For Exposure

Scope of Insurers Subject to Liquidity Stress Test

I. Background

Draft: 7/31/18

As part of its work toward developing a Liquidity Stress Testing Framework, the Liquidity Assessment (EX) Subgroup has prioritized consideration of the scope of insurers to which the framework would apply.

At its meeting held June 25, 2018, the Subgroup exposed a document that noted a number of considerations for determining scope and asked for input by July 13. Some of the considerations included, among others:

- Objective of the stress testing exercise.
- Granularity and availability of data needed to achieve the objectives.
- Guidance from the Financial Stability (EX) Task Force regarding the term "e.g., large life insurers."

Further, the Subgroup sought input on the following questions related to scope:

- 1. Should the scope of large life insurers subject to liquidity stress testing be based on both size and activities or on activities alone?
- 2. Should other criteria be considered besides size and activities?
- 3. What changes are recommended to the list of activities the Subgroup identified? The identified activities included: fixed and indexed annuities; derivatives; repurchase agreements; borrowed money; funding agreements; and guaranteed investment contracts (GICs).

II. Comments Received

Comment letters were received from the American Council of Life Insurers, American Academy of Actuaries and a group of five life insurers (Prudential, MetLife, MassMutual, New York Life and American Insurance Group). These comment letters have been posted and can be read in their entirety by going to the Subgroup's page on the NAIC website. Comments include, among others:

- Need for further clarity around the objective of the stress testing exercise.
- Scope should be sufficiently broad to achieve stated objectives.
- Scope should include companies subject to Own Risk and Solvency Assessment (ORSA) requirements.
- Scope should capture companies with material exposure to liquidity risk-bearing activities.
- Need to clarify whether significant gross exposure is defined on an absolute basis or relative to the size of the firm.
- Regarding the specific list of activities, views varied from there should be no specific list of
 activities, to general support for the specific list of activities identified in the exposure.
 Other suggested criteria included: puttable borrowings; fixed and indexed annuities with
 limited surrender charges; and short-term borrowings (e.g., bonds with maturities of less
 than one year).

III. Objectives of the Liquidity Stress Testing Framework

Subgroup members consider the primary objective of the Liquidity Stress Testing Framework is to provide insights for macroprudential surveillance. In this regard, Subgroup members believe stress testing using a cash flow approach applied to large life insurers can provide meaningful insights as to potential asset sales (to meet liquidity needs) that might arise under the baseline and stressed scenarios. Collecting this type of information may, for example, allow the Task Force to compare them to broader financial market metrics in normal and stressed economic environments.

Having access to actual projections, rather than having to make simplifying and potential erroneous assumptions, should better enable the Task Force to address macroprudential concerns regarding asset liquidation risk and implications for the broader financial markets, including financial market counterparties. While these types of macroprudential insights are the primary goal, Subgroup members believe the Liquidity Stress Testing Framework will also provide useful insights regarding vulnerability of insurers to various economic factors and thus provide utility to legal entity and group supervisors of these large life insurers.

IV. Liquidity Risk Inherent in Selected Activities

The scope criteria is not intended to serve as a measure of a particular insurance group's liquidity risk, but rather is a starting point to capture activities that will usually pose more liquidity risk under stress situations. Keep in mind the focus of the Task Force is macroprudential concerns, so these are specific activities where asset sales would likely occur due to accelerated payout features.

For the purpose of the scoping exercise, the following products and/or activities are identified as having the potential to pose liquidity risk. The NAIC annual financial statement blank data has been used as a proxy for a group's gross exposure.

a. Fixed and Indexed Annuities

Fixed and indexed annuities have features that provide a set rate of return to investors (either a fixed amount or tied to an index) from the insurer's general account, in contrast to variable annuities, which allow the annuitant to participate in the ups and downs of the market in separate account funds. If interest rates were to rise substantially, fixed/indexed annuitants may be incentivized to surrender and move to a higher-yielding contract.

b. Derivatives

The types of derivatives and their purpose vary widely, but the key liquidity risk is the requirement of daily posting of cash collateral if the fair value of the derivative changes or under other circumstances such as a credit rating downgrade. For example, hedging with derivatives for the risk associated with variable annuity

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guarantees exposes insurers to liquidity risk, where equity market increases require additional collateral posting by the insurer. Furthermore, during significant equity market declines, counterparties may be challenged to meet collateral calls or payouts on their derivative obligations to the insurer.

c. Funding Agreements and GICs

Funding agreements are primarily deposit-type contracts relating to insurers' borrowings from a Federal Home Loan Bank (FHLB). Similarly, GICs can expose the insurer to liquidity risk when the fair value of the assets at surrender is lower than the guarantee provided, which would require additional cash to make up the difference. In addition, surrenders prior to maturity may also be allowed per the contract terms. In the case of synthetic GICs, which are derivatives in nature, there could be additional liquidity risk from collateral posting or payout.

d. Securities Lending

Securities lending transactions involve a counterparty providing cash as collateral in exchange for securities lent to them. The counterparty can return the securities and demand cash back prior to maturity. If the insurer reinvests the cash collateral for yield enhancement per the usual practice and the counterparty terminates the contract early when the value of the reinvested collateral is lower, additional asset sales may likely be needed.

e. Repurchase Agreements

Repurchase agreements (repos) are similar to securities lending agreements. The liquidity risk in repos exists because the transaction is essentially a short-term loan that is callable but the value of the bonds may be lower, leading to a shortfall.

f. Borrowed Money (Includes Commercial Paper)

Commercial paper issued by an insurer is short-term borrowing with a maturity of less than one year. Many institutional investors in insurers' commercial paper reinvest in new commercial paper with the same insurers when the old commercial paper matures. However, this behavior can change dramatically when market concerns, or concerns with the specific issuer, exist, resulting in large cash outlay needs.

