CENTER *for* RETIREMENT RESEARCH *at* BOSTON COLLEGE

September 2014, Number 14-14

# THE FINANCIAL STATUS OF PRIVATE SECTOR MULTIEMPLOYER PENSION PLANS

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## Introduction

Private sector multiemployer pension plans are retirement plans negotiated by a union with a group of employers, typically in the same industry. While these plans were once thought to be secure, they have now become the focus of concern and congressional interest. Multiemployer plans – having expanded benefits during the stock market boom in the 1990s – became significantly underfunded in the wake of the bursting of the dot-com bubble in 2000. Although by 2004 these plans appeared to have weathered the storm, the multiemployer plan community, hoping to moderate the boom-bust cycle, worked with Congress to update funding rules.[1] This effort culminated in the Pension Protection Act of 2006 (PPA); the key innovations for multiemployer plans were to require plan trustees to look past valuations on a single date and assess where the plan is headed and, where necessary, to require changes to restore the plan to viability. Just as the legislation took effect, the plans were once again pummeled by another financial crisis and the ensuing prolonged recession. The question is how the roughly 1,400 multiemployer plans are faring today.

This *brief*, the second in a series of four on multiemployer plans, attempts to answer that question, using data from the Department of Labor's (DOL) *Form 5500* and from corrective action proposals required by the PPA for plans in either "endangered" or "critical" status.

The discussion proceeds as follows. The first section describes the provisions of the PPA for classifying multiemployer plans and the number of plans in each category as of 2012. The data show that the majority of plans are on relatively secure footing, but a significant number of plans, covering at least one million of the 10.4 million participants, are seriously troubled. The second section identifies the unique features of troubled plans using Central States Teamsters and United Mine Workers as examples. The third section explores when these troubled plans are likely to run out of money, using a combination of a simple model and information from the PPA-required action plans. The fourth section reports on actions taken by plans in various PPA categories to improve their financial status. The final section concludes that more troubled plans may be at risk of exhausting their assets than currently thought. In terms of actions to date, most critical and endangered plans have increased contributions and cut "adjustable benefits," but reducing future accruals for active workers has been a much less popular option.

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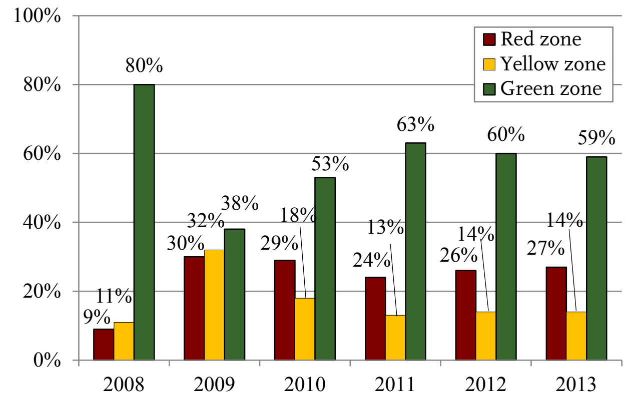
## PPA Classification of Multiemployer Plans

One key innovation of the PPA was to require plan sponsors to look past valuations on a single date and assess where the plan is headed. That is, instead of focusing just on today's funded ratio, trustees, employers, and unions are required to take an active forward-looking approach to managing their plans. Based on each plan's assessment of its financial health over the next five or 10 years, the PPA assigns them to one of three buckets. Those with a projected funding deficiency within four or five years or a near-term cash flow problem are deemed "critical;" those with serious, but less imminent, problems are "endangered" (see Table 1); and all others fall into the third bucket.[2] Critical plans are characterized as being in the red zone, endangered plans in the yellow zone, and all other plans in the green zone. The second major innovation of the PPA is that it requires plans in the critical or endangered categories to take corrective action.

In 2008, when the PPA first took effect and before the financial crisis, data for a sample of one quarter of multiemployer plans show that 80 percent of plans were in the green zone, 11 percent in the yellow zone, and 9 percent in the red zone (see Figure 1).[3] Then the markets crashed and the economy tanked, causing unfunded liabilities to spike and the number of troubled plans to soar.[4] As the economy and the stock market began to recover, a large share of multiemployer plans moved from the yellow zone back to the green, but the share in the red zone declined only slightly. Today, roughly 60 percent of plans are in the green zone, 14 percent in the yellow zone and 27 percent in the red zone.

