SOCIETY OF ACTUARIES

U.S. Multiemployer Pension Plan Contribution Indices

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Introduction and Executive Summary

Multiemployer pension plans (MEPPs) in the United States generally cover unionized participants from more than one participating employer. In March 2016, the Society of Actuaries introduced contribution indices—metrics for measuring pension plan contribution adequacy toward funding the plan.[1] This article presents updated results across the MEPP system through 2014, with preliminary results for 2015 based on a partial year of reporting. Here are highlights of the update:

- From 2013 to 2014, aggregate unfunded liabilities declined by 16% using funding-basis discount rates, from $162 billion to $136 billion. Contributions are one factor affecting the improvement. Using Current Liability rates, aggregate unfunded liabilities fell from $513 billion to $495 billion. Note that Current Liability discount rates were slightly lower for 2014 than for 2013, causing liabilities to increase slightly.
- 2014 marked the first time in recent years that aggregate contributions met the benchmark for eliminating unfunded liabilities within 15 years when using funding-basis discount rates. However, when using Current Liability discount rates, 2014 contributions continue to fall significantly short of the level needed to maintain existing unfunded liabilities.
- In 2014, about 45% of MEPP participants were in plans that received at least enough contributions to fund the plan within 15 years using funding basis discount rates, up from 35% the year before. However, using Current Liability discount rates, fewer than 1% of participants were in such plans.
- Although nearly 90% of MEPP participants were in plans that received more contributions for 2014 than required by federal law, 30% of MEPP participants were in plans that did not receive sufficient contributions to maintain existing unfunded liabilities computed on the same basis, down from 45% for 2013. Regulations reduce the minimum required contribution by the “credit balance,” a mechanism for recognizing that a plan’s past contributions were more than the minimum required.[2]

Aggregate MEPP Liabilities and Funded Status

The MEPP system continues to carry significant unfunded liabilities, regardless of how they are measured (see Figure 1). From 2013 to 2014, unfunded liabilities using funding discount rates and the market value of assets declined approximately 16% from about $162 billion to $136 billion. Contributions are one factor behind the

[1] Society of Actuaries, “Multiemployer Pension Plan Contribution Analysis,” March 2016, https://www.soa.org/Research/Research-Projects/Pension/2016-multiemployer-pension-plan-analysis.aspx.
[2] Funding requirements for MEPPs are set forth in Internal Revenue Code §§431-432 and accompanying regulations.

improvement. The other factor is favorable financial and demographic experience compared to actuarial assumptions used, which is beyond the scope of this article. Most MEPPs had an unfunded liability on this basis.

When funded status is measured on a Current Liability basis using much lower discount rates based on Treasury rates (see Figure 2), unfunded liabilities improved slightly from roughly $513 billion for 2013 to $495 billion for 2014.[3] Almost all MEPPs had an unfunded liability on this basis.

Figure 1

AGGREGATE TOTAL LIABILITIES AND FUNDED STATUS

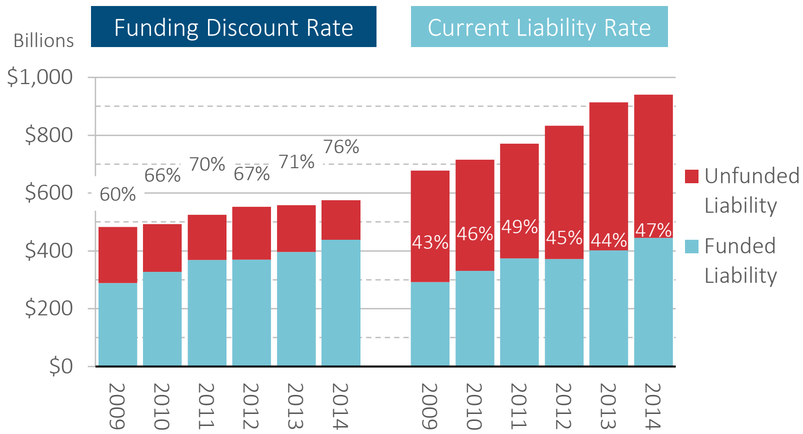
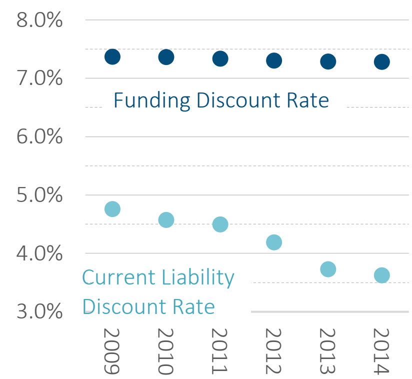


