Ryan ALM, inc.

Asset/Liability Management

The Solutions Company

Ronald Ryan, CEO, CFA

The Ryan Letter

June 30, 2010

Index	Returns YTD 2010	Estimated Weights
Liabilities :		
Market (Tsy STRIPS)	15.29 %	100 %
FAS 158 (AA Corporates)	9.30	
PPA (3 Segment)	5.40	
PPA (Spot Rates)	4.92	
GASB /ASOP (8% ROA)	4.00	
Assets :		
Ryan Cash	0.21 %	5 %
Barclays' Aggregate	5.33	30
S&P 500	-6.64	60
MSCI EAFE Int'l	-12.82	5
Asset Allocation Model	-2.96 %	100 %
Assets – Liabilities		
Market	-18.25%	
FAS 158	-12.26	
PPA (3 Segment)	-8.36	
PPA (Spot Rates)	-7.88	
GASB/ASOP (8% ROA)	-6.96	

Using the Asset Allocation above in 2010, pension asset growth difference vs. liabilities was: **-18.25%** (market valuation STRIPS); **-12.26%** (FAS 158); **-8.36%** (PPA rules-AA Corporate rates) and **-7.88%** (PPA-Spot Rates); **-6.96%** (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 -145.23% 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	-2.96
Liabilities	25.96	3.08	19.47	1.96	9.35	8.87	0.81	11.76	33.93	-19.52	15.29
Difference: Annual	-28.46	-8.48	-30.89	18.08	-0.43	-4.44	11.44	-4.94	-58.40	38.95	-18.25
Cumulative		-37.60	-73.40	-60.08	-66.13	-76.75	-64.60	-78.38	-181.57	-106.94	-145.23

New York State Pension Fund… Borrower and Lender!

Governor Patterson and the state legislature leaders have agreed to allow the state and municipalities to borrow nearly **$6 billion** from the pension plan to help them make their required annual contributions to the state pension fund for the next three years. Just to be clear… the State pension plan will borrow the money to make their required annual payments to the pension fund (Contributions) – from itself! In what looks like a political shell game, state legislators are resistant to make the difficult and appropriate decisions to cut government spending and reduce pension benefits. The state legislatures rejected a $2 billion budget cut in favor of this borrowing strategy. Harry Wilson, candidate for comptroller who holds a MBA from Harvard, said "It's a classic Albany example of kicking the can down the road". Such borrowings will be paid back with interest over the following decade starting in 2013. The bet is that pension assets will have rebounded such that pension contributions will be much lower starting in three years. The State Senate estimates that this strategy will cost state and local governments about $1.85 billion in interest payments based on borrowing at 4.5% to 5.5%. However, pension assets are expected to grow at an 8% (ROA) creating a return arbitrage in the State's favor. Robert Megna, the state budget director, is quick to argue that this is not borrowing but a way to amortize or smooth pension contributions. Gee, I wonder why they charge interest on this transaction if it is *not* borrowing? New York State faces a **$9.2 billion deficit** this fiscal year ending March 31. Lawmakers are expected to rely heavily on borrowing, raising taxes, fee increases and an array of accounting maneuvers to placate this budget deficit.

Pension Crisis is a Budget Crisis!

The Pension Crisis that I have monitored, measured and shouted about for a decade is a *budget crisis* mainly due to spiking out-of- control Contribution costs. New York City is not part of the NY State pension system presented above but is representative of the Contribution led budget crisis facing pension America:

New York City Employees Retirement System (NYCERS)
Annual Required Contribution (ARC)

FY 06/30/00	**$ 68,619,745**	**0.915%**
FY 06/30/09	**$ 2,150,439,042**	**20.570%**

Contribution costs increased 30.3x in nine years = 88.77% annual increase! Such an increase in Contribution costs went from 0.915% rate of payroll (employer costs) to 20.57%. The projected Contributions are expected to rise steadily. Such an increase in costs is not part of the CPI but is common among Public pension's budgets.

Social Security: The Ultimate Model for Borrowing from Yourself

Federal Congressmen are very adept at playing this game of borrowing long term from yourself to fund current budget shortfalls. In an amazing game of political accounting wizardry, they borrow from the Social Security trust fund by issuing Special Issue bonds which are placed in the SS trust fund. First, they calculate an *annual* Social Security surplus based upon the current fiscal year premium revenues vs. benefits paid. An annual surplus flies in the face of the *total* deficit for Social Security that may well exceed $20 trillion based on *total* future benefits estimated to be paid. Such annual surpluses are then taken and used to cover the current Federal operational budget shortfalls. Such usurpation procedures are to then give SS an IOU to be paid back long term through the use of "Special Issue" securities. Currently, these IOUs or special issue securities total **$2.6 trillion** representing many years of stealing from the SS trust fund. This has to be paid back with interest making the Federal deficit larger. The cliff where SS benefits exceed premiums is supposedly five years away... the clock is ticking.