Before looking at the long view, a snapshot is useful. Using data from the Department of Labor's *Form 5500*, Table 2 (on the next page) presents two measures of funded status and unfunded liabilities –

Figure 1. Sample of Multiemployer Plans by Zone Status, 2008-2013




Note: More than 350 plans are represented in all six surveys.
*Source*: Segal Consulting (2014).

Table 1. Triggers and Required Action for Critical and Endangered Zone Status

| Zone status | Triggers | Required action |
|---|---|---|
| Endangered | Less than 80% funded *or* funding deficiency within 7 years. | "Funding Improvement Plan" to close 1/3 of gap over 10 years. |
| Severely endangered | Less than 80% funded *and* funding deficiency within 7 years. | "Funding Improvement Plan" to close 1/5 of gap over 15 years. |
| Critical | • Less than 65% funded and either funding deficiency within 5 years or insolvency within 7 years, *or*<br>• funding deficiency within 4 years, *or*<br>• insolvency within 5 years, *or*<br>• liabilities for inactives greater than for actives; contributions less than normal cost plus interest; *and* funding deficiency within 5 years. | "Rehabilitation Plan" to get out of critical status within 10 years. |

Note: A plan's status is determined at the start of the plan year and the criteria shown include the current plan year in their provisions. Alternatively, the criteria can be written excluding the current plan year and only reporting provisions for succeeding years, thus showing one fewer year for each criterion.
*Sources*: U.S. Government Accountability Office (2013); and Solis, Geithner, and Gotbaum (2013).

Table 2. Funded Status of Multiemployer Plans by Zone Status, 2012

| PPA category | Funded ratio (percent) | | Unfunded liabilities (billions) | |
|---|---|---|---|---|
| | Current | Actuarial | Current | Actuarial |
| Red | 37.1% | 62.5% | $166 | $65 |
| Yellow | 39.7 | 69.6 | $110 | $35 |
| Green | 51.9 | 86.4 | $210 | $40 |
| All | 44.9 | 75.9 | $486 | $140 |

*Source*: Authors' calculations from U.S. Department of Labor *Form 5500* (2012).

a current view and an actuarial smoothed view. The actuarial view averages asset values over a period of time and uses the expected return on plan assets as the discount rate for calculating liabilities. The current view is based on the market value of plan assets and a liability calculated using a four-year average yield on 30-year Treasuries as the discount rate, and a standardized mortality table.[5]

The actuarial funded ratio overall for multiemployer plans is 75.9 percent. The funded ratio for those in the green range averages well above the 80-percent trigger in the PPA; plans in the yellow zone average 69.6 percent; and those in the red zone average slightly below the PPA trigger of 65 percent. The whole point of the PPA, however, is to look past valuations on a single date and assess where the plan is headed.

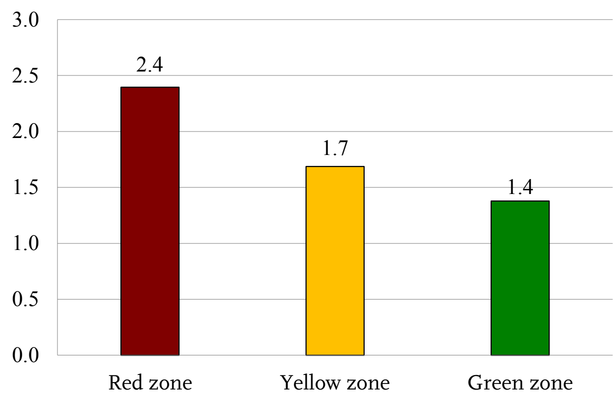
# Looking Ahead at Multiemployer Plans

Looking ahead requires exploring characteristics other than the funded status of plans. The most important for underfunded plans appears to be the relative size of the population of active workers and its impact on cash flow. This perspective helps explain why the most talked about large plans – Central States Teamsters and United Mine Workers – are deemed to be facing insolvency.

## *Characteristics of Plans by Zone*

On its face, an average funded status of 65 percent would not be thought enough to characterize a plan as in serious trouble. If assumed rates of return materialized and the trustees made appropriate adjustments, one could hope that over time the situation would improve. Unfortunately, for a number of troubled plans time will not lead to improvement; these plans have so few active workers relative to inactive participants that the financing base is disappearing (see Figure 2).