Figure 2

LIABILITY-WEIGHTED AVERAGE DISCOUNT RATES

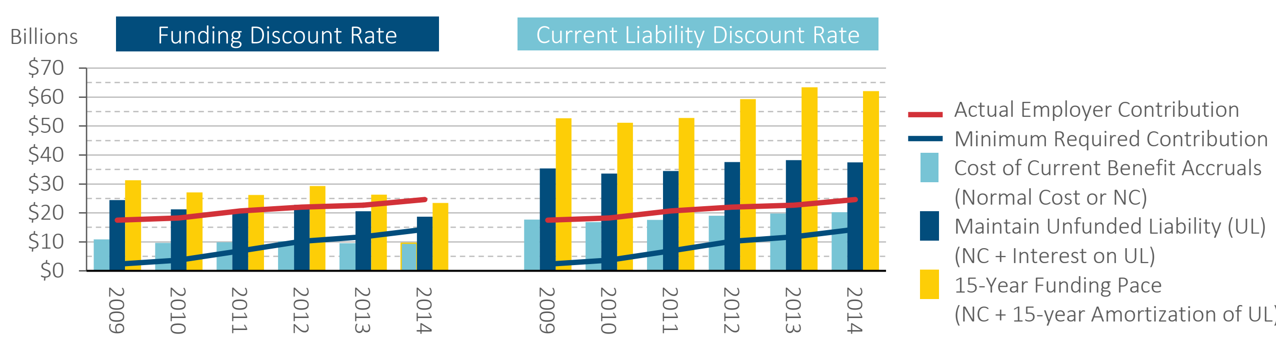


Aggregate Contribution Trends

Aggregate MEPP contributions increased on average 7.1% per year from 2009 to 2014. In addition, during the same period they continually significantly exceeded minimum required contributions. However, 2014 was the first year during this period for which aggregate contributions met the benchmark for funding the system within 15 years when measured using funding-basis discount rates. And 2013 was the first year during this period for which aggregate contributions exceeded the benchmark for maintaining existing unfunded liabilities, as Figure 3 shows.[4]

Figure 3

AGGREGATE MEPP CONTRIBUTIONS COMPARED TO BENCHMARKS



[3] Current Liability basis uses the unit credit cost method, discount rates based on an average of Treasury discount rates, prescribed mortality rates and the market value of assets.
[4] Contributions in aggregate provide a point of reference only and cannot be used to measure the funding pace for every plan in the system. Some plans contributed significantly more than this pace while others contributed significantly less.

When measured using Current Liability discount rates, which are based on Treasury rates, aggregate contributions for 2014 continued to fall significantly short of the level needed to maintain existing unfunded liabilities, let alone to make funding progress.

Funding-pace benchmarks use the unit credit cost method and market value of assets. This methodology was designed only for contribution indices and their benchmarks and is not intended to provide commentary on the appropriateness of either assumptions or methods for funding these plans or any other purpose.

