



Ryan ALM, inc.

Asset/Liability Management

The Solutions Company



Ronald Ryan, CEO, CFA

The Ryan Letter

January 2006

Index	Returns YTD 2005	Estimated Weights
Liabilities :		
Market (Treasury STRIPS)	- 1.21 %	100 %
IRS (30 yr Treasury)	0.52	
ROA (8% constant rate)	0.67	
Assets :		
Ryan Cash	0.32 %	5 %
Lehman Aggregate	0.01	30
S&P 500	2.65	60
MSCI EAFE Int'l	6.15	5
Asset Allocation Model	1.92 %	100 %
Assets – Liabilities		
Market	3.13 %	
IRS	1.40	
ROA	1.25	

January saw a spike up in interest rates whereby Liabilities eroded in present value (-1.21%) due to their long durations. Assets outperformed Liabilities, mainly on the strength of Domestic Equities (S&P 500 = 2.65%) and Int'l Equities (EAFE = 6.15%), by about **3.13%** for the month (1.92% vs. -1.21%) using market valuations (i.e. STRIPS); to **1.40%** under the IRS Contribution rules; and to **1.25%** 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 -50% since 1999** (see table below).

Total Returns							
	2000	2001	2002	2003	2004	2005	2006
Assets	- 2.50	- 5.40	-11.41	20.04	8.92	4.43	1.92
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	- 1.21
Difference	-28.46	- 8.48	-30.89	18.08	-0.43	-4.44	3.13
Cumulative		-34.53	-54.75	- 46.57	-46.80	-49.16	-47.57

God Bless Pension America !

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

Pension Equity Act Ended 12/31/05

After a brief two year life, the sunset clause has occurred on the Pension Equity Funding Act. This means that the discount rate used for funding purposes for corporations reverts back to the IRS 404(a) rule using the 30-year Treasury on a moving monthly average basis over four years weighted 40% this year, 30% last year, 20% two years ago, 10% three years ago. The corporate bond yields being used for the Pension Equity Act are now gone. As a result, discount rates will be lower and liability valuations will be higher. The last corporate rate used in December was 5.70%, an 85 basis points yield spread over the Treasury 30-year moving average of 4.85%. This yield spread times the average duration of liabilities is a good estimate of the liability valuation increase estimated at an 8.50% to 12.75% increase based on average liability durations of 10 to 15 years:

$$\begin{aligned} 0.85\% \text{ yield spread} \times 10 \text{ year Duration} &= 8.50\% \text{ increase} \\ 0.85\% \text{ yield spread} \times 15 \text{ year Duration} &= 12.75\% \text{ increase} \end{aligned}$$

Welcome Back 30-year Treasury !

The bellwether 30-year Treasury issue is being reissued on Thursday, Feb. 9. This key issue was removed from the auction schedule on Halloween, October 31, 2001 ... **Trick or Treat America!** Over these last 4 years and 3 months, long interest rates went to the lowest levels of the last 45 years. Time will tell how much this decision will cost America not to refinance with 30-year securities. This new issue comes just in time to support the IRS funding rules to discount pension liabilities from the 30-year Treasury. Moreover, all LDI are screaming for longer zero-coupon bonds to better match assets vs. liabilities. Lotteries, in particular, were in an uncomfortable position where they were mandated to only buy Treasury STRIPS and they could not match any liability past 2031. My recommendation is SHELF REGISTRATION on the Treasury STRIPS yield curve so any institution can buy any maturity they want at any time.

Remember those days in 2001 when we were told that the fiscal budget was going to create and maintain a surplus balance and the Treasury was going to pay down the Federal debt. Call me old fashioned but I believe that there are three things you can count on in your life ... death, taxes and Treasury debt.

The best way to monitor the success of the new 30-year Treasury auction and all Treasury auctions is to go to:

www.RyanIndex.com

The Ryan Index is the *ONLY* Treasury index that starts from auction date instead of settlement date. Legally, ownership of a bond takes place on trade date not settlement date. In order to be an accurate total return measurement of a Treasury auction issue you must start from birth (auction date). The Ryan Index also has the **most complete data history** from the start of each continuous auction maturity series. The Ryan Index is the **first daily bond index** created March 1983.

FASB Announces Overhaul of Pension Accounting

The Financial Accounting Standards Board (FASB) which sets US accounting rules announced that it will require companies to report the funding status of their pension plans and other retirement plans on their balance sheets likely by year end. A second phase of changes would take several years to come requiring companies to more accurately measure their pension benefits and costs in calculating profits. According to CSFB estimates, if GM were forced to accurately show its true benefit costs on its balance sheet, the company's book value would have been cut from \$27.7 billion in 2004 to a negative \$18.5 billion today.