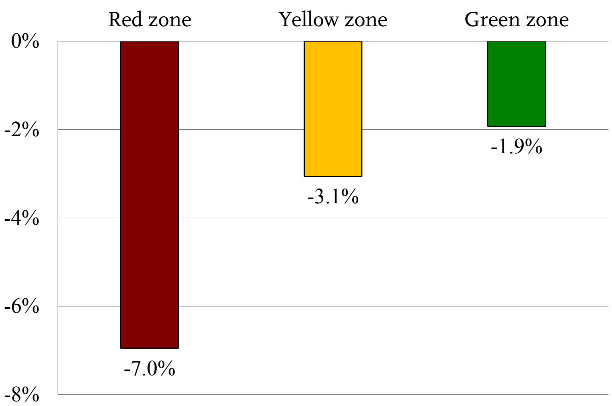
Figure 2. Ratio of Inactive to Active Participants by Zone Status, 2012




*Source*: Authors' calculations from U.S. Department of Labor *Form 5500* (2012).

When the financing base disappears, contributions fall short of benefit payments, which produces negative cash flow. The magnitude of the negative flow relative to assets is a key determinant of the future of multiemployer plans. The easiest way to think about the power of this dynamic is to consider a situation where the negative cash flow rate exceeds the rate of return. That is, cash flow is equal to, say, minus 8.5 percent and the assumed rate of return is plus 7.5 percent. In this case, the trustees each year will have to dig into assets to cover promised benefits. As assets decline, the negative cash flow will increase as a percent of assets, and the plan is in a death spiral. Thus, analysts looking for trouble down the road need to go no further than cash flow as a percent of assets. As shown in Figure 3, this metric varies dramatically by zone, ranging from -7.0 percent for plans in the red zone to -3.0 percent for those in the yellow zone and -1.9 percent for those in the green zone.

Figure 3. Cash Flow as a Percent of Assets by Zone Status, 2012




*Source*: Authors' calculations from U.S. Department of Labor *Form 5500* (2012).

Note that negative cash flows by themselves are not worrisome; they are the inevitable result of a mature plan. Yes, eventually the assets are drawn down, but in a fully funded plan they are sufficient to cover promised benefits. In the case of an underfunded plan, however, the assets are depleted before all benefits are paid.[6]

### *Why the Focus on Central States and United Mine Workers?*

Two plans that appear on the PBGC's list of "reasonably possible" insolvencies – although not explicitly identified by the PBGC – are the Central States Teamsters and the United Mine Workers. These are large plans with a potential cost to the PBGC of $20 billion and $6 billion, respectively. These two plans, however, look very different from each other when viewed as a snapshot. The Central States Teamsters plan is very poorly funded with an actuarial (current) funded ratio of 54 percent (35 percent); in contrast, the funded ratios for the United Mine Workers are about average for multiemployer plans (see Table 3). Where these plans are very similar is that their negative cash flow exceeds 10 percent of assets. That means they are digging into assets to pay benefits and are projected to exhaust their assets within the next 12-16 years.

## Projected Exhaustion Dates for Multiemployer Plans

To get a sense of the overall condition of multiemployer plans, we constructed a simple model to project the numbers of years before each plan exhausts its assets. In this model, contributions and benefits were projected assuming for each plan that the dollar difference between the benefits and contributions in 2012, from the *Form 5500*, would continue into the future.[7] Assets were projected to grow at the plan's assumed rate of return, a generous assumption. The initial estimates of years to exhaustion were compared

Table 3. Central States and United Mine Workers Plans, 2012

| Plan | Zone | Funded ratios (percent) | | Ratio of inactive to active participants | Annual cash flows | | | Expected return |
|---|---|---|---|---|---|---|---|---|
| | | Actuarial | Current | | Benefits (millions) | Contributions (millions) | (B-C)/ assets | |
| Central States | Red | 53.9% | 35.2% | 4.9 | $2,824 | $569 | -12.8% | 7.5% |
| United Mine Workers | Yellow | 72.3 | 42.6 | 9.7 | 573 | 115 | -10.9 | 8.0 |

*Source*: U.S. Department of Labor *Form 5500* (2012).

