Given the current coronavirus (COVID-19) pandemic and resulting volatile market conditions, LIMRA, ACLI, Oliver Wyman and SOA are partnering 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. 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 30 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:
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>
<th>Somewhat concerned</th>
<th>A little concerned</th>
<th>Not at all concerned</th>
<th>Not applicable</th>
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<tr>
<td>GAAP earnings</td>
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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>Rating</td>
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<td>New business margins</td>
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<td>New business sales</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)  ________________________________________________

Page Break
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) __________________________________________________________

____________________________________________________________________________________

Page Break
For your company’s “base case scenario”, what is your company anticipating for the following metrics for its management scenarios?

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<thead>
<tr>
<th></th>
<th>&gt;0%</th>
<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>
<th>3% but less than 5%</th>
<th>5+%</th>
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</thead>
<tbody>
<tr>
<td>Interest rates (10-year treasury at end of 2020)</td>
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<td>Interest rates (30-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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<td>Credit spreads (BBB spreads at the end of 2020)</td>
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<td>Credit defaults (BBB one-year defaults at the end of 2020)</td>
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</table>
For your company’s “worst case scenario”, what is your company anticipating for the following metrics for its management scenarios?

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<thead>
<tr>
<th>Metric</th>
<th>&gt;0%</th>
<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>
<th>3% but less than 5%</th>
<th>5+%</th>
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<tbody>
<tr>
<td>Interest rates (10-year treasury at end of 2020)</td>
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<tr>
<td>Interest rates (30-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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<td>Credit spreads (BBB spreads at the end of 2020)</td>
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</tbody>
</table>
Credit defaults (BBB one-year defaults at the end of 2020)
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 rate assumption for Treasuries?

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%  

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

________________________________________________________________

Page Break
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 rates with spreads tightening for the next 1-3 years
- [ ] Lower bond rates with spreads tightening for the next decade
- [ ] Lower bond rates combined with general inflationary conditions
- [ ] Lower bond rates combined with inflationary conditions for health care but lower inflation for non-health care items
- [ ] Lower bond 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 rates and increased lapses
- [ ] Other (please describe) ________________________________
- [ ] None of the above
If your company is not considering negative Treasury rate (10 year) scenarios for management scenarios, why not?
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
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
- [ ] Other (please describe) __________________________________________________________
- [ ] Not planning to change
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?

☐ Yes

☐ No
How would you characterize your company’s current ALM strategy for *new business*?

- 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*?

- 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) ____________________________________________

Page Break

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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)  ________________________________________________

Page Break

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How concerned are you about the following asset and liability-related challenges for your company?

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Very concerned</th>
<th>Concerned</th>
<th>Somewhat concerned</th>
<th>A little concerned</th>
<th>Not at all concerned</th>
<th>Does not apply</th>
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<tbody>
<tr>
<td>Short-term liquidity</td>
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<td>Credit spread volatility</td>
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<td>Credit migration</td>
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<td>New business yields</td>
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<tr>
<td>Reinvestment rates</td>
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<tr>
<td>Hedging/options cost</td>
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<tr>
<td>Default risk</td>
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<tr>
<td>Ability to support in-force guarantees/inforce margins</td>
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<tr>
<td>Additional premiums (flexible premium products)</td>
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<tr>
<td>Liquidity risk (including lapse, withdrawals, and increased loan activity)</td>
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<tr>
<td>Market-value adjustments mechanics</td>
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<tr>
<td>Other (please list)</td>
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</tbody>
</table>
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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You indicated your company has some level of concern regarding the following items. Which items are you planning to take action to address? Please select all that apply.

- [ ] Short-term liquidity
- [ ] Credit spread volatility
- [ ] Credit migration
- [ ] New business yields
- [ ] Reinvestment rates
- [ ] Hedging/options cost
- [ ] Default risk
- [ ] Ability to support in-force guarantees/inforce margins
- [ ] Additional premiums (flexible premium products)
- [ ] Liquidity risk (including lapse, withdrawals, and increased loan activity)
- [ ] Market-value adjustments mechanics
- [ ] Other
- [ ] Not planning to take action on any now
You indicated your company is planning to take action to address $(lm://Field/2)$. Please describe what types of actions your company is planning to take.

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What has been your company’s monitoring frequency for the following factors before and during COVID-19?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Before COVID-19</th>
<th>During COVID-19</th>
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<tbody>
<tr>
<td>Asset portfolio duration</td>
<td>Daily</td>
<td>C</td>
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<tr>
<td>Liability portfolio duration</td>
<td>Weekly</td>
<td>C</td>
</tr>
<tr>
<td>Cash, cash equivalent and short term balances</td>
<td>Monthly</td>
<td>C</td>
</tr>
<tr>
<td>New premium on flexible premium products</td>
<td>Quarterly</td>
<td>C</td>
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<tr>
<td>Policy loan activity</td>
<td>Annually</td>
<td>C</td>
</tr>
<tr>
<td>Withdrawal levels</td>
<td>Other</td>
<td>C</td>
</tr>
<tr>
<td>Lapse levels</td>
<td>Daily</td>
<td>C</td>
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<td></td>
<td>Weekly</td>
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<td>Monthly</td>
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<td>Quarterly</td>
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<td>Annually</td>
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<tr>
<td></td>
<td>Other</td>
<td>C</td>
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</tbody>
</table>
If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor asset portfolio duration before COVID-19.

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Page Break
If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor asset portfolio duration during COVID-19.

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Page Break
If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor liability portfolio duration before COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor liability portfolio duration during COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor cash, cash equivalent and short term investment balances before COVID-19.

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Page Break
If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor cash, cash equivalent and short term investment balances during COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor new premium on flexible premium products before COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor new premium on flexible premium products during COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor policy loan activity before COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor policy loan activity during COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor withdrawal levels before COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor withdrawal levels during COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor lapse levels before COVID-19.

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If “Other” frequency chosen, please respond to the question below.

Please describe what other frequency your company has been using to monitor lapse levels during COVID-19.
Has your company received questions on the impact of the current market environment on its ALM position and strategy from any of the following stakeholder groups? Please select all that apply.

☐ Board
☐ Senior management
☐ Regulators
☐ Rating agencies
☐ Investors/analysts
☐ None of the above

What questions is your company being asked regarding the impact of the current market environment on its ALM position and strategy from these stakeholder groups?

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End of Block: Block 4