Introduction

On July 6, 2012, President Obama signed into law the Moving Ahead for Progress in the 21st Century Act ("MAP-21," aka "The Highway Bill"). In addition to transportation funding, this bill also includes two important provisions for corporate pension plans. The first main provision allows companies to make lower pension contributions for the next few years. This provision was considered a “pay for” the Highway Bill as pension contributions lower the tax bill for corporations, and deferring these payments translates into paying higher taxes in the short term. The second main provision raises the premiums paid to the Pension Benefit Guaranty Corporation ("PBGC"). The PBGC essentially insures a certain level of benefit payments to retirees and this fund needs to be built up to meet its obligations. In this paper, we describe the specific provisions of MAP-21, and briefly explore their impact on corporate pension plan contributions.

Background

Before delving into MAP-21, it is helpful to review the pension funding requirements set out in the Pension Protection Act of 2006 ("PPA") and the events of the past decade or so.

PPA. For single-employer corporate plans, the main headline of PPA was that it required pension plans to target 100% funding on a market-related basis which used a discount rate to measure the liability value that was linked to the corporate bond yield curve. Contributions were required to recover any deficit to 100% funding over a 7-year period¹. Notably, this meant that the ‘expected return on plan assets’ did not impact the calculation of funding levels or contribution requirements. However, some smoothing was allowed. For instance, a 24-month smoothed segment yield was permitted as an alternative to a spot yield curve and either market value or a 2-year smoothed market value of assets could be used. Among the other details, there were also provisions for accelerated contribution requirements for at-risk plans and limited benefit increases and accruals for significantly underfunded plans².

Emergence of deficits. Over the past 15 years, we have seen significant volatility in corporate pension funding ratios. As noted in Figure 1, the tech bubble in 2000 and the financial crisis of 2008 significantly reduced these funding ratios. Falling equity values, but perhaps more importantly falling discount rates (i.e., long investment-grade corporate bond yields), led to the value of assets falling far behind the value of the plans’ liabilities. Despite corporate contributions and a rebound in equities, most corporate pension plans are less than 80% funded today.

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¹ The 100% funding target and 7-year deficit reduction period apply after an initial phasing-in period of 5 years.
² In addition, and little talked about at the time, was a provision that changed the calculation of lump sums from pension plans. This has become more important as the phasing-in period has ended, and has led to more plans offering certain beneficiaries – especially vested terminated members – lump sum transfers.
Accounting. Over the past decade the Financial Accounting Standards Board (FASB) has changed the way in which pension plans are accounted for on the balance sheets of their plan sponsors. Looking forward we also expect changes to their income statement treatment (in line with changes recently made to International Accounting Standards – see sidebar on IAS19). Regardless, the rules governing pension plan contributions and pension plan accounting remain distinct and separate. Hence MAP-21, which addresses funding and contributions, does not affect the status of the pension plan in the plan sponsor’s annual report and accounts.

What has changed in MAP-21?

MAP-21 allows companies to use a higher discount rate to value their pension plan liabilities for funding (i.e., contribution) purposes. Higher discount rates equal lower liability values, so pension contribution requirements will be lower in the near future. However, in the longer term, pension contribution requirements may well be higher since the bill has no impact on the pension benefits that have been promised.

This easement in funding requirements is achieved by a process termed “Interest Rate Stabilization” which permits the use of an average corporate bond yield over the past 25 years with a corridor around this average. The corridor starts in 2012 at the 25-year average +/- 10% and it loosens in increments of 5% until 2016 when it is the 25-year average +/- 30%². As historical corporate bond yields were higher than current yields, the use of a higher discount rate lowers the value of liabilities, thus necessitating lower contributions.

What does this mean for PPA valuations?

We estimate that the discount rate used to value liabilities will increase by roughly 125–150 basis points (bps) under the new rules. The exact amount will depend on many items, including the duration of the plan’s liabilities.

► The 25-year average long dated corporate yield is about 3% higher than the current long dated corporate yield and about 2% higher than the 24-month average rate.

► Allowing for the fact that most pension plans use the smoothed, segmented version of the PPA yield curve, and overlaying the initial size of the corridor, we estimate that the PPA discount rate will increase by approximately 125–150 bps (see Figure 2)⁴.

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² While pension plan sponsors can choose to use either the market curve or the segment rate approach to value liabilities under PPA, MAP-21 only affects the segment rate approach. However, for those plans using the yield curve approach, MAP-21 permits them to re-elect to switch to the segment rate approach.

⁴ On August 17, 2012, the IRS released Notice 2012-55 (http://www.irs.gov/pub/irs-drop/n-12-55.pdf) which outlined its methodology and the initial segment rates to be used under MAP-21 for pension plan years beginning in 2012. The methodology used by BlackRock differs from the IRS methodology. We are seeking more transparency from the IRS, but the differences are small and we believe our inferences remain valid.
For a typical pension plan with roughly 12 years of duration, we estimate this change will cause its PPA liability value to fall by 15–18%.

Impact horizon of MAP-21

While the new law is permanent, it is likely to provide significant contribution relief only for the next few years.

► MAP-21 does not affect the size or timing of pension promises that have been made. Therefore, it is not really permanent relief as lower contributions today are likely to mean higher contributions in the future.

