

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

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HELEN HANKS, on behalf of herself and all	)	Civil Action No. 16-cv-6399 (PKC)
others similarly situated,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	
	)	
VOYA RETIREMENT INSURANCE	)	
AND ANNUITY COMPANY,	)	
formerly known as Aetna Life	)	
Insurance and Annuity Company,	)	
	)	
Defendant.	)	
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**DECLARATION OF KEITH MCNALLY IN SUPPORT OF CLASS COUNSEL'S  
MOTION FOR ATTORNEYS' FEES, REIMBURSEMENT OF LITIGATION  
EXPENSES, AND INCENTIVE AWARD**

I, Keith McNally, declare as follows:

1. I submit this declaration in support of Class Counsel Susman Godfrey’s Motion for Attorneys’ Fees, Reimbursement of Litigation Expenses, and Incentive Award,” in connection with the proposed class action Settlement between Plaintiff Helen Hanks, on behalf of herself and the certified class, and Defendant Voya Retirement Insurance and Annuity Company (“Voya”) and its administrative agent and reinsurer the Lincoln Life and Annuity Company of New York (“Lincoln”). I have personal, first-hand knowledge of the matters set forth herein and, if called to testify as a witness, could and would testify competently thereto.

**A. Experience and Qualifications**

2. I am a company director and the Chief Operating Officer at Demeter Capital Limited (“Demeter Capital”). Demeter Capital is authorized and regulated by the United Kingdom’s Financial Conduct Authority (FRN 745647) and is a financial consulting company that offers independent, discrete and high quality analysis to clients active in alternative investments with a core focus in the insurance market. Demeter Capital has 3 other company directors, James Rouse, Marcos Flores, and Alejandra Limones who have worked together in a broad range of senior positions in institutional investor capacities in the longevity markets, which includes working at a large bank, large asset manager and as advisors to insurance companies. Demeter Capital works with large, regulated institutional investors with a mandate to assess and acquire life related exposure in the US and Europe to include life settlements and longevity/mortality derivatives. The team at Demeter Capital has traded in over \$20bn longevity risk swaps, notes and securitizations since 2003. Additionally, the team at Demeter Capital executed the first ever swap in the UK Pension fund market.

3. At Demeter Capital, I am responsible for advising on the creation of new life settlement investment funds and consulting for large financial institutions on their investment in

life settlements. Prior to Demeter Capital, I was a Managing Director and Global Head of Macro Investor Products at Credit Suisse. I was also a member of the Credit Suisse's European Fixed Income Operating Committee. From 2006 to 2011, along with Demeter Capital company directors James Rouse and Marcos Flores, I was a leading member of the Credit Suisse Longevity Markets Group