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

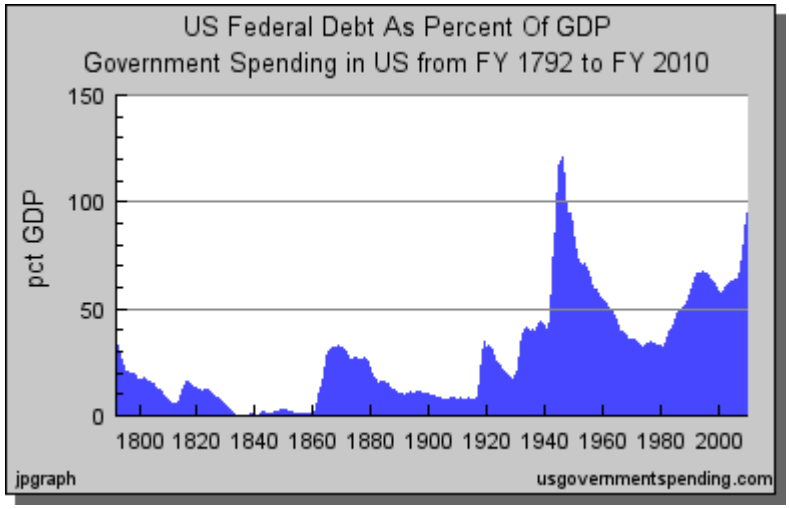
I have blamed accounting rules and schemes as a major villain for the pension crisis. When I testified before the ERISA committee on pensions in 2003, I brought in a five foot pencil (***Woody***) which I proclaimed as the weapon of mass destruction among U.S. pensions. I showed how the pension accounting 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.

Moody's and Fitch Downgrade Greece Credit Rating

Greece's debt has risen to 300 billion Euros ($441 billion) equal to about 125% of their national GDP. Soaring budget deficits and this debt burden caused Moody's to lower their credit rating of Greece four notches to *below investment grade* from A3 to B1with a stable outlook while Fitch lowered their rating to BBB+ from A- with a negative outlook. S&P warned that it might lower Greece's sovereign rating too. At the Greece elections in October, the ruling New Democracy party suffered a crushing defeat to the Pan-Hellenic Socialist Movement (PASOK) led by Prime Minister George Papandreou. PASOK approved an anti-crisis program to steer the country away from potential default on its obligations.

Is U.S. the Next Greece?

Given the escalating budget deficits and soaring federal debt, isn't the U.S. headed down the same the same road as Greece? Once your national debt exceeds your GDP, you have entered the land of negative value added. The history of our Federal Debt/GDP ratio has been steadily on the rise since 1974 when it stood at 31.68%. Currently, it stands at **94.27%** (highest since WW II when it hit 116.00% in 1945, 121.25% in 1946 and 105.81 in 1947). Remember back then we owed our debt mainly to the Federal Reserve and U.S. investors. Today most of our Treasury debt is foreign owned. It is estimated that this Debt/GDP ratio will continue to climb past 120% within three to five years.



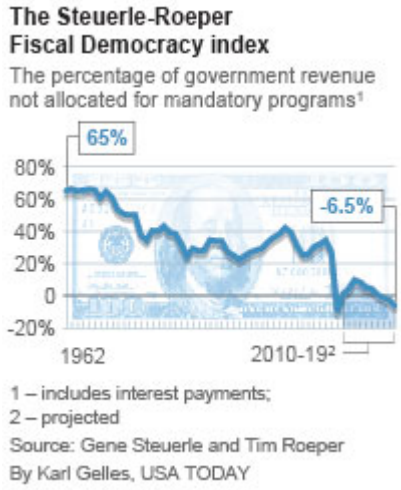
A review of the rest of the world's Debt/GDP ratio is not so bright either (except for Russia):

Japan	170.4%	Canada	62.3%
Italy	103.7%	UK	47.2%
India	78.0%	Russia	6.8%

Steurle-Roper Fiscal Democracy Index

Two scholars (Gene Steurle and Tim Roper) created an index to monitor fiscal budget responsibility. This index is defined as the percentage of federal revenue *not* allocated for mandatory programs, including interest payments. It is not a pretty picture. **For the first time in American history, every single dollar of federal revenue was committed before Congress voted on any spending program!** Steurle and Roper call this a disease of fiscal sclerosis – setting future national priorities in stone long before the future has arrived (i.e. entitlements). Most of the government's basic functions are paid for out of swelling,

unsustainable deficits. This ratio has been declining rapidly from 65% in1962 to a -6.5% today. Once it enters a negative territory this is labeled as the *dead zone* where it is hard for the economy to grow from this burden of excess fixed costs over revenue. Similar to the bankruptcy ratio of corporations, when fixed costs exceed revenue you are on the road to bankruptcy.



