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Where Does the MAP Lead Small Plans?

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MAP-21 relief may help sponsors manage contribution levels and ease restrictions. But what's the best path for a small employer sponsoring a defined benefit plan?

MAP-21 provided welcome relief for many employers by allowing the use of higher discount rates for certain defined benefit plan calculations. This often resulted in lower contributions and higher funding ratios. With the more favorable results, some plans that may need to be frozen or terminated

could remain active or frozen when the more prudent decision may be to freeze or terminate the plan. This is especially true of small plans.

Smaller traditional defined benefit plans have some unique circumstances that most larger plans do not:

- Most smaller plans allow lump sum distributions upon termination.
- Smaller plans are often designed to provide very large benefits over a short timeframe with the goal of maximizing benefits to one or a small number of owners or key employees.
- The lifespan of many smaller plans is 10 years or less because the plan is terminated when the sponsor's owner retires.
- Smaller plans are more likely to terminate when underfunded, with the owner either waiving benefits or benefits being prorated based on funding levels.
- Many smaller plans are not covered by the PBGC.

Let's look at a few examples where the implementation of MAP-

21 may have an adverse effect on smaller active and frozen defined benefit plans. For simplicity, all three examples have the following characteristics:

- No carryover or pre-funding balances.
- All are assumed to offer immediate lump sums upon termination.
- The plans are not PBGC plans.
- Valuations are performed on the last day of the plan year.
- Assets are assumed to return 5% per annum.

EXAMPLE 1: FROZEN TRADITIONAL DB PLAN

Fig. 1 displays valuation results using 2013 MAP-21 rates. Based on the results, the AFTAP for 2014 will be over 80%, meaning no plan restrictions for 2014.

Now let's look at the results based on pre-MAP-21 rates, displayed in Fig. 2. There are two major differences in the valuation results. First, the minimum contribution is higher, resulting in an extra \$33,000 contribution for 2013. Second, even with the higher contribution, the 2014 AFTAP is 65.4% meaning restrictions for 2014.

Why does this matter for a frozen plan? Assume that Staff Employee 1 terminates on July 1, 2014. Under MAP-21, the AFTAP is greater than 80% and no restrictions are placed on lump sum distributions for 2014. Assume that the value of the lump sum is \$150,000. Under MAP-21, this lump sum would be paid out in full. Using the prior discount rates, only about half of the lump sum value would be distributed

FIG. 1: DEC. 31, 2013 VALUATION RESULTS, MAP-21 RATES

| Participant | Age | Monthly Accrued Benefit | Funding Target | Benefit Increase | Target Normal Cost |
|------------------|-----|-------------------------|----------------|------------------|--------------------|
| Business Owner | 59 | 8,000 | 928,500 | 0 | 0 |
| Staff Employee 1 | 60 | 1,000 | 123,800 | 0 | 0 |
| Staff Employee 2 | 44 | 500 | 21,000 | 0 | 0 |
| Staff Employee 3 | 34 | 400 | 8,600 | 0 | 0 |
| | | | 1,081,900 | 0 | 0 |

Contribution for 2013 of \$75,000 made on 7/1/2013
 Assets as of December 31, 2013 — \$875,000
 2014 AFTAP - 80.9%

FIG. 2: DEC. 31, 2013 VALUATION RESULTS, PRE-MAP-21 RATES

| Participant | Age | Monthly Accrued Benefit | Funding Target | Benefit Increase | Target Normal Cost |
|------------------|-----|-------------------------|----------------|------------------|--------------------|
| Business Owner | 59 | 8,000 | 1,177,400 | 0 | 0 |
| Staff Employee 1 | 60 | 1,000 | 154,700 | 0 | 0 |
| Staff Employee 2 | 44 | 500 | 32,900 | 0 | 0 |
| Staff Employee 3 | 34 | 400 | 15,600 | 0 | 0 |
| | | | 1,380,600 | 0 | 0 |

Contribution for 2013 of \$75,000 made on 7/1/2013
 Additional Contribution of \$33,000 made on 12/31/2013
 Assets as of December 31, 2013 — \$903,000
 2014 AFTAP - 65.4%

FIG. 3: JUNE 30, 2014 TERMINATION LIABILITIES

Estimated Distributions

| Participant | Termination Liability | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|------------------|-----------------------|------------|------------|------------|------------|
| Business Owner | 1,135,000 | 766,300 | 719,400 | 794,500 | 774,200 |
| Staff Employee 1 | 150,000 | 101,300 | 150,000 | 105,000 | 126,200 |
| Staff Employee 2 | 30,000 | 20,300 | 19,000 | 21,000 | 20,500 |
| Staff Employee 3 | 13,500 | 9,100 | 8,600 | 9,500 | 9,200 |
| | 1,328,500 | 897,000 | 897,000 | 930,000 | 930,000 |

as a lump sum.