V. Proposed Criteria

The Subgroup proposes to include in the scope of the Liquidity Stress Testing Framework any insurance group that exceeds the following thresholds for any of the noted activities (or account balance as a proxy for that activity). The thresholds have been established taking into consideration both the account balance of the insurer to the total balance for the life insurance sector, as well as

the aggregate account balance of insurers within scope to the aggregate account balance for the life insurance sector.

Account balances	Threshold in \$ billions "greater than"	Reference to 2017 NAIC life/accident and health (A&H) annual financial statement blank
(1)	(2)	(3)
Fixed and Indexed Annuities	25	Analysis of Increase in Annuity Reserves
		Page: Supplement 62
		<u>Line</u> : Reserves December 31, current year (15)
		<u>Column</u> : Sum of Individual Fixed Annuities, Individual Indexed Annuities, Group Fixed Annuities, and Group Indexed Annuities
Funding Agreements and GICs ⁱ	10	Deposit-Type Contracts
		Page: Exhibit 7 – Deposit-Type Contracts
		Line: 9
		<u>Column</u> : Total
		+
		Synthetic GICS
		Page: Exhibit 5 – Interrogatories
		<u>Line</u> : 7.1
		+
		FHLB Funding Reserves
		Page: Note 11.B(4)1(b)
		<u>Line</u> : Funding agreements - current year - amount as of the reporting date - borrowing from FHLB - collateral pledged to FHLB
		Column: Funding Agreement Reserves Established
Derivatives	1	Derivatives
		Pages: Schedule DB, Part A; Schedule DB, Part B, Section 1
		<u>Line</u> : Totals (1449999)
		<u>Column</u> : Fair Value

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Securities Lending	2	Securities Lending Collateral Assets Pages: Schedule DL, Part 1; Schedule DL, Part 2 Lines: Total (9999999) Column: Fair Value
Repurchase Agreements	1	Repurchase Agreements Page: General Interrogatories Lines: Sum of 25.21, 25.22, 25.23, 25.24
Borrowed Money (includes commercial papers, letters of credit, etc.)	1	Borrowed Money Page: Liabilities Line: Borrowed Money (22) Column: Current Year

Annex 1 displays each activity and anonymizes the groups that exceed the thresholds for each activity and provides the percentage of the life insurance sector covered by those groups based on the above criteria and using the 2017 annual statutory financial statements filed with the NAIC.

VI. Questions for Comments

- a. Do the scope criteria achieve the objectives of the Liquidity Stress Testing Framework?
- b. In what way, if any, should the scope criteria be modified? Please explain the rationale for your recommendation.

VII. Comment Period

Comments are requested by close of business Friday, Aug. 31, 2018.

In performing the addition of the FHLB funding agreement amount to the GICs amount, NAIC staff discovered that the reporting of FHLB funding agreements is not consistent in Exhibit 7, Deposit-Type Contracts. For some insurers, we were able to match amounts from the FHLB funding agreement footnote to the exact same amount in Exhibit 7, either Column 2 (GICs) or Column 6 (Premiums and Other Deposit Funds). For those insurers where the FHLB amount matched Exhibit 7, Column 2, we did not add the FHLB funding agreement amount to the GICs amount, because that would be double-counting the FHLB funding agreements. For other insurers, even though the amounts did not match exactly, we were able to assume the FHLB funding agreements were reported in either Column 2 or Column 6 (e.g., the amount in Exhibit 7, Column 2 was zero or much smaller than the FHLB note, while the Column 6 amount was larger). However, for several insurers, we were not able to make an informed assumption (e.g., both Column 2 and Column 6 amounts were larger than the FHLB funding agreement amount). To be conservative in these instances, we added the FHLB funding agreement amount to the GICs amount. Overall, for the \$10 billion threshold, adding FHLB funding agreements to GICs does not result in a different list of insurance groups from the list with GICs of more than \$10 billion.

Χ

10 83.2%

Annex 1 Scope of Insurers subject to Liquidity Stress Test Draft 7/31/18

Borrowed Money GICs + FHLB Funding Fixed and Indexed Repurchase **Insurers in Scope? Derivatives Sec Lending** (includes Commercial **Annuities** Agreements Agreements Paper) Criteria >\$25 B >\$1 B >\$2 B >\$1 B >\$1 B >\$10 B YES Χ Χ Χ Insurance group Χ Insurance group YES Χ Х YES Insurance group Χ Insurance group YES Χ Χ Χ Χ Χ Χ YES Χ Insurance group YES Χ Χ Insurance group YES Χ Insurance group YES Χ Χ Χ Χ Insurance group YES Χ Χ Χ Insurance group Χ Insurance group 10 YES Χ Insurance group 11 YES Χ Χ YES Χ Insurance group 12 Χ 13 YES Χ Χ Χ Insurance group Insurance group YES Χ 14 15 YES Χ Insurance group 16 YES Χ Χ Χ Insurance group 17 YES Χ Χ Insurance group 18 YES Χ Χ Insurance group 19 YES Χ Χ Insurance group 20 YES Χ Χ Insurance group 21

Source data: NAIC Annual Blanks 2017

Insurance group

Percentage coverage (*)

Total

21

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15

59.6%

YES

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6

74.1%

5

80.9%

4

77.7%

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9

69.0%

^(*) Total exposure of above insurers for given activity /Total exposure of life industry for that activity