Can multiemployer pension plans survive COVID-19?

Ladd Preppernau, FSA, EA, MAAA | Carrie Vaughn, ASA, EA, MAAA

As COVID-19 spreads and financial markets react to economic slowing, the multiemployer community is attempting to come to grips with the implications on their defined benefit pension plans. The impact has been swift and severe:

- Over the first 10 weeks of 2020, equity markets have decreased over 25%. While the impact on an individual plan’s assets will depend on its specific allocation, this will have a significant impact on all plans.
- The multiemployer system’s aggregate funding level is estimated to have dropped from 85% to 68% during this time. This doubles the system’s underfunding, adding over $120 billion to the estimated shortfall.
- The impact on an individual plan’s funding will depend on its cash flow and how well it has recovered from 2008. In general, plans with negative cash flow are more vulnerable, and also entered 2020 in a weaker position, than those with positive or neutral cash flow.

On the heels of the dot-com bust from 2000-2002 and the global financial crisis in 2008, can multiemployer plans survive a third “once-in-a-lifetime” event? This Multiemployer Alert explores the potential impact of recent events.

How bad has the market performance in 2020 been so far?

It is fair to say that this has been a historically difficult time for financial markets around the globe. The calendar year performance through March 18, 2020, for some of the major market indices is summarized in Figure 1.

The impact on a given plan will depend on its specific allocation. For example, a pension plan that is invested in 45% equities across all market capitalizations, 20% international equities, and 35% domestic fixed income might have a calendar year-to-date return around –19%.

The above information is only intended to provide an idea of how the recent market volatility might affect a general pension portfolio. It is based on the simplified portfolio used in Milliman’s most recent Multiemployer Pension Funding Study. Every plan is invested differently, and many include alternative investments that are intended to provide downside protection in times of crisis, such as we are currently experiencing. Trustees should discuss the impact of the recent market volatility on their plans with their investment consultant.
What is the impact for plans with different fiscal years?

For calendar year plans, the events of the last few weeks will not affect the 2020 zone certification. For non-calendar year plans (plans with a fiscal year that is not January 1–December 31), their fiscal year-to-date returns will not be as bad as shown in Figure 1 due to strong returns in the later part of 2019. However, for plans with a fiscal year beginning April 1 or later, the 2020 certification will reflect this experience. The fiscal year to date return for each of the above indices through March 18, 2020, is shown for several different fiscal years in Figure 2.

How will the recent experience affect the funding of the multiemployer pension plan system?

Milliman publishes a biannual Multiemployer Pension Funding Study that examines the health of the multiemployer system as a whole. As noted above, the simplified investment portfolio in that study would have returned –19% for 2020 through March 18, 2020.

This would result in the system’s estimated aggregate funding level dropping from 85% to 68% as of March 18, 2020. As shown in Figure 3, this is about where the system’s funding was in 2011. In other words, the last few weeks have erased (at least temporarily) almost a decade of general improvement in funding levels.

As noted in the study, this chart represents the entire system’s estimated assets over the entire system’s estimated liability, utilizing each individual plan’s assumptions and methods. It provides a rough estimate of the system’s overall funding level, but consists of data from many individual plans (each using its own assumptions) and a very rough approximation of the potential investment return for the system as a whole.
How will the interest rate environment affect long-term return market expectations?

One of the potentially more impactful events in the last few weeks is the continued reduction in interest rates – both the 10-year and 30-year Treasury bond rates recently closed below 1% for the first time ever, and the Federal Reserve subsequently reduced interest rates yet again. Figure 4 shows how the 10-year Treasury rate has changed over time.

The yield on Treasury bonds is an important consideration for investment consultants and actuaries as they model future expected returns. In general, Treasury yields are considered to represent a “risk-free” level of return, and so-called “risk assets” are expected to earn a spread compared to a risk-free return. If that spread remains relatively constant over time, a lower risk-free return level will generally pull down the expectations for all asset classes.

For example, if a given corporate bond is generally expected to return 2% more than the 10-year Treasury yield, the expected yield in 2001 (when the risk-free level of return was close to 5%) would have been about 7%. Currently, that analysis would produce an expected yield around 3%.

Interest rates did not revert to historical levels as expected following the market collapse of 2008. If they remain at historically low levels, expectations for all asset classes may be impacted.

Will the recent events affect my actuary’s investment return assumption?

Under the Actuarial Standards of Practice (ASOP), actuaries are required to select an investment return assumption that, among other requirements, reflects relevant history and current market expectations, and has no significant bias. Actuaries in general prefer not to respond too abruptly to short-term market fluctuations, and the ASOPs provide that actuaries “should not give undue weight to recent experience.”