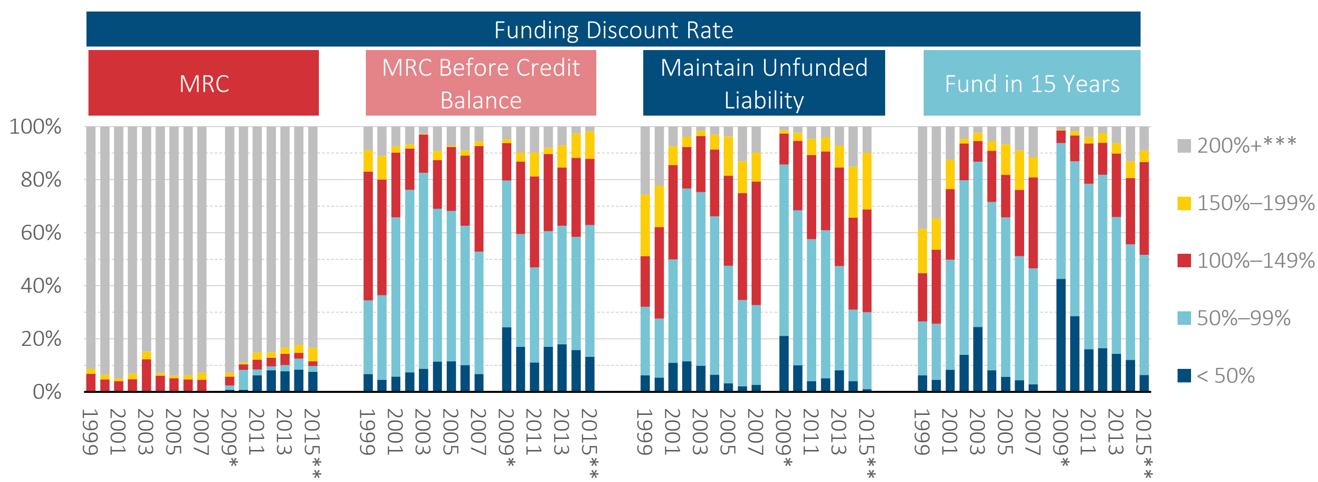
Contribution Indices

The contribution index (CI) compares a plan's contribution to benchmarks. A plan's CI is the ratio of its actual contribution to a given benchmark. A CI of more than 1.0 means that the contribution exceeded the benchmark, while a CI of less than 1.0 means the contribution fell short of the benchmark.

Figure 4 illustrates the frequency, weighted by participants, that the MEPP system's CIs fell within certain ranges when CI benchmarks are computed using the discount rates used for funding purposes. The graph presents two benchmarks from a regulatory perspective in addition to the two benchmarks from a funding perspective presented in Figure 3. Regulatory perspective benchmarks are the minimum required contribution (MRC) under federal law, and for illustration, the MRC before reduction by the credit balance, a mechanism for recognizing that a plan's past contributions were more than the minimum required.[5]

Figure 4

CONTRIBUTION INDICES USING FUNDING DISCOUNT RATES



* 2008 data is missing.
** Partial year of reporting; Oct. 28, 2016, data reflects roughly 50% of plans with roughly 60% of MEPP system liabilities reporting for 2015.
*** Includes plans for which the benchmark is zero.

MEPP contributions generally exceeded the MRC. For 2014, nearly 90% of the MEPP participants were in plans for which 2014 contributions exceeded the MRC—about the same as 2013. That figure includes the approximately 80% of MEPP participants who were in plans that had no MRC. However, since 2009 only about 40% of MEPP

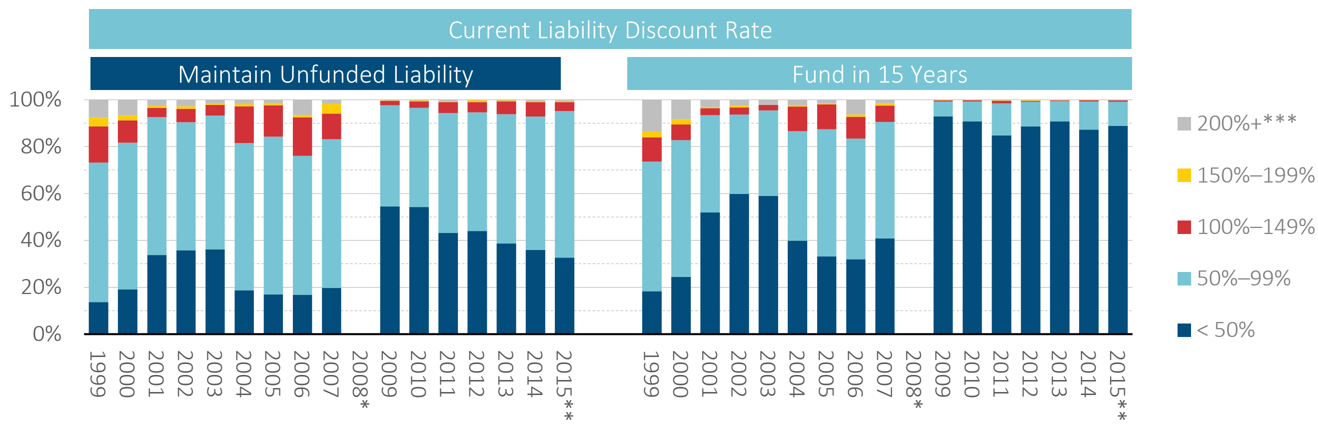
[5] Funding requirements for MEPP are set forth in Internal Revenue Code §§431-432 and accompanying regulations.

participants were in plans whose contributions would have exceeded the MRC if regulations did not recognize the credit balance.

