

US Rates Strategy

Back in Danger Zone: U.S. Corporate Pensions in 2014

Interest Rates

Americas

Solvency ratios drop close to critical level

2014 proved to be another challenging year for U.S. corporate schemes. We estimate that the blended pension solvency ratio for the universe of Russell 1000 (R1K) companies declined to 81% from 87% in 2013. While the overall 6% drop may not seem huge, this is significant because schemes with solvency ratios below 80% are considered at-risk by law. Moreover, poorly funded plans outnumbered well-funded almost 4:1.

Half-trillion dollar pension hole?

The 6% decline in average solvency led to a large jump in pension deficits. We estimate that unfunded liabilities for R1K companies funds grew by over \$180 billion to about \$426 billion, or roughly 2.5% of nominal GDP. The total size of the corporate pension hole may be approaching half-trillion dollars if we included companies outside of R1K universe. In terms of industry concentration, airlines and car manufacturers are in worse shape with pension deficits reaching on average one-quarter of sponsor market cap.

Companies keep pouring money into pensions

New pension infusions barely slowed in 2014 despite big improvements in corporate schemes in 2013. R1K sponsors poured over \$55 billion into their pensions last year compared to about \$60 billion in 2013. The steady stream of contributions is a legacy of pension deficits in earlier years. At the same time it demonstrates that sponsors are serious about closing pension gaps. We believe this is part of long-term plans to drastically reduce pension-related volatility in company financial results. Consequently, we expect a significant portion of new money to be earmarked for LDI investments.

Market impact: long-end Treasury yields and corporate spreads capped?

The boost to LDI means that pensions' thirst for long-term bonds should continue for years. We expect pension buying to restrain increases in long-term Treasury yields and corporate spreads. One development that could potentially mitigate effects of pension demand would be a large shift in debt issuance in 20-30y maturities by US Treasury and highly rated corporate names. We estimated that US private pension demand may restrain long-term yields by 30-40bp.

New year, new challenges

The pension industry continues to evolve posing new challenges and opportunities to scheme sponsors. New actuarial tables will likely inflate liabilities for most mature schemes, while another hike in PBGC premiums will increase sponsors' costs. At the same time, the market for pension buyouts appears to become more competitive, potentially lowering the hurdle for sponsors who want to completely get out of the business of running pensions. It remains to be seen whether buyout providers continue to bid aggressively to take over pension risk.

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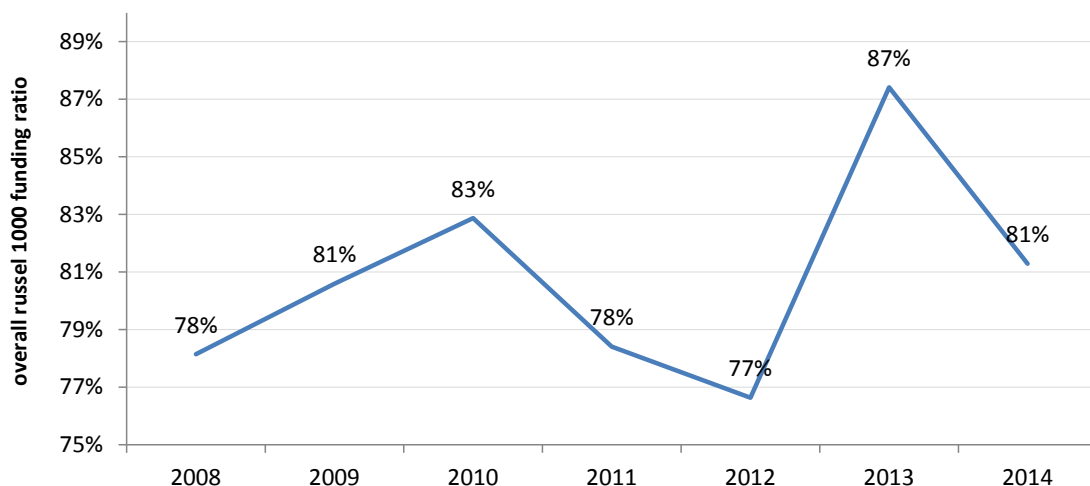
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Solvency ratios drop into danger zone

To sponsors of corporate pensions schemes in U.S. 2014 may feel like a rude awakening after the great 2013. We estimate that the blended solvency ratio for pensions of companies in the Russell 1000 index (R1000) declined to 81% at the end of 2014 down from 87% in 2013 (Figure 1). Pensions saw improvement on both the asset side from rising equities and the liability side from higher discounting rates in 2013. In fact, some sponsors reported that their schemes were in the 90+% range, approaching fully funded status.