If the low interest rate environment continues, the lower expected returns currently assumed by investment professionals for many, if not all, asset categories could persist. However, other market considerations could partially offset the impact of the currently low interest rate environment. For example, if equities generally become undervalued as a result of the current market activity, expectations for future equity performance may actually increase.

Regardless of a plan’s asset allocation, persistently low interest rates and recent changes in the market may affect the actuary’s assessment of the investment return assumption. Trustees may want to discuss this with their actuary to make sure they understand the actuary’s rationale for the selection of the assumption.
How will the recent experience affect individual multiemployer pension plans?
The expected impact on individual pension plans differs based on the plan’s cash flow situation.

- Plans with **positive cash flow** (contributions that exceed benefit payments and administrative expenses) have more time for a market recovery to avoid a negative long-term impact on their financial stability. These plans do not have to sell assets while their value is at a low point in order to pay benefits. In other words, as long as the markets eventually recover and meet long-term expectations prior to recent events, even if it takes years to get there, the long-term outlook for these plans is unlikely to be materially impacted.

- For plans with significant **negative cash flow** (benefit payments and expenses significantly larger than contributions), a quick recovery is important to avoid lasting financial damage. These plans must sell investments while assets are at a low point in order to pay benefits, which further draws down the Plan’s assets. As a result, any subsequent investment returns are realized on a lower base, which means fewer dollars.

In general, the order of returns is irrelevant for plans that have no net cash flows, but the order of returns matters greatly for plans with a negative cash flow. Figure 5 illustrates the impact a constant negative cash flow of -3% of initial assets (this is about the median cash flow situation for the multiemployer system) can have on a plan’s projected market value of assets, compared to a plan with a neutral cash flow. Figure 5 also illustrates the impact of a constant negative cash flow of -6% of initial assets.

In addition, plans with a stronger cash flow position are generally in better position going into 2020 than other plans. Figure 6 details the estimated median funded percentage as of December 31, 2019, for different cash flow levels (as a percentage of assets) based on Milliman’s December 2019 Multiemployer Pension Funding Study.

<table>
<thead>
<tr>
<th>FIGURE 6: MULTIEMPLOYER FUNDING LEVELS BY NET CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NET CASH FLOW (PERCENTAGE OF ASSETS)</strong></td>
</tr>
<tr>
<td>0% or Greater</td>
</tr>
<tr>
<td>0% to -2%</td>
</tr>
<tr>
<td>-2% to -4%</td>
</tr>
<tr>
<td>-4% to -6%</td>
</tr>
<tr>
<td>-6% to -8%</td>
</tr>
<tr>
<td>-8% or Less</td>
</tr>
</tbody>
</table>

* Based on estimated liabilities using each plan’s investment return assumption and estimated investment return since the last Form 5500 filing as described in Milliman’s December 2019 Multiemployer Pension Funding Study.

Figure 6 shows that not only are plans with negative cash flow more vulnerable to recent market draw-downs, but they also generally entered 2020 in a weaker position than those with better cash flow positions.

In addition, recovery for all plans could be hampered if employment levels drop significantly. Fewer hours worked results in lower contributions, which worsens a plan’s cash flow situation.
What are the takeaways from an actuarial perspective?

Below are a few takeaways from the perspective of a multiemployer pension plan actuary:

- Funding requirements and zone status are based on measurements at a single point in time. This means plans with different plan years could have different experiences. For example:
  - For calendar year plans (which is the majority of plans), Trustees won’t know until markets close on December 31, 2020, if they will be forced to take any action as a result of the market volatility in 2020. In other words, there is time for markets to recover.
  - Plans with a fiscal year beginning April 1 are likely to have negative returns for their plan year unless there is a significant recovery in the next few days, and this will affect their 2020 certification.

- Plans with more negative cash flow are more vulnerable, and also entered 2020 in a weaker position, than those with positive or neutral cash flow. This is very similar to the situation leading into the market collapse in 2008.

- Many plans adjusted contribution and benefit levels in response to the market downturn in 2008 and had not yet fully recovered prior to 2020. Another large drawdown in assets, particularly if accompanied by a significant drop in hours, would add further strain. For many plans, additional adjustments may not be feasible.

- One potentially long-lasting fallout of the recent weeks is the significant reductions to interest rates. This could lead to lower expected long-term returns, particularly with regard to fixed income investments, which are generally held for their predictability and relatively low volatility.

While the events of recent weeks are startling and unsettling, pension plans are long-term vehicles. We will begin to see the damage of the current market volatility as each plan reaches the end of the current fiscal year, but we won’t have a complete picture of the fallout for quite some time. If the fallout is severe, it is possible that we may see legislative or regulatory relief similar to that provided after 2008.

Our best advice is to keep calm, stay healthy, and carry on as best as possible in the current environment.