to exhaustion dates that 43 critical plans provided in their Rehabilitation Plans. Even though the model is extremely simple, the exhaustion dates matched up fairly well.[8]

The results of this exercise are shown in Table 4. As one would expect, the pattern of exhaustion dates varies by zone. About 35 percent of red zone plans are projected to run out of assets within the next 30 years and about 65 percent will make it beyond 30 years. In the case of plans in the yellow and green zones, most plans will remain solvent beyond 30 years. The projection of 7 percent insolvency for yellow zone plans and 4 percent for red zone plans assumes that these plans take no corrective actions in the future, which they almost certainly will as insolvency becomes more imminent. Thus, except for the United Mine Workers, which is categorized as a yellow zone plan, the real concern is plans in the red zone.

Table 4. Estimated Distribution of Multiemployer Plan Exhaustion Dates by Zone Status, 2012

| Zone | Estimated exhaustion date | | | |
|---|---|---|---|---|
| | 0-10 | 11-20 | 21-30 | Never |
| Red | 11% | 17% | 8% | 64% |
| Yellow | 1 | 3 | 3 | 93 |
| Green | 1 | 2 | 1 | 96 |

*Source*: Authors' estimates based on analysis of U.S. Department of Labor *Form 5500* (2012).

Compared to prior studies, the results from our simple model show a slightly more negative outlook for plans in the red zone. One study of a sample of plans in 2010 concluded that about 25 percent had basically given up and were trying to forestall insolvency.[9] The U.S. Government Accountability Office also puts the share of insolvent plans at 25 percent, although the PBGC suggests it could be somewhat higher.[10] While our own survey of the most recently available rehab letters for critical status plans finds similar results – about a quarter of plans said that they were forestalling insolvency – the simple model puts the number at about 35 percent. And, if anything, our simple model biases the results in favor of solvency by using assumed returns and providing no increase in the gap between contributions and benefits.

## Actions Taken by Troubled Plans

As discussed, the PPA requires that troubled plans take corrective action ("Funding Improvement Plans" for endangered plans and "Rehabilitation Plans" for critical plans) to improve their status or, at a minimum, to forestall insolvency. A number of these agendas for corrective action can be found on the Department of Labor's website with the *Form 5500* reports, and a few additional ones were available on the plan's own website. In total, we were able to locate Funding Improvement Plans for 54 percent of plans in endangered status and Rehabilitation Plans for 70 percent of those in critical status.

The possible corrective actions differ by zone. For plans in the yellow zone, the PPA restricts contribution reductions and benefit increases and requires that the trustees come up with a plan to close the funding gap by at least one third over a 10-year period. For plans in the red zone, in addition to restrictions on contribution cuts and benefit increases, the plan must stop paying lump sums or other front-loaded benefits to new retirees and devise a plan to get out of the red zone within a 10-year period. Under such a rehabilitation plan, the trustees can cut benefits for current workers that are usually protected from cutbacks – "adjustable benefits," such as recent benefit increases, early retirement subsidies, and other benefit features. If the trustees determine that, after adopting all reasonable measures, they will not be able to recover in the statutory period, they must adopt a program that may take longer but is likely to work. If they believe that they cannot reasonably turn the situation around, they must design a plan to forestall insolvency.[11]

Table 5 on the next page tabulates, for plans for which Funding Improvement or Rehabilitation Plans were available, *intended* changes. Plans in the critical zone are separated into those trying to get out and those that are simply forestalling insolvency. Essentially, the plans that have given up contend that they have cut benefits and raised contributions and that additional contribution increases would threaten the employers' competitiveness and additional benefit reductions would diminish support among workers.

The tabulations show that most plans in both the critical and endangered zones have reported that they intended to increase contributions, with endangered plans only slightly less likely to do so than critical plans. In addition, 71 percent of critical plans – both those forestalling insolvency and those ongoing – have taken advantage of the PPA provision to cut adjustable benefits. Since changes in adjustable benefits affect separated vested participants as well as active members, eliminating these benefits for plans dominated by inactive members can reduce liabilities more effectively than cutting benefit accruals. (The fact that 14 percent of endangered plans, which do not have such an option, cut adjustable benefits can be explained by the fact that they were previously classified as critical (see Appendix Table 2).)