► As Figure 2 illustrates, it is estimated that there may be a crossover point for the tier-2 segment of the PPA yield curve in 2019. The crossover point for the tier-3 segment may come sooner, because the yield curve is currently much steeper than it historically has been (see Appendix).

► Should interest rates rise, we would expect an even earlier reversion to the 24-month segmented rates.

Figure 2: Implementation of Pension Funding Stabilization – Tier-2 Segment Rate (liabilities 5-20 years away)

Contributions and other implications of MAP-21

Across the entire US corporate defined benefit universe, MAP-21 might reduce the required contributions in the near term by about half (or by even more), meaning they could fall by roughly $50bn in 2012 and 2013, with perhaps the most impact in 2013. Importantly, and as mentioned previously, MAP-21 has no impact on the actual pension promise. Nor does it impact the accounting for the pension plan in the plan sponsor’s financial statements. Hence any near term reduction in contributions will need to be made up with higher contributions in the longer term – all other factors constant. If yields and/or equity values rise significantly, these additional contributions to address pension funding deficits might not be required – but there is clearly no guarantee of this.

It is also worth noting that PPA and MAP-21 represent the minimum amount of plan sponsor contributions that are required each year. Plan sponsors are generally at liberty to contribute higher amounts up to a relatively high value governed by IRS rules. In the past few months, numerous corporations have announced their intentions to make contributions on the pre-MAP-21 basis, or otherwise pay more than

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5 For example, if the yield curve evolves as implied by the forward curve, we estimate that the impact of the 25-year interest rate averaging and corridor will cease in September 2015 for the tier-2 segment rate and October 2015 for the tier-3 segment rate.
the required minimum. These decisions vary significantly based on a variety of factors that have been considered by each company, including managing their tax charges, lowering PBGC variable rate premiums, and providing a boost to reported earnings.

For companies that defer contributions, we can expect to see funded ratios increase more slowly than they otherwise might have. In the context of a general trend for pension plans to de-risk into liability-matching long duration bonds when their funded ratio improves, slower progress towards full funding implies a near-term reduction in this long bond demand.

Note on Pension Accounting: IAS19

The International Accounting Standards Board (IASB) is making fundamental changes to the recognition, presentation and disclosures of defined benefit plans. While these changes do not directly impact US generally accepted accounting principles (GAAP), they do set a precedent that might influence future changes that do apply in the US – not least as there is considerable debate and likely movement towards convergence of US accounting with international accounting standards.

Changes to IAS19, which governs the accounting for corporate pension plans, were announced in 2011 and become effective in 2013. Of note is the fact that the expected return on assets will no longer flow through the income statement; therefore, the pension expense will be independent of any expectations based on the asset allocation. Smoothing of asset-liability gains and losses will no longer be permitted – instead these will be shown unsmoothed in the Statement of Other Comprehensive Income (OCI).

To learn more about changes to accounting standards from the IASB, with related implications for US standards under the Financial Accounting Standards Board (FASB), read “Pension Accounting Reform: Views from BlackRock.” This and other articles of interest to pension plan sponsors are available on www.blackrock.com/ldi.

Pension Benefit Guaranty Corp. (PBGC) Premiums

Another noteworthy part of MAP-21 is a revision to the required PBGC contributions payable by each corporate pension plan.

The PBGC was created in 1974 as part of the Employee Retirement Income Security Act (“ERISA”). The original concept was to provide a backstop insurance program in the event of a corporation being unable to perform on its pension liabilities. PBGC’s obligations include monthly payments to participants and beneficiaries in terminated defined benefit plans. The financial resources available to pay these obligations are underwriting income received from insured plan sponsors (largely premiums), the income earned on PBGC’s investments, and the assets taken over from failed plans.

Premiums paid by corporate DB pension plans consist of a fixed dollar amount per member plus a variable rate premium linked to the value of the underfunded liability in the plan (i.e., the extent to which there is a deficit). Under MAP-21, the per-member premium has increased from $35 per participant to $42 in 2013 and $49 in 2014 (indexed to inflation thereafter), while the variable rate premium has been increased from 0.9% to 1.3% of unfunded liability in 2014 and 1.8% in 2015.

Summary

MAP-21 has important implications for corporate pension plans, including both contributions and premiums. Some corporations will take advantage of the flexibility to defer contributions; however, this will not be universal. For those who delay contributions, the underlying funded status of the plans may increase at a slower pace. While the trend toward investment de-risking continues, the pace might be slowed somewhat, and the consequential near term demand for long “liability-like” bonds might be reduced.

Ultimately, the economics of the pension plan investment and funding challenge remain unaltered. We encourage investors to contact us to discuss the implications of this legislation or issues in pension funding and investment more broadly.

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6 To offset some of this increase, MAP-21 also introduced a cap on variable rate premiums of $400 per participant, indexed to inflation going forward. We also note the 1.3% and 1.8% levels are subject to possible minor adjustment due to experienced inflation over the intervening period.
Figure 3: Implementation of Pension Funding Stabilization – Tier-3 Segment Rate
(liabilities 20+ years away)


Monthly Tier 3 rate estimated as 25 year rate on HQM curve from October 2003 onwards. For earlier periods, HQM rate estimated as Barclays Long Credit Index (Rate level 0.98 correlated with 25 year HQM rate level). “Rate Used” is PPA rate.

24-month smoothed rate based on PPA data from September 2007 onwards. All earlier/other smoothed rates derived from monthly rates.