States Desperate to Solve Debt Crisis

Our States are faced with similar debt problems that are escalating due mainly to spiking pension contribution costs. Instead of facing these problems head on with budget cuts and reworked less costly pension formulas, most States tend to resort to accounting gimmicks that would make most accountants blush or hide, such as:

1. California accelerated corporate income tax = 70% by June 15.
2. Colorado tried to grab $500m surplus from workers compensation insurer.
3. Connecticut has tried to create their own accounting rules
4. Hawaii inaugurated a four day school week.
5. New Hampshire was ordered by the Supreme Court to put back $100 m it took from medical malpractice insurance pool to help balance its budget.
6. Several States are using the federal health care dollars to balance their budget which Congress has not appropriated yet.

Seven States On Watch List to be Out of Money by 2020

According to Joshua D. Rauh of the Kellogg School of Management at Northwestern University, seven states will run out of money to pay pensions by 2020. That hasn't stopped them from hiring new employees. According to the Bureau of Labor Statistics these states combined have added 9,700 workers to

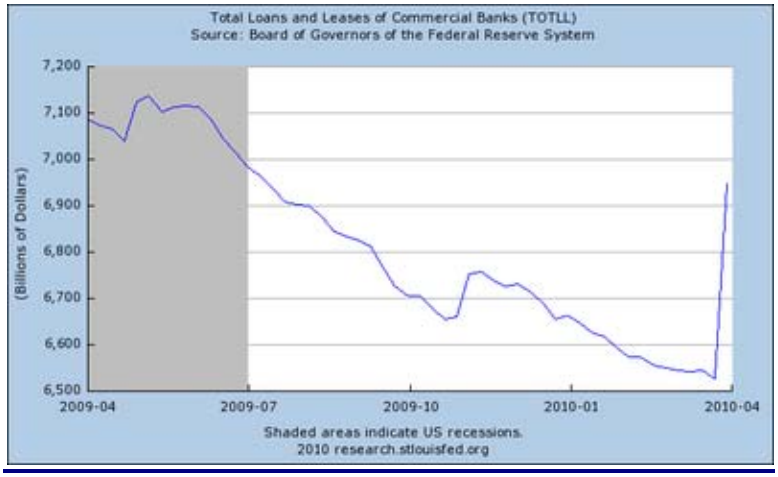
both state and local government payrolls between December 2007 and April 2010. The seven states cited are:

Connecticut	**Hawaii**
Illinois	**Indiana**
Louisiana	**New Jersey**
Oklahoma	

The federal government will be under intense pressure to bail out any state. If marked to market, the estimated pension deficit for all Public pension plans is over $2 trillion currently. Is TARP II in the works?

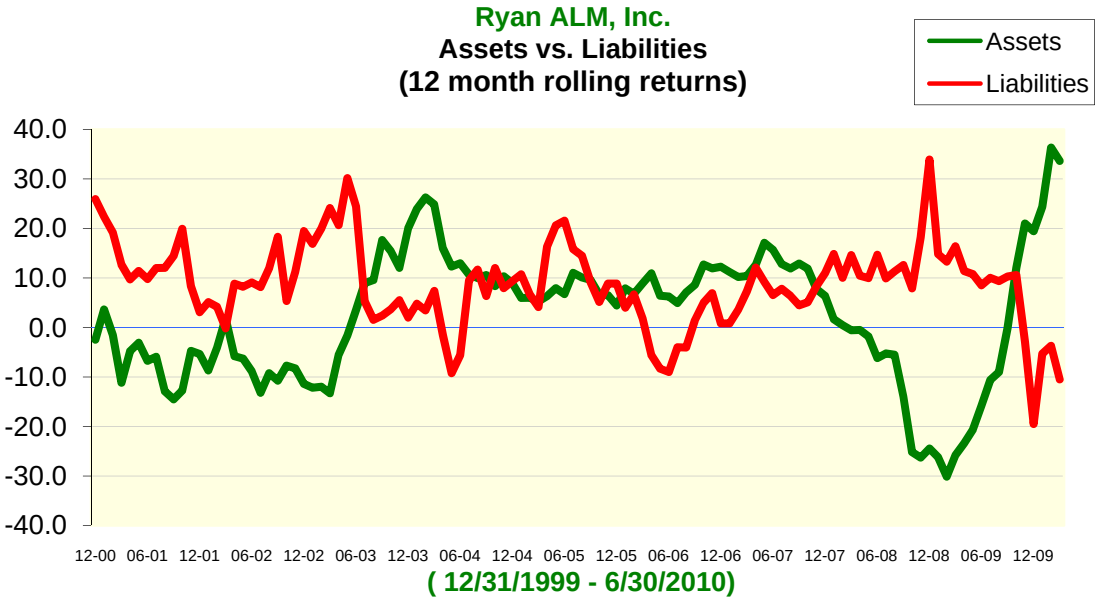
Did the Fed just Bail Out Europe?