Table 5. Percent of Plans Intending To Take Corrective Action by Zone Status, 2012

| Corrective action | Critical: Forestalling insolvency | Critical: Ongoing | Endangered |
|---|---|---|---|
| Raised contribution rates | 88% | 94% | 83% |
| Cut "adjustable benefits" | 71 | 71 | 14 |
| Reduce future benefits | 58 | 40 | 30 |
| Addendum: # of plans | 75 | 174 | 145 |

*Sources*: Various plan rehabilitation letters and funding improvement plans; and U.S. Department of Labor *Form 5500* (2012).

The story for future benefit increases is somewhat different. Here the percent planning to take action varies significantly by zone. About 30 percent of plans in the endangered zone announced that they planned to cut future benefits, compared to 40 percent of critical ongoing plans and 58 percent of those forestalling insolvency. One might have expected 100 percent of plans forestalling insolvency to be interested in reducing future benefits, but it appears that the trustees, seeing insolvency as inevitable, conclude that further changes will not be helpful and could even have perverse effects.[12] Moreover, active workers are such a small segment of the plan population that reducing their benefits has a limited impact on overall liabilities.

While the previous analysis presents information about whether plans intended to take action or not, it does not indicate whether the changes actually occurred and the magnitude of any change. Table 6 presents trends in contributions per active worker and in benefits (as measured by normal cost), before and after the implementation of the PPA, for the plans for which we have a Funding Improvement Plan or Rehabilitation Plan.

Table 6. Annual Growth of Contributions and Benefit Accruals per Active Worker

| Zone status | Contributions (per active worker) | | Benefit accruals (normal cost) | |
|---|---|---|---|---|
| | 2001-2007 | 2007-2012 | 2001-2007 | 2007-2012 |
| Critical: forestalling insolvency | 7.7% | 2.1% | 7.5% | 2.7% |
| Critical: ongoing | 8.3 | 5.3 | 2.7 | 1.5 |
| Endangered* | 7.5 | 6.9 | 2.8 | 4.1 |

* United Mine Workers is excluded because its precipitious drop in normal cost makes the change in benefit accruals for all endangered plans negative in 2001-2007.
*Source*: U.S. Department of Labor *Form 5500* (2001-2012).

The results are very interesting, but need to be interpreted with care. On the contribution side, let's start with the easy numbers. Contributions per active worker have been increasing by 5 percent or more *per year* for critical ongoing plans and for endangered plans. In contrast, for critical plans facing insolvency, annual contribution increases slowed noticeably after 2007. The reason is that one large plan with just over 70,000 active participants – Central States Teamsters – shows contributions per active worker declining. If this plan is excluded, contributions for critical plans facing insolvency have been rising by 12 percent per year. Overall, with the exception of Central States Teamsters, the rates of increase are substantial, suggesting that the high percent of plans intending to increase contributions actually succeeded in getting it done.[13]

On the benefit side, the picture is more difficult to interpret. Normal costs have increased over the period 2007-2012. But many factors are at play here. First, a much smaller percentage of plans in each category said that they intended to reduce future benefits compared to those planning to raise contributions. Second, plans are not always able to immediately follow through on their intentions; among those that had planned to decrease benefits, nearly 20 percent had not done so as of 2012.[14] Third, a number of plans link their benefits to contributions so that rising contributions also produced higher benefits. Fourth, normal cost is not reported on a consistent basis across all plans (see Table 7). For plans using the unit credit method, the normal cost would increase (at the discount rate) with the age of the population. For example, in plans where the average age is increasing by a year, anything less than, say, a 7.5-percent increase in the normal cost implies some level of benefit cuts. But the bottom line is that cuts in accruing benefits for active workers have played much less of a role in righting these plans than contribution increases and cuts in adjustable benefits.

Table 7. Actuarial Cost Method by Zone Status, 2012

| Zone status | Cost method | | |
|---|---|---|---|
| | Entry age | Unit credit | Other |
| Red | 26 % | 73 % | 1% |
| Yellow | 34 | 64 | 2 |
| Green | 47 | 47 | 6 |
| All | 39 | 57 | 4 |

*Source*: U.S. Department of Labor *Form 5500* (2012).

# Conclusion

In the wake of an expansion of benefits in the 1990s and two financial crises, the bulk of multiemployer plans are righting themselves. However, 14 percent are classified as endangered and 27 percent as critical. These classifications reflect the actuary's projection of the plan over an extended period of time as required by the Pension Protection Act of 2006, as opposed to the snapshot provided by the funded ratio.