The overall 6% drop may not seem that huge, especially because it did not fully reverse the 10% increase in the solvency ratio in 2013. Nevertheless, this is significant because funds with solvency ratios below 80% are considered at-risk by the pension regulations. Besides attracting greater scrutiny, there are certain specific limitations of increases in and disbursement of benefits for schemes with <80% solvency ratios. Consequently, dropping so perilously close to the 80% level should sound an alarm for the entire corporate pension space.

Figure 1: Blended solvency ratio for US corporate pensions, 2008-2014



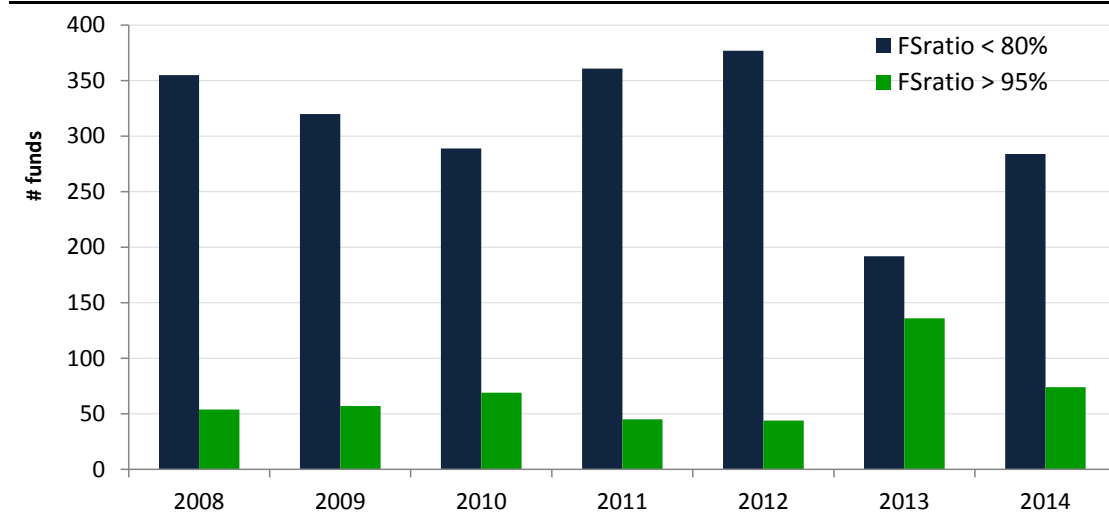
Source: UBS, Bloomberg, company financials. Companies in the Russell 1000 index

Fewer "poster boys", more "troubled teens"...

Board-based averages may sometimes disguise the true underlying picture. For instance, some may argue that a single industry-wide blended solvency ratio in Figure 1 may overstate the depth of the trouble. Hypothetically, one very large scheme with a very poor ratio can make things look bad for everyone. For further insight we are going to take a more granular look at the individual scheme level.

Figure 2 shows the number of pension schemes with solvency ratios that are either poor (<80%) or strong (>95%) in the R1K. This distribution is clearly skewed to the wrong side: well-funded "poster boys" are vastly outnumbered poorly funded "troubled teens". In fact, 2014 saw "poster boys" drop from 136 to 74 while the "troubled teens" increased from 192 to 284. Given that the set of R1K companies is well representative of the entire corporate pension space, exactly half of U.S. corporate schemes were in the poorly funded category at the end of 2014.

Figure 2: Count of individual pension funds with solvency ratio <80% and >95%, 2008-2014

