Given the current coronavirus (COVID-19) pandemic and resulting volatile market conditions, LIMRA, ACLI, Oliver Wyman and SOA have partnered on a series of pulse surveys around this important topic.

This survey aims to collect and disseminate information regarding best practices around asset and liability management. This is the second survey focusing on ALM issues and the goal is compare responses with the first survey that was fielded in April 2020.

The survey is targeted at actuaries, investment managers, and risk managers directly involved in assessing the impact of recent events on ALM. It should take about 20 minutes to complete.

The results of the survey will be aggregated and shared with all participants. In addition, a summary of results will be shared with members of all the partnering organizations. No individual company responses will be shared.

Thank you, in advance, for helping us to gather best practices around understanding the impact of the coronavirus on the industry.

Click the following link for a preview of the questions asked in this survey:

Please provide your contact information.

- Company: ________________________________________________
- Role: ________________________________________________
- Name: ________________________________________________
- Email address: ________________________________________________
How concerned are you about the impact of low interest rates on ALM for your company?

- Very concerned
- Concerned
- Somewhat concerned
- A little concerned
- Not at all concerned
What are you concerned about related to the impact of low interest rates on ALM for *your company*?

<table>
<thead>
<tr>
<th></th>
<th>Very concerned</th>
<th>Concerned</th>
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<td>Stat earnings</td>
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<td>IFRS earnings</td>
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<td>Regulatory capital</td>
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<td>Internal capital metrics</td>
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<td>Solvency</td>
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<td>Other (please describe)</td>
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</table>
How concerned are you about the impact of low interest rates on ALM for the life insurance industry?

- Very concerned
- Concerned
- Somewhat concerned
- A little concerned
- Not at all concerned
For this section, “management scenarios” are defined as internal scenarios used for planning or other management decisions.

What types of interest rate scenarios does your company use to evaluate and set ALM strategies? Please select all that apply.

☐ Management scenarios
☐ Forward curve
☐ Other deterministic scenarios
☐ Real-world stochastic scenarios
☐ Risk-neutral stochastic scenarios
☐ Other (please describe) ________________________________
Has your company revised its management scenarios for this year to address recent market conditions?

- Yes, have changed
- No, but planning to change
- No, and not planning to change
- Other (please describe) ________________________________________________
For your company’s “base case scenario”, what is your company anticipating for the following metrics for its management scenarios?

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<th>0% but less than 0.5%</th>
<th>0.5% but less than 1%</th>
<th>1% but less than 1.5%</th>
<th>1.5% but less than 2%</th>
<th>2% but less than 3%</th>
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<tr>
<td>Interest rates (10-year treasury at end of 2020)</td>
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<td>Interest rates (20-year treasury at end of 2020)</td>
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<td>Credit spreads (Single A spreads at end of 2020)</td>
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<td>Credit defaults (Single A one-year defaults at the end of 2020)</td>
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For your company’s “worst case scenario”, what is your company anticipating for the following metrics for its management scenarios?

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<th>2% but less than 3%</th>
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Does your company account for credit migration in its management scenarios?

- Yes
- No
Does your company use a market long-term interest rate expectation in its management scenarios?

- Yes
- No
You said that your company uses a market long-term interest rate expectation in its management scenarios.

What is your company’s long-term interest rate assumption?

________________________________________________________________

What is the basis for your company’s long-term interest rate assumption?

- 5 year Treasury
- 10 year Treasury
- 20 year Treasury
- Other: please describe  ____________________________________________

Over what time period do rates revert to this expectation level? Please provide response in whole years.

________________________________________________________________

Page 11 of 32
Many companies are running more sensitivities in the current environment than in past years. What scenarios is your company considering in its sensitivity testing in the current environment? Please select all that apply.

- Lower bond nominal rates with spreads tightening for the next 1-3 years
- Lower bond nominal rates with spreads tightening for the next decade
- Lower bond nominal rates combined with general inflationary conditions
- Lower bond nominal rates combined with inflationary conditions for health care but lower inflation for non-health care items
- Lower bond nominal rates combined with lower long-term capital market assumptions
- Negative treasury rates (10 year) over a short term with current spreads
- Negative treasury rates (10 year) over a longer term with spreads widening
- Negative treasury rates (10 year) over a longer term with current spreads (potential negative corporate bond rates)
- Rising Treasury rates and increased lapses
- Stagflation (low growth and high inflation) - increased lapses and defaults
- Other (please describe) ________________________________
- None of the above
If your company is not considering negative Treasury rate (10 year) scenarios for management scenarios, why not?