The key to serious financial problems is a declining financial base caused by few active participants relative to those separated and retired, which produces a negative cash flow. In underfunded plans, once this negative cash flow exceeds returns to assets, it is only a matter of time before the plans exhaust their assets. Our analysis suggests that one third of critical plans will exhaust their assets over the next 30 years.

Endangered and critical plans have tools at their disposal to address their financing problems, and the PPA requires that they take action. They can raise contributions and/or cut future benefits, and critical plans can cut so-called adjustable benefits. Generally, plans appear to have made a substantial effort to increase employer contributions, which are rising by 5 percent or more per year. And nearly three quarters of critical and endangered plans have cut adjustable benefits. Since these cuts apply to separated vested as well as active participants, they are a useful lever. Cutting benefit accruals for active workers appears to be a less popular option.

While the analysis is constrained by a lack of access to detailed plan data, the picture – particularly for critical plans – is sobering. The next *brief* explores the extent to which the PBGC can meet the needs of this troubled segment of the pension world.

# Endnotes

1 Mazo and Greenblum (2012).

2 A plan has a funding deficiency if projections indicate that the plan does not have sufficient funds to meet the legislated minimum required contributions.

3 We used data from Segal Consulting, an actuarial consulting firm, because Segal provides more recent information than the Department of Labor (DOL) or the PBGC. Additionally, 5500 data on plan status is unavailable in 2008. The data for Segal clients – about 25 percent of multiemployer plans – look very much like those for the DOL/PBGC universe of multiemployer plans in earlier years, although they show slightly more green zone plans and slightly fewer yellow (see Appendix Table 1).

4 The post-crisis zone count can be measured in two ways: 1) the classification as designated by the actuaries; and 2) the official classification that reflects the trustees' ability to freeze at their previous year's classification under the Worker, Retiree and Employer Recovery Act of 2008. Figure 1 shows the actuaries' count.

5 The PBGC uses current funded ratios in its analysis.

6 Note that once a plan is living off its investments, long-term historical average asset returns may present a deceptive picture. Just as for individuals who have reached the pension distribution years, an early year of bad plan returns can lead to unrecoverable financial losses.

7 The 5500 data report a single dollar amount for employer contributions that may include, among other things, ad-hoc withdrawal liability payments and employer surcharges in addition to regularly made employer contributions. In most cases, these additional contributions are small relative to the annual flow of contributions but for some plans, especially those in critical or endangered status, they can amount to more than half of the total employer contribution in any given year. As such, projections based on 5500-reported employer contributions will likely overstate the level of contributions going forward.

8 The exhaustion date model was tested using three different assumptions regarding future cash flows: 1) that the dollar difference between contributions and benefits in 2012 remained constant going forward; 2) that both contributions and benefits continued to grow at a rate equal to their growth from 2007 to 2012; and 3) that both contributions and benefits continued to grow at a rate equal to their growth from 2001 to 2012. A comparison of the exhaustion dates under each assumption with the exhaustion dates reported by the 30 critical plans found the first assumption to be most accurate, with an average difference of about seven years between the model and the plan's reported runout date.

9 Mazo and Greenblum (2012).

10 U.S. Government Accountability Office (2013); and Pension Benefit Guaranty Corporation (2014).

11 Procedurally, the plan trustees can offer the bargaining parties multiple contribution and benefit schedules from which to choose, but one of these must be designated as the "default schedule," which will be imposed if the bargaining parties do not select an option within a specified period of time.

12 For a flavor of plans' rationale in forestalling insolvency, see Rehabilitation Plan for the Pension Plan of the Pension Fund of Amalgamated Industrial and Toy & Novelty Workers of America, Local 223; Update to Rehabilitation Plan Gastronomical Workers Union Local 610 and Metropolitan Hotel Association Pension Fund; and Rehabilitation Plan of the Bakery & Sales Drivers Local No. 33 Industry Pension Fund.

13 In some cases, however, the increases in contribution rates may not be as large as they appear. With the recent economic slow-down, employees in many industries – namely construction – are working fewer hours annually. For plans with contribution rates set on a per hour basis (rather than per person) the decrease in hours worked per employee will partially counter the overall impact of any scheduled increase in the contribution rate per hour.