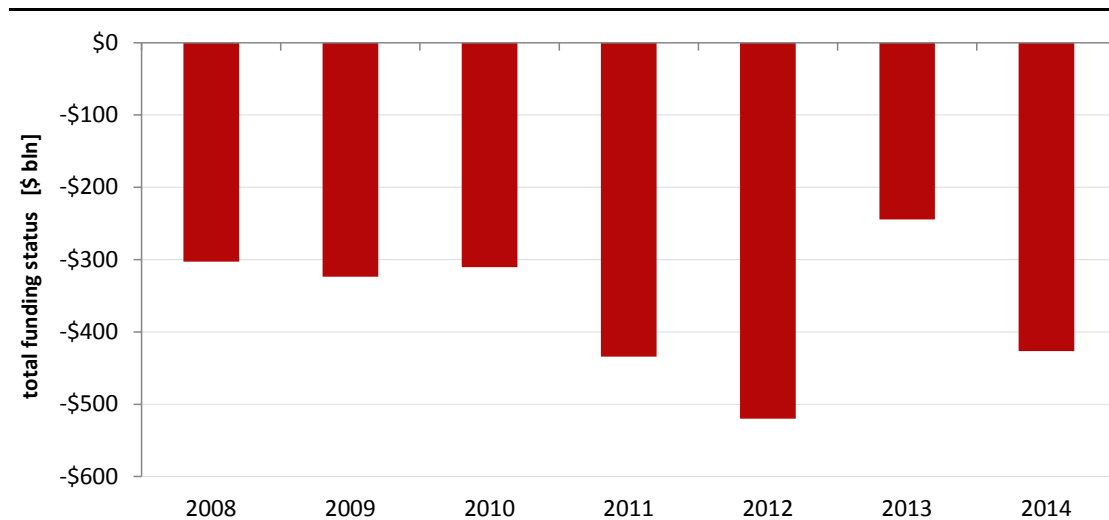


Source: UBS, Bloomberg, company financials. Companies in the Russell 1000 index

Half-trillion dollar pension hole?

We estimate that the hole of unfunded liabilities for R1K funds grew by over \$180 billion to about \$430 billion (Figure 3), or about 2.5% of nominal GDP. Conceivably, the total size of pension deficit may be approaching half-trillion dollars if we Included companies outside of the R1K universe

Figure 3: Total unfunded deficit of US corporate pensions, 2008-2014



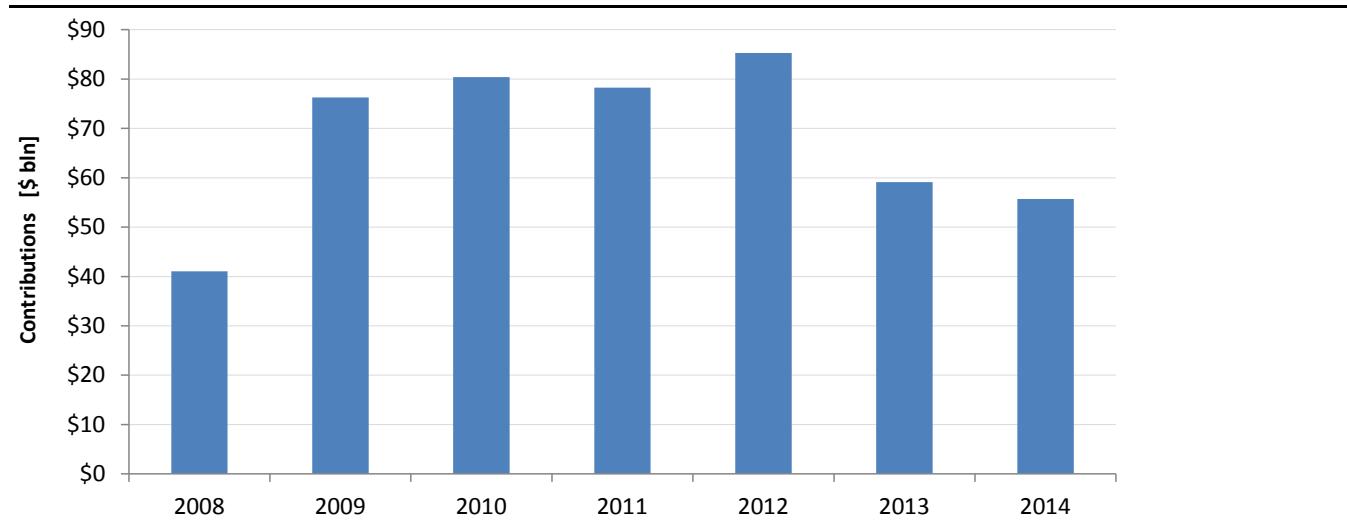
Source: UBS, Bloomberg, company financials. Companies in the Russell 1000 index

As we had discussed in our earlier publications, gapping pension deficits have a double-whammy effect on the sponsors. First, company financials obviously take a hit, both on the income statement and the balance sheet. A greater pension hole likely means more capital required to top up the scheme, diverting financial resources from potentially more productive use in R&D, capex, etc. Additionally, sponsors with poorly funded pensions inevitable come under more scrutiny from rating agencies, investors, and analysts. This adds a new dimension to the challenge of maintaining a large pension scheme and affect valuations of sponsors' debt and equity. What must be truly frustrating to the leadership of these firms is

that pension scheme issues that often entangle them have nothing to do with the core business.

