Ryan ALM, inc.

Asset/Liability Management

The Solutions Company

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The Ryan Letter

June 30, 2011

Index	Returns YTD 2011	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	2.62 %	100 %
FAS 158 (AA Corporates)	1.09	
PPA (3 Segment)	7.81	
PPA (Spot Rates)	4.44	
GASB / ASOP (8% ROA)	4.00	
Assets :		
Ryan Cash	0.17 %	5 %
Lehman (Barclay) Aggregate	2.73	30
S&P 500	6.02	60
MSCI EAFE Int'l	5.34	5
Asset Allocation Model	4.73 %	100 %
Assets – Liabilities		
Market	2.11%	
FAS 158	3.64	
PPA (3 Segment)	-3.08	
PPA (Spot Rates)	0.29	
GASB / ASOP (8% ROA)	0.73	

Using the Asset Allocation above, the difference in asset growth vs. liabilities in 2011 was: **2.11%** (market valuation STRIPS), **3.64%** (FAS 158), **-3.08%** (PPA rules-AA Corporate rates), **0.29%** (PPA-Spot Rates) and **0.73%** (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 -115.87% since 1999** on a compounded index basis starting at 100 on 12/31/99!

(see **Pension Scoreboard on page 5**)

Total Returns	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assets	-2.50	-5.40	-11.41	20.04	8.92	4.43	12.25	6.82	-24.47	19.43	11.89	4.73
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76	33.93	-19.52	10.13	2.62
Difference:												
Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-58.40	38.95	1.76	2.11
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-78.38	-181.57	-106.94	-115.67	-115.87

New Jersey Passes Pension Reform

A Democratic led legislature gave final approval on June 23rd to a pension reform bill that would force public workers to pay more (contributions) for benefits. The bill was opposed by unions which would raise the retirement age and increase employee contribution rates for both pension and health care plans. Gov. Christie said that this pension reform bill would save taxpayers more than $120 billion over the next 30 years plus an additional savings of $3.1 billion on health care over the next 10 years. Critics say Gov. Christie hurt the state's fiscal credit rating by reneging on a $3 billion pension payment in 2010. Gov. Christie vowed to make a $506 million payment to the pension fund only if the Legislature approved his pension reform plan.

IASB's New Pension Accounting Rules = BIG Changes

As I have mentioned numerous times before, the IASB is the key organization to watch on pension accounting rules. Currently, about 120 countries including all European Union members follow IASB accounting standards. They are run by Sir David Tweedie who is the dominant leader on pension accounting reform. FASB tends to follow what IASB creates since they want to normalize financial statements throughout the world. In June IASB published its amendments to IAS 19 Employee Benefits. The IASB changes apply to U.S. subsidiaries of foreign companies and take effect in January 2013.

IASB new amendments takes away the pension credit (income) from the income statement based on the pension plan's expected return on assets (ROA). The new rule requires that you use an ROA equal to the discount rate used on liabilities. Currently this discount rate under FAS 158 is an AA corporate bond zero-coupon yield curve. **Ryan ALM is a leader in providing the FAS 158 discount rate yield curve** of 60 maturities or annualized spot rates. As of June 30 our FAS 158 yield curve had an average rate of 4.87% (if equally weighted) which is much lower than the ROA used by most, if not all, corporate pension plans. If FASB was to accept the IASB ruling this would reduce the ROA by 39% based on an 8% ROA and could turn pension income into pension expense. This could hurt EPS significantly.

The new IASB rules also eliminate the amortization of actuarial gains and losses including the *corridor effect* that allowed a 10% of pension assets or liabilities margin of error (whichever is higher) before the actuarial gain/loss is calculated. The difference between the ROA and actual pension asset returns (actuarial gain/loss) will now be recorded immediately. However, instead of being a line item to the income statement it will be posted to the OCI (other comprehensive income) statement.

The net effect of all this is that corporations will no longer find pensions as a budgeted source of income for their financial statements due to robust ROA projections. They will have to rely on actual market returns which will increase the volatility of pension income or expense.

Moody's And S&P Warn of U.S. Rating Downgrade

Moody's warned the U.S. government in early June that its Aaa rating could be downgraded soon if there is no clear progress on raising the debt limit. Moody's Investor's Service has placed the government's rating under review due to the rising risk of a short default period on U.S. debt if Washington can't agree on raising the debt ceiling above the current $14.3 trillion level. S&P announced in April that it was putting the credit rating of the U.S. on the negative watch list. The main difference between these downgrade threats is that Moody's focuses on the debt ceiling fight in Washington while S&P does not. S&P seems more concerned about a credible plan to handle our ballooning debt load which is higher than the entire Euro zone and more than China plus Japan combined. Since 1989, S&P has lowered the ratings of 101 sovereign entities after placing them on their negative watch list. Usually such downgrade action happens after six months of a negative watch decision.

