

# The Impact of Interest Rates on Single-Employer Defined Benefit Plan Costs

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*This is the first in a 3 part series regarding pension costs for single-employer defined benefit plans. Stay tuned for the next two articles - PBGC premium increases<sup>1</sup> and immunization strategies.*

## **Pension plans twice dodged the bullet of the drop in the MAP-21<sup>2</sup> interest rates for 2013 and 2014 – but won't be so lucky in 2015 – PLAN AHEAD!**

Temporary pension funding relief, which began in 2012, allows sponsors of single employer defined benefit plans to use artificially high interest rates to measure pension liabilities, which in turn lowers liabilities and plan costs. This relief effectively phases out over several years, beginning in 2013. Luckily, strong investment performance during 2012 and 2013 largely offset the impact of the liability increases. However, predictions for equity and fixed income gains for 2014 don't bode as well, which will likely further raise pension costs for 2015 and beyond.

### **Background**

The Pension Protection Act<sup>3</sup>, generally effective in 2008, completely overhauled corporate pension plan funding requirements. One of the primary purposes of the Act was to strengthen the funded position of corporate pension plans through accelerated minimum required contributions. Pension liabilities are now determined based on a current 24 month average corporate bond yield curve rather than the actuary's best estimate of the assumed long-term rate of return on plan assets, which dramatically increases liabilities over what they were under the prior law.

The impact of the economic downturn which began in 2008 and subsequent events drove pension liabilities and minimum funding requirements to elevated levels at a time when plan sponsors could least afford it. First, the collapse of the stock market caused pension assets to drop. Second, interest rates declined to historic lows which raised the calculated liabilities, largely due to Federal Reserve policies intended to stimulate the economy. In order to provide pension plan sponsors with *temporary* economic relief, a new pension law was passed in 2012 as part of the "Moving Ahead for Progress in the 21<sup>st</sup> Century Act" (MAP-21).

Under MAP-21, pension funding relief was achieved by maintaining a floor interest rate used to measure liabilities. This floor interest rate is tied to a 25 year average of corporate bond yields. Since interest rates over the past 25 years were much higher than

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<sup>1</sup> Pension Benefit Guaranty Corporation premiums for single-employer plans were increased as part of the Bipartisan Budget Act of 2013, enacted December 26, 2013

<sup>2</sup> Moving Ahead for Progress in the 21<sup>st</sup> Century Act, enacted July 6, 2012

<sup>3</sup> The Pension Protection Act of 2006, enacted August 17, 2006

current interest rates, the resulting floor interest rate was substantially higher in 2012 than the 24 month average rate that was required to be used prior to MAP-21. In general, the relief provided by MAP-21 lowered 2012 average pension liabilities by approximately 20%.

However, this relief is temporary. Interest rates have been predicted to increase due to the expected change in the Federal Reserve’s monetary policy with an improving economy. This, in conjunction with the mechanics of how the MAP-21 interest rates are determined, will result in a diminishing impact of MAP-21 funding relief over the next few years.

### Near Term Outlook for Pension Liabilities and Contribution Requirements

MAP-21 provided welcome immediate funding relief for pension plan sponsors. However, the impact of MAP-21 diminishes over time as demonstrated by the drop in 2013 required interest rates of approximately 70 basis points from those required for 2012. Fortunately, most plans achieved favorable investment returns in 2012 through both strong equity and bond performance, which at least partially offset the interest rate reduction and dampened any increase in 2013 required contributions. For 2014, the MAP-21 interest rates will be another 50 basis points lower than for 2013, which again will be at least partially offset by strong 2013 equity performance and hence minimize the increase in 2014 required contributions.

Corporate bond rates have risen approximately 1% within the past year and are expected to rise further, although how much and how quickly is difficult to project. If corporate bond rates (A) remain level, (B) increase 1%, or (C) decrease 1% over the next 2 years, the impact on the MAP-21 funding interest rates would be roughly as follows for a mature pension plan with liability duration of approximately 13 years:

#### Approximate MAP-21 Effective Rate<sup>4</sup>

Year	(A)Level Interest		(B)1% Increase Over 2 Yrs.		(C)1% Decrease Over 2 Yrs.	
	Rate	Est. Annual Liability Increase	Rate	Est. Annual Liability Increase	Rate	Est. Annual Liability Increase
2013	6.35%	-	6.35%	-	6.35%	-
2014	5.85%	6%	5.85%	6%	5.85%	6%
2015	5.35%	6%	5.35%	6%	5.35%	6%
2016	5.10%	3%	5.60%	-3%	4.85%	6%
2017	5.05%	1%	5.85%	-3%	4.70%	2%

<sup>4</sup> Projections based on IRS guidance under Notices 2012-55 and 2012-61, and December 2013 IRC Section 417(e)(3)(D) interest rates.

## Observations

There are a couple key observations from these estimates. First, there is a delayed impact of interest rate changes. For example, the expected MAP-21 interest rates are the same in 2015 under all three scenarios and only begin to diverge in 2016.

Second, the approximate yearly increase in liability displayed is attributable solely to interest rate changes and does not account for growth due to new benefits being earned during the year or passage of time. In other words, plans will experience an actuarial loss (or gain) equal to the approximate interest rate impact on the liability. It is unlikely that 2014 will be another banner year for plan investment performance to offset expected liability growth.

## Summary

Unless there is another law change that grants additional interest rate relief, pension plan sponsors will continue to face financial headwinds. The development and maintenance of cohesive funding and investment policies, as well as establishing a continuation or termination end game strategy for the plan, are important steps in managing through this environment.