Consequently, we expect sponsors to keep writing hefty checks to prop up their pension scheme solvency ratios. Figure 4 shows that new corporate pension infusions have been running at a rate of \$55-85 billion per year for R1K names. What happens to pension funding status in previous years typically determines the size of the new contribution in the subsequent year. Given persistent deficits shown in Figure 3 above, we expect new infusions to remain at hefty levels. Furthermore, a number of sponsors with healthy balance sheets have been voluntarily increasing their pension infusions above and beyond what's required by rules.

Figure 4: Contributions of new capital to US corporate pensions, 2008-2014



Source: UBS, Bloomberg, company financials. Companies in the Russell 1000 index

"A" is for troubled spots?

The extent of pension funding issues is certainly not uniform across various industries and sectors. One conventional way of assessing how much stress an underfunded scheme may inflict on the sponsor is to compare its funding gap to the sponsor's market cap.

Figure 5 details how various industries compare in terms of their pension funding exposures based on that measure. Interestingly enough, all of the industries with the worst deficit/market cap ratios start with an "A" - aerospace, airlines, auto manufacturers. The latter two seem to have particularly acute pension funding issues: the deficits in their schemes are nearly one quarter the size of the sponsors' market cap.

Figure 5: Pension deficit relative market cap across industries, 2014

Industry	pension deficit (\$ bil)	Market cap (\$ bil)	% of mkt cap
Aerospace/Defense	50	396	13
Airlines	21	92	23
Auto Manufacturers	35	143	24
Chemicals	28	538	5
Computers	18	431	4
Electric	28	557	5
Miscellaneous Manufactur	35	649	5
Oil&Gas	28	974	3
Pharmaceuticals	21	1,409	1
Telecommunications	26	430	6

Source: UBS, Bloomberg, company financials. Companies in the Russell 1000 index

Market impact: 2014 strengthens the case for LDI, downward pressure on long-term yields to continue

The corporate scheme experience in 2014 should give another major boost to proponents of LDI strategies for private pensions. In a way, it turned out a near custom-made case study of how large duration mismatch between assets and liabilities continues to plague pensions even when nearly everything else goes right for them.

Let's take a step back. 2013 delivered a big improvement on the size of the deficit when it got sliced almost in half from \$520 billion to about \$240 billion. That improvement came primarily from the three key drivers:

- Strong performance of equities and other return-seeking assets in pension portfolios. For instance, the S&P500 stock index alone returned more than 30% in 2013.
- Increase in long-term Treasury and corporate yields. Pension liability discounting benchmark is closer to the long-term high grade corporate bond yields. Moody's long-term AA rate, which is a popular proxy for pension benchmark rose almost 100bp in 2013.
- Infusions of new money from sponsors. R1K companies have been pouring money into pensions to improve solvency at a rate of \$55-85 billion per year, including a hefty \$60 billion infusion in 2013.

2014 should have been a decent year for corporate schemes. First, stocks and other risk assets had put in strong performance boosting pension portfolios. S&P500 was up 13% with some of the international equity markets delivering even stronger returns. Next, sponsors among R1K companies alone added another \$55 billion of new money to schemes. Nevertheless, a big decline in long-term bond yields in 2014 had wiped out most of the 2013 gains, as shown in Figure 1 and Figure 2 above. Even another very strong year for stocks and hefty checks written by the sponsors could not offset the headwind from lower bond yields and flatter yield curves.

Consequently, we expect corporate schemes to continue boosting their LDI portfolios. In our Q-Series® note back in February we estimated that US private pension demand may restrain long-term yields by 30-40bp. Furthermore, it may continue to influence a flatter US term structure in long maturities than what it had been historically at a given point of the cycle. High-grade corporate spreads should enjoy significant support from pension demand as well and long-term swap spreads may remain stuck in historically low ranges

One development that could potentially mitigate effects of pension demand would be a large shift in debt issuance in 20-30y maturities by the US Treasury and highly rated corporate names. In fact, some industry observers have advocated for the US government to start issuing proportionally more 30y bonds and even consider longer maturity (40y, 50y) issuance. We doubt the US Treasury is close to drastically altering their debt issuance profile. On the other hand, highly rated corporate names have flexibility to shift their debt issuance to longer maturities in response to growing pension demand. The fact that long-term yields are at historical lows may provide them with added incentive.

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