Chairman of the Ways and Means Committee, Dave Camp (R-Michigan) commented, "Today's announcement from Moody's simply reinforces the position already announced by S&P and a clear bipartisan majority in the House of Representatives. House Republicans have put forward bold solutions to deal with the crisis and it is time for the president to come to the table and join us in talking about specific policy solutions." House speaker John Boehner added "this report makes clear that if we let this opportunity pass without real deficit reduction, American's financial standing will be at risk. A credible agreement means the spending cuts must exceed the debt limit increase. The White House needs to get serious right now about dealing with our deficit and debt."

S&P Downgrades Greece to B from BB -

On May 9, S&P cut Greece's credit rating from BB- to B due to concerns that euro zone officials want to renegotiate Greece's debt by extending the maturities of the European Commission's portion of the $110 billion euro bailout. According to S&P "as part of such an extension, we believe the euro zone creditor governments would likely seek comparability of treatment from commercial creditors in the form of their similarly extending bond and loan maturities. Even if there were no discount of principal, such an extension of maturities is generally viewed to be less favorable to commercial creditors than repayment according to the original terms of the debt."

Federal Reserve Pension / OPEB Status

Given the status of our highest bank regulatory office, we would expect that their pension and medical (OPEB) liabilities would be handled with the utmost prudence and conservatism. The highlights of the 2010 financials are:

Pension Liabilities	**$8,258,000,000**	**OPEB Liabilities**	**$1,358,000,000**
Pension Assets	**$7,273,000,000**	**OPEB Assets**	**$ NONE**
Deficit	**$ 985,000,000**	**Deficit**	**$1,358,000,000**
Funded Ratio	**88.07%**	**Funded Ratio**	**0.0%**
ROA	**7.75%**		

The pension is reportedly 88% funded based on using a discount rate of 5.50% (FAS 158 accounting). If we would mark to market using the Treasury STRIPS yield curve (@ 4.50%) and assuming a 12 year average duration, the liabilities would be about 12% higher in present value (@ $9,248,96200,000). If correct, this would lower the Funded Ratio to 79%. What is noteworthy is that the OPEB liabilities are **not funded** (funded ratio = 0%).

*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**.

The Misery Index is back

The Misery Index was initiated by economist Arthur Okun as economic advisor to President Lyndon Johnson in the 1960s. It is a measurement of hardships among America's population. It grew significantly during the Jimmy Carter administration. The index is simply:

Unemployment Rate + Consumer Price Index = Misery Index

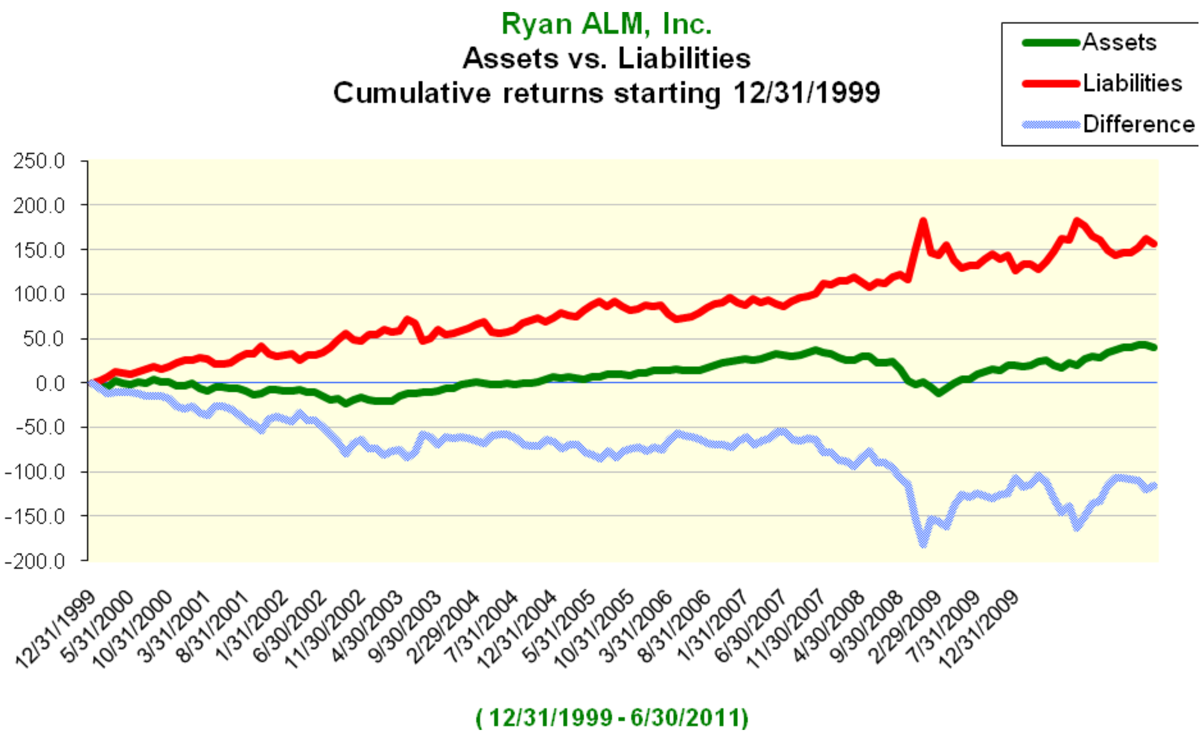
On June 17 CNBC posted the story that the Misery Index is the highest in 28 years:

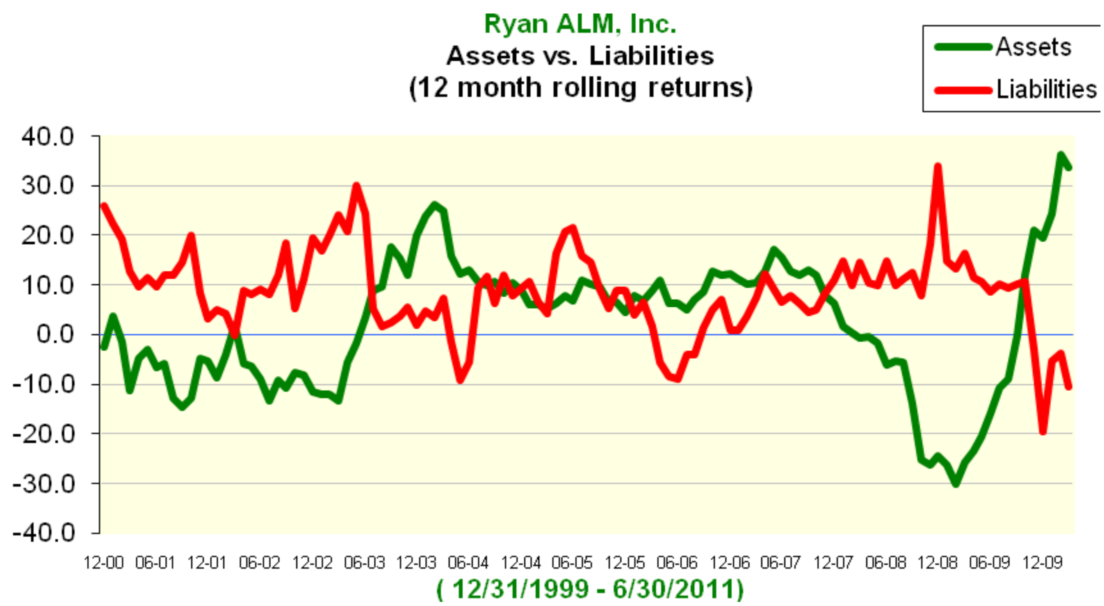
2011 = 12.7% (9.1% unemployment + 3.6% CPI)
1983 = 33.5% (22.3% unemployment + 11.2% CPI)

Over the years, both unemployment and CPI numbers have been adjusted or even manipulated making it tougher to compare such data.

Pension Scoreboard

The graphs below show asset vs. liability rolling 12 month and cumulative growth since 1999. The cumulative growth difference is **–115.87% suggesting any pension Funded Ratio below 182.30% 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 with 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 = PHB)

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 (click on fixed income portfolios)

Ryan/Mergent 1-30 year Treasury Maturity Ladder (PowerShares ETF = PLW)

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 (click on fixed income portfolios)

Ryan ESG Bond Index Series (Global version)

In 2009 Ryan ALM launched the 1st ESG Global corporate bond index series based upon the GSRA ESG ranking (G100 + G400 series) for the top ranked ESG Global companies. This index series includes a 1-30+ year index.

Ryan FAS 158 Spot Rate Yield Curve Index

In 2008, Ryan ALM designed the FAS 158 yield curve Index that prices any private pension liabilities in conformity to FAS 158 standards. In Nov. 1, 2008 Pricewaterhouse Coopers, LLP signed a subscription to our FAS 158 yield curve Index and monitor our conformity to FAS standards.

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

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 (1^{st} 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.