Turning to funding progress as measured using funding-basis discount rates, more than 30% of MEPP participants were in plans whose 2014 contributions fell short of maintaining existing unfunded liabilities—a significant improvement since 2013 when over 45% of the system fell short of the same benchmark. In addition, approximately 45% of participants were in plans whose 2014 contributions met or exceeded levels needed to close funding gaps within 15 years—up from about 35% for 2013. Preliminary results for 2015 indicate potential for slightly improved funding rates compared to 2014. When measured using Current Liability discount rates, contributions were less effective, as Figure 5 shows.

Figure 5

CONTRIBUTION INDICES USING CURRENT LIABILITY DISCOUNT RATES



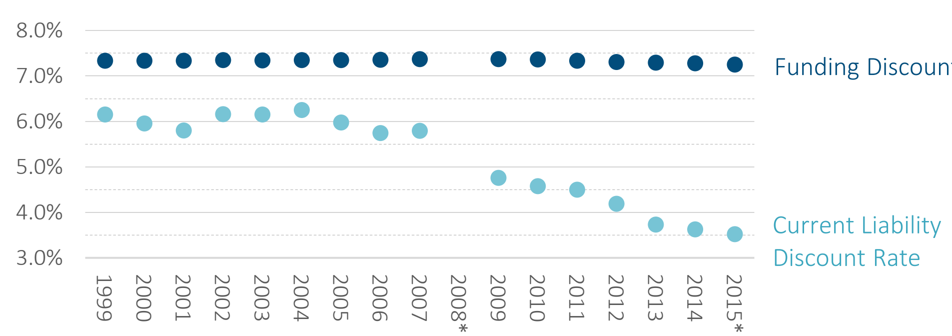
* Data for 2008 is missing.
** Partial year of reporting; Oct. 28, 2016, data reflects roughly 50% of plans with roughly 60% of MEPP system liabilities reporting for 2015.
*** Includes plans for which the benchmark is zero.

Using Current Liability discount rates, only 6% of 2014 MEPP participants were in plans that received enough contributions to maintain the existing unfunded liability, and less than 1% of participants were in plans that received enough to meet the benchmark for closing the funding gap within 15 years. These results are slightly worse than for 2013 when Current Liability discount rates were slightly higher.

Figure 6 compares funding-basis and Current Liability discount rates from 1999 to 2015. The weighted average funding discount rate remained essentially flat during this period, whereas Current Liability rates decreased substantially.

Figure 6

LIABILITY-WEIGHTED AVERAGE DISCOUNT RATES



* Data for 2008 is missing.
** Data as of Oct. 28, 2016, reflect roughly 50% of plans with roughly 60% of liabilities reporting for 2015.

Data Notes

Analysis is based on publicly available data from the Department of Labor Form 5500 as of Oct. 28, 2016. Data for the 2015 plan year represents roughly 50% of the plans, which have roughly 60% of the liabilities of the MEPP system. Plans reporting by Oct. 28, 2016 are primarily those with plan years beginning in January.

Other than adjustments for obvious errors, data were used as reported. The use of the reported values is not intended to provide commentary on the appropriateness of the underlying assumptions for funding these plans or any other purpose.

Following are some specific notes about the data:

- For 2014, analysis included 1,199 plans representing 9.7 million participants and approximately 205,000 employers. Many participants participate in more than one plan, and many employers contribute to more than one plan. Data reflected in this article is the sum of counts for each plan.
- Data for the 2008 Schedule MB is missing from the Department of Labor database.
- Criteria for errors and missing data differ slightly from previous analyses, so results for previously published years may differ slightly.

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