14 Benefit changes stipulated in the Funding Improvement Plans and Rehabilitation Plans are often subject to collective bargaining decisions, which generally occur every 3 to 5 years. For this reason, many of the changes reported in the most recent Funding Improvement Plans and Rehabilitation Plans would not be reflected in the 2012 5500 data.

# References

Defrehn, Randy G. and Joshua Shapiro. 2013. "Solutions not Bailouts: A Comprehensive Plan from Business and Labor to Safeguard Multiemployer Retirement Security, Protect Taxpayers and Spur Economic Growth." Washington, DC: National Coordinating Committee for Multiemployer Plans.

Mazo, Judith F. and Eli Greenblum. 2012. "Multiemployer Pension Plans Respond to the Financial Crisis." In *Reshaping Retirement Security*, eds. Raimond Maurer, Olivia S. Mitchell, and Mark J. Warshawsky. Oxford, United Kingdom: Oxford University Press.

Pension Benefit Guaranty Corporation. 2014. *FY 2013 PBGC Projections Report*. Washington, DC.

Segal Consulting. 2014. "Survey of Plans' 2013 Zone Status." *Benefits, Compensation, and HR Consulting* (Winter 2014). New York, NY.

Solis, Hilda L., Timothy F. Geithner, and Joshua Gotbaum. 2013. "Multiemployer Pension Plans: Report to Congress Required by the Pension Protection Act of 2006." Washington, DC.

U.S. Department of Labor, Pension and Welfare Benefits Administration, Office of Policy and Research. *Form 5500*, 2001-2012. Washington, DC.

U. S. Government Accountability Office. 2013. *Private Pensions: Timely Action Needed to Address Impending Multiemployer Plan Insolvencies*. Report No. GAO-13-240. Washington, DC.

# APPENDIX

### Appendix Table 1. Percent of Multiemployer Plans, by Zone Status, 2011

| Zone | Data source | | |
|---|---|---|---|
| | 5500 | PBGC | Segal |
| Red | 24% | 24% | 24% |
| Yellow | 16 | 16 | 13 |
| Green | 59 | 60 | 63 |
| Total number of plans | 1,227 | 1,312 | 350 |

*Sources*: Authors' calculations based on analysis of U.S. Department of Labor *Form 5500* (2011); Solis, Geithner, and Gotbaum (2013); and Segal Consulting (2014).

### Appendix Table 2. Plans in Endangered Status that Were Previously in Critical Status

| Plan name | Years in critical status |
|---|---|
| Asbestos Workers Local 84 | 2009 |
| Bay Area Painters and Tapers | 2009-2012 |
| Bricklayers and Trowel Trades International | 2009 |
| Cement Masons - Employers | 2009 |
| Chicago Motion Picture Operators Union Local No. 110 | 2009-2011 |
| Engineers Union Local 68 | 2009-2010 |
| Greater Pennsylvania Carpenters | 2009-2011 |
| Heat & Frost Insulators and Allied Workers Local No. 40 | 2010 |
| HRSA-ILA | 2010 |
| IBEW Local 1249 | 2009-2011 |
| Insulators Local 96 | 2009 |
| Minneapolis Retail Meat Cutters and Food Handlers | 2009 |
| Plumbers and Pipefitters Local Union No. 9 | 2010 |
| Plumbers and Pipefitters 298 Jurisdiction | 2009-2010 |
| Roofers Local No. 74/No. 203 | 2009 |
| Teamsters Joint Council No. 83 of Virginia | 2009-2010 |
| Transport Workers Union-Westchester Private Bus Lines | 2010 |
| Truck Drivers and Helpers Local Union No. 355 | 2009-2010 |
| Twin City Carpenters & Joiners | 2009-2010 |
| Twin City Iron Workers | 2009 |
| United Association Local Union No. 190 | 2009 |
| United Association Local Union No. 322 | 2009-2010 |
| WA-ID-MT Carpenters Employers | 2009-2010 |

*Sources*: Various plan rehabilitation letters and funding improvement plans; and U.S. Department of Labor *Form 5500* (2009-2012).

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The research reported herein was supported by the Center's Partnership Program. The findings and conclusions expressed are solely those of the authors and do not represent the views or policy of the partners or the Center for Retirement Research at Boston College.