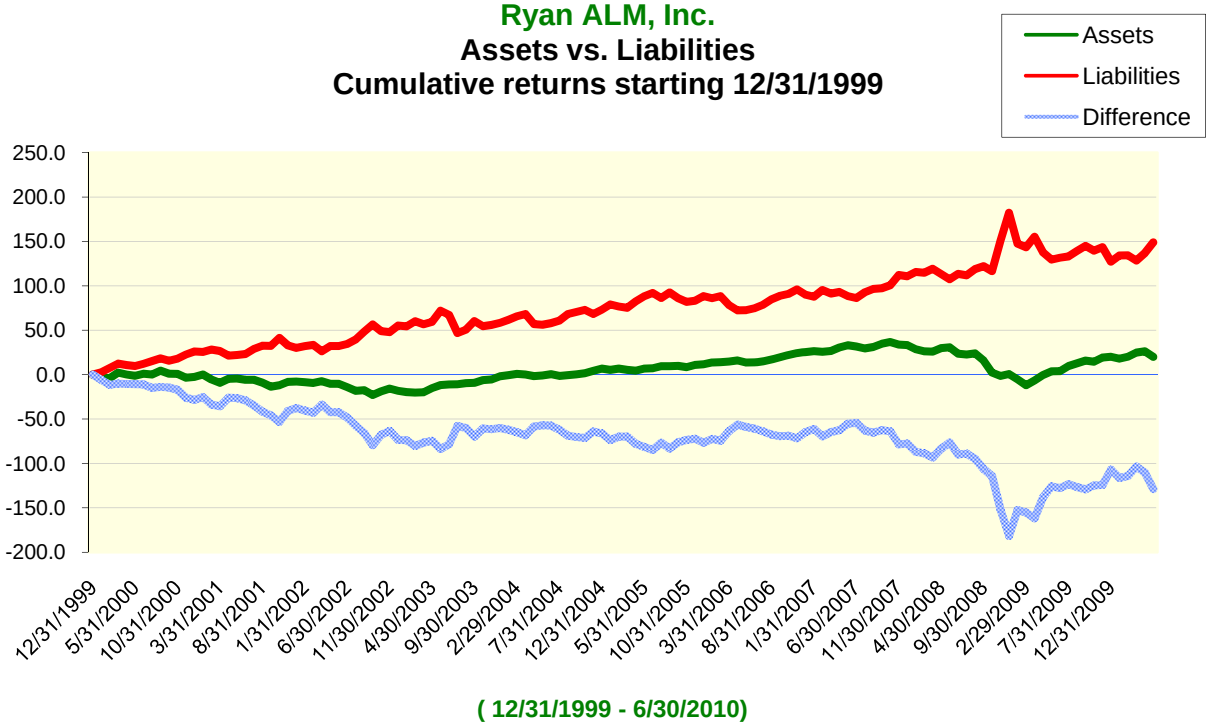
There was a gain of $421.8 billion in commercial loans in one week. Where did this money go? What was the collateral? Such an increase is unprecedented … to be continued.



Pension Scoreboard

The graphs below show asset vs. liability rolling 12 month and cumulative growth since 1999. The cumulative growth difference is **–145.23% suggesting any pension Funded Ratio below 224.56% 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, my team and I at 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. Without a CLI it would be difficult for assets to be managed vs. this liability objective. 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* series)

In March 1983, my index team and I at 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). The best way to understand the interest rate behavior of bonds is to use the Ryan Treasury constant maturity series for each *auction* maturity (9 indexes) with two composite indexes … **Ryan Cash and Ryan Index.**

Ryan/Mergent 1-30 year Treasury Maturity Ladder Index (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

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. 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

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.