Potential negative consequences include:

- The extra funds would not remain a part of the trust for asset accumulation.
- No chance of the paid out benefit being lower if interest rates rise.
- The owner may lose a portion of his or her benefit if the plan is terminated while underfunded.

Assume the owner does not have the resources to make contributions for 2014 and decides to terminate the plan. If the plan is not covered by the PBGC, the portion going to the owner could be significantly lower under MAP-21. Fig. 3 displays four scenarios based on termination as of June 30, 2014:

- Scenario 1 — MAP-21 rates; plan terminated prior to terminated

participant distribution

- Scenario 2 — MAP-21 rates; plan terminated after terminated participant distribution
- Scenario 3 — Pre-MAP-21 rates; plan terminated prior to terminated participant distribution
- Scenario 4 — Pre-MAP-21 rates; plan terminated after terminated participant distribution

As can be seen by comparing

FIG. 4: DEC. 31, 2013 VALUATION RESULTS, MAP-21 RATES

| Participant | Age | Monthly Accrued Benefit | Funding Target | Benefit Increase | Target Normal Cost |
|------------------|-----|-------------------------|----------------|------------------|--------------------|
| Business Owner | 59 | 8,000 | 928,500 | 800 | 92,900 |
| Staff Employee 1 | 60 | 1,000 | 123,800 | 100 | 12,400 |
| Staff Employee 2 | 44 | 500 | 21,000 | 100 | 4,200 |
| Staff Employee 3 | 34 | 400 | 8,600 | 80 | 1,700 |
| | | | 1,081,900 | 1,080 | 111,200 |

Contribution for 2013 of \$75,000 made on 7/1/2013
 Additional Contribution of \$100,000 made on 12/31/2013
 Assets as of December 31, 2013 — \$975,000
 2014 AFTAP - 81.7%

FIG. 5: DEC. 31, 2013 VALUATION RESULTS, PRE-MAP-21 RATES

| Participant | Age | Monthly Accrued Benefit | Funding Target | Benefit Increase | Target Normal Cost |
|------------------|-----|-------------------------|----------------|------------------|--------------------|
| Business Owner | 59 | 8,000 | 1,177,400 | 800 | 117,700 |
| Staff Employee 1 | 60 | 1,000 | 154,700 | 100 | 15,500 |
| Staff Employee 2 | 44 | 500 | 32,900 | 100 | 6,600 |
| Staff Employee 3 | 34 | 400 | 15,600 | 80 | 3,100 |
| | | | 1,380,600 | 1,080 | 142,900 |

Contribution for 2013 of \$75,000 made on 7/1/2013
 Additional Contribution of \$175,000 made on 12/31/2013
 Assets as of December 31, 2013 — \$1,050,000
 2014 AFTAP - 68.9%

FIG. 6: JUNE 30, 2014 TERMINATION LIABILITIES

Estimated Distributions

| Participant | Termination Liability | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|------------------|-----------------------|------------|------------|------------|------------|
| Business Owner | 1,362,000 | 848,800 | 783,900 | 914,200 | 887,600 |
| Staff Employee 1 | 180,000 | 112,200 | 180,000 | 120,800 | 148,600 |
| Staff Employee 2 | 42,000 | 26,200 | 24,200 | 28,200 | 27,400 |
| Staff Employee 3 | 19,000 | 11,800 | 10,900 | 12,800 | 12,400 |
| | 1,603,000 | 999,000 | 999,000 | 1,076,000 | 1,076,000 |

FIG. 7: DEC. 31, 2013 VALUATION RESULTS, MAP-21 RATES

| Participant | Age | Monthly Accrued Benefit | Funding Target | Benefit Increase | Target Normal Cost |
|------------------|-----|-------------------------|----------------|------------------|--------------------|
| Business Owner | 59 | 8,000 | 928,500 | 800 | 92,900 |
| Staff Employee 1 | 60 | 1,000 | 123,800 | 100 | 12,400 |
| Staff Employee 2 | 44 | 500 | 21,000 | 100 | 4,200 |
| Staff Employee 3 | 34 | 400 | 8,600 | 80 | 1,700 |
| | | | 1,081,900 | 1,080 | 111,200 |

Contribution for 2013 of \$75,000 made on 7/1/2013
 Additional Contribution of \$135,000 made on 12/31/2013
 Assets as of December 31, 2013 — \$810,000
 2014 AFTAP - 67.9%

distributions from Scenarios 2 and 4, the owner would receive a larger portion of the total distribution if the AFTAP restrictions using the pre-MAP-21 rates had applied. This is due to the restriction on Staff Employee 1's lump sum.

EXAMPLE 2: ACTIVE PLAN

Let's look at the same set of circumstances for an active plan. Fig. 4 provides valuation results using 2013 MAP-21 rates. Again, the AFTAP for 2014 will be over 80%, meaning no plan restrictions for 2014.