Quality of EPS

The year 2005 set a record for the most restatements of earnings. At near 1,200 restatements for 2005, this basically doubled the record year of 2004 at 619 restatements. Earnings restatements tend to raise the question of the integrity of management and do they manipulate these numbers. According to a report by CSFB about 10% of the S&P 500 reported EPS is phantom earnings from pension accounting with the aerospace industry around 30%.

San Diego Pension Update

On January 6, a federal grand jury handed up fraud and conspiracy indictments against five current and former officials of the city's pension system. The charges centered on a 2002 decision by the 13-member San Diego City Employees Retirement System (SDCERS) to enact a plan to increase significantly the pension benefits of city employees while failing to provide sufficient funding (Contributions) to keep the pension fund solvent. This gets back to my constant preaching of ... **bad rules lead to bad decisions**. Due to inappropriate calculations of the true economic valuation of both assets (due to smoothing) and liabilities (due to high discount rate = ROA assumption), the funded ratio for Public pension plans was overstated by 30% to 50% thru the years. This overstated funded ratio supported the decision to increase benefits and make little or no contribution. This San Diego fiasco can be repeated throughout most of Public Fund America who must obey inappropriate and inaccurate rules. The role of fiduciary is certainly being tested here if not redefined.

Pension Monitor

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 1,288 press articles going back to 2002. We believe that this is the most comprehensive site for pension articles in the world today. To view, please go to :

www.RyanALM.com/PensionMonitor

www.PensionMonitor.com

Pension Monitor
the latest pension articles and news from around the world

Pension Watch – IBM, Alcoa

IBM has decided to terminate its defined benefit plan in 2008 and replace it with a 401 (k) plan. Alcoa also announced that they would freeze their pension plans and end pension coverage for new hires. Alcoa will make a contribution of 3% of annual salary and bonus to the 401 (k) plan.

Corporate Bond Issuance

The FT reports that US corporate bond issuance in January reached \$90 billion which broke the record of \$76 billion issued in January of 2001.

Taxes are Taxing

The Tax Foundation released a study on The Rising Cost of Complying with the Federal Income Tax. The study estimates that complying with the tax code cost taxpayers \$265.1 billion or 22% of the tax revenues collected. By 2015, compliance costs are projected to grow to \$482.7 billion.

BoJ Watch

Bank of Japan has repeated warnings that its zero-interest easing policies will soon end. Given that the Japan fiscal year ends March 31, speculation has it that they will wait until the new fiscal year starts to do anything new on monetary policy. Japan reported the first back-to-back monthly increases in CPI since 1998. Although a manufactured number, they are now done to show inflation and a cause to raise rates.

Every day more money is printed for Monopoly than the US Treasury
FACT

Pension Ideas

I. Pension Problems :

Key pension problems itemized in [www.RyanAlm.com/Research/The PENSION CRISIS](http://www.RyanAlm.com/Research/The%20PENSION%20CRISIS) :

1. **Discount Rate** = Wrong rate(s) creates wrong present values
2. **Smoothing** = Distorts / Overstates market values by about 29%
3. **ROA** = Dictates Asset Allocation and Discount Rate for Public Funds.

II. Pension Solutions !

Ryan ALM has a series of Pension Solutions research papers :

- | | |
|-----------------------------|---|
| Pension Solution # 1 | Custom Liability Index (CLI) |
| Pension Solution # 2 | Portable Alpha Liability System (PALS) |
| Pension Solution # 3 | Liability Index Fund (LIF) |

III. Custom Liability Index (CLI)

Ryan ALM provides the Benchmark for ALM with accurate daily pricing **that best represents the present value of the projected benefit payment schedule.** Ryan ALM builds Custom Liability Indexes based on market rates or any discount the client wants.

IV. Beta + Alpha Portfolio

For pensions, **Beta is the portfolio that matches liabilities** not some generic market index. Without a CLI it would be difficult to match liabilities. **Beta is best as a Liability Index Fund.** This is where investment grade bonds should go since they have little or no Alpha vs. liabilities. **Alpha is the excess return above liability growth.** It is certainly not excess returns above a **generic** market index. If you outperform a market index but lose to liabilities, **...you LOST ! Alpha is best as non-bonds portfolios that do not correlate to liabilities.**

V. Portable Alpha

Portable Alpha strategies should be liability driven since that is their true objective. Instead, most Alpha portfolios are given benchmarks different than liabilities and most Beta portfolios

have poor correlation to pension liabilities (not matched). Ryan ALM designed our CORE product **“PALS”** as a Portable Alpha Liability Strategy where the Alpha portfolio is non-bonds (i.e. Equity, Real Estate, etc.) and the Beta portfolio is 100% bonds matched to liabilities. **Our Alpha portfolio mission is to cure the pension deficit by outperforming target liabilities (Alpha) over a time horizon equal to the liability payment dates based on a Custom Liability Index. When our Alpha portfolio achieves the client goal (i.e. full funding) we port over to the Beta portfolio to match liabilities and secure the victory !**

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