- My company does consider negative 10-year Treasury Rate scenarios
- Believe it is unrealistic for the long-term
- It is under consideration/we are reviewing system capabilities
- Fed view is that 0 percent is the floor
- Other please explain. _________________________________
How concerned is your company about inflation risk over the next 2-3 years?

- Very concerned
- Concerned
- Somewhat concerned
- A little concerned
- Not at all concerned
Do you have management scenarios that vary based on the results of the November 2020 US elections?

- Yes
- No
How would you characterize your company’s current ALM strategy for in-force?

- Duration matched
- Not duration matched (liabilities longer than assets)
- Not duration matched (assets longer than liabilities)
- Other (please describe) __________________________
If your company is not duration matched for *in-force*, what factors contribute to this? Please select all that apply.

- Management position on interest rates
- Inability to source long-duration assets
- Preference for shorter-duration asset classes
- Use of equity to match long-duration liabilities
- Other (please describe) ________________________________________________
Is your company planning on changing its ALM strategy for *in-force*?

- Yes, have changed
- No, but planning to change in light of current pandemic / market environment
- No, but planning to change even prior to the most recent pandemic / market environment
- Not planning to change
- Other (please describe) _________________________________
How is your company changing / planning to change its ALM strategy for in-force?

- Reducing duration gap over the short term
- Reducing duration gap over the long term
- Allowing greater duration gap
- Other (please describe) ________________________________
Does your company use the same ALM strategy for in-force and new business (new products)?

- Yes
- No
How would you characterize your company’s current ALM strategy for *new business (new products)*?

- Duration matched
- Not duration matched (liabilities longer than assets)
- Not duration matched (assets longer than liabilities)
- Other (please describe) ____________________________________________
If your company is not duration matched for *new business*, what factors contribute to this? Please select all that apply.

- Management position on interest rates
- Inability to source long-duration assets
- Preference for shorter-duration asset classes
- Use of equity to match long-duration liabilities
- Other (please describe) ________________________________________________
Is your company planning on changing its ALM strategy for new business (new products)?

- Yes, have changed
- No, but planning to change in light of current pandemic/market environment
- No, but planning to change even prior to most recent pandemic/market environment
- Not planning to change
- Other (please describe) ________________________________________________
How is your company planning to change its ALM strategy for new business?

- Reducing duration gap
- Reducing duration gap over the long term
- Allowing greater duration gap
- Other (please describe) ________________________________
Is your company changing its *investment strategy* if recent conditions continue for the next several years?

- Yes, have changed
- No, but planning to change
- Not planning to change
- Other (please describe)  ________________________________________________
How is your company changing / planning to change its *investment strategy?* Please select all that apply.

- [ ] More liquid assets
- [ ] Higher credit quality assets
- [ ] Higher-yielding asset classes
- [ ] Increased use of derivatives
- [ ] Increased use of equities
- [ ] Change to industry/sector allocations
- [ ] Other (please describe) _____________________________________________
| How concerned are you about the following asset and liability-related challenges for your company? | Short-term liquidity | Credit spread volatility | Credit migration | Reinvestment rates | New business yields | Default risk | Credit migration | Hedging/options cost | Market-value adjustments mechanics | Additional premiums (flexible premium products) | Ability to support in-force guarantees/in-force margins | Liquidity risk (including lapse, withdrawals, and increased loan activity) | Other (please list) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Very concerned | | | | | | | | | | | | | | |
| Concerned | | | | | | | | | | | | | | |
| Somewhat concerned | | | | | | | | | | | | | | |
| A little concerned | | | | | | | | | | | | | | |
| Not at all concerned | | | | | | | | | | | | | | |
| Planning to take action to address | | | | | | | | | | | | | | |
| Does not apply | | | | | | | | | | | | | | |
You said that your company is concerned about additional premiums for flexible premium products.

Has your company enforced contractual limits on new premiums in the past where applicable?

- Yes
- No
How often is your company reviewing new premium deposit activity in the current environment?

________________________________________________________________
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What is the approximate proportion of your current liabilities that have interest guarantees materially above current portfolio yields?

________________________________________________________________
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Is your company tracking lapse, withdrawal and policy loan activity more frequently in the current environment?

- Yes
- No
How does the first quarter 2020 year to date level of lapse, withdrawal and policy loan activity compare to the same period last year?

<table>
<thead>
<tr>
<th></th>
<th>Significantly higher</th>
<th>2020 slightly higher</th>
<th>2020 about the same as same period last year</th>
<th>2020 slightly lower</th>
<th>2020 significantly lower</th>
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<tbody>
<tr>
<td>Lapses</td>
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<td>Withdrawals</td>
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<tr>
<td>Policy loans</td>
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Thank you for your time filling out this survey. Please click on SUBMIT to finalize your responses.