Fig. 5 provides the results for the active plan under pre-MAP-21 discount rates. The 2014 AFTAP is below 80% resulting in restrictions.

Assume that Staff Employee 1 terminates on July 1, 2014. Under MAP-21, the AFTAP is greater than 80% and no restrictions are placed on lump sum distributions for 2014.

But now, the lump sum has grown to \$180,000 because the participant earned additional accruals in 2013 and 2014. The same consequences discussed earlier would apply on an even larger scale.

Fig. 6 illustrates four scenarios based on termination as of June 30, 2014:

- Scenario 1 — MAP-21 rates; plan terminated prior to terminated participant distribution
- Scenario 2 — MAP-21 rates; plan terminated after terminated participant distribution
- Scenario 3 — Pre-MAP-21 rates; plan terminated prior to terminated participant distribution
- Scenario 4 — Pre-MAP-21 rates; plan terminated after terminated participant distribution

Again, compare the owner's share of the distribution under Scenarios 2 and 4. Even though the owner would be required to make

\$75,000 more in contributions, his distribution under Scenario 4 is more than \$100,000 greater than that under Scenario 2.

EXAMPLE 3: ACTIVE PLAN WITH LARGE ASSET LOSS

Finally, Fig. 7 illustrates an active plan that experienced a large asset loss in 2013. The 2014 AFTAP is below 80%, but above 60%. Therefore, lump sums are limited, but accruals continue.

Fig. 8 provides the valuation results using pre-MAP-21 discount rates for an active plan with large asset losses. The 2014 AFTAP falls below 60% resulting in restrictions on lump sums and benefit accruals.

Assume that Staff Employee 1 terminates on July 1, 2014. Under MAP-21, the AFTAP is less than 80% and greater than 60%. Restrictions are placed on lump sum distributions for 2014, but the

FIG. 8: DEC. 31, 2013 VALUATION RESULTS, PRE-MAP-21 RATES

| Participant | Age | Monthly Accrued Benefit | Funding Target | Benefit Increase | Target Normal Cost |
|------------------|-----|-------------------------|----------------|------------------|--------------------|
| Business Owner | 59 | 8,000 | 1,177,400 | 800 | 117,700 |
| Staff Employee 1 | 60 | 1,000 | 154,700 | 100 | 15,500 |
| Staff Employee 2 | 44 | 500 | 32,900 | 100 | 6,600 |
| Staff Employee 3 | 34 | 400 | 15,600 | 80 | 3,100 |
| | | | 1,380,600 | 1,080 | 142,900 |

Contribution for 2013 of \$75,000 made on 7/1/2013
 Additional Contribution of \$205,000 made on 12/31/2013
 Assets as of December 31, 2013 — \$880,000
 2014 AFTAP - 57.8%

FIG. 9: JUNE 30, 2014 TERMINATION LIABILITIES

Estimated Distributions

| Participant | Termination Liability | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
|------------------|-----------------------|------------|------------|------------|------------|
| Business Owner | 1,362,000 | 705,200 | 666,200 | 766,400 | 766,400 |
| Staff Employee 1 | 180,000 | 93,200 | 134,000 | 101,300 | 101,300 |
| Staff Employee 2 | 42,000 | 21,800 | 20,500 | 23,600 | 23,600 |
| Staff Employee 3 | 19,000 | 9,800 | 9,300 | 10,700 | 10,700 |
| | 1,603,000 | 830,000 | 830,000 | 902,000 | 902,000 |

While the MAP-21 relief may help sponsors manage contribution levels and ease restrictions, a more in-depth analysis may be required to see what would be the best path for a small employer sponsoring a defined benefit plan.”

employee would accrue an additional benefit for 2014. The lump sum of \$180,000 would be limited to approximately 50%, or \$90,000. Under pre-MAP-21 discount rates, lump sum distributions would not be allowed and no benefit would accrue during 2014.

Fig. 9 illustrates four scenarios based on termination as of June 30, 2014.

- Scenario 1 — MAP-21 rates; plan terminated prior to terminated participant distribution
- Scenario 2 — MAP-21 rates; plan terminated after terminated participant distribution
- Scenario 3 — Pre-MAP-21 rates; plan terminated prior to terminated participant distribution
- Scenario 4 — Pre-MAP-21 rates; plan terminated after terminated participant distribution

Compare the owner’s share of the distribution under Scenarios 2 and 4. Even though the owner would be required to make \$70,000 more in contributions, his

distribution under Scenario 4 is \$100,000 greater than that under Scenario 2.

CONCLUSIONS

While the MAP-21 relief may help sponsors manage contribution levels and ease restrictions, a more in-depth analysis may be required to see what would be the best path for a small employer sponsoring a defined benefit plan. If the owner will not have sufficient funds to fully fund the plan on a termination basis, a freeze or plan termination may be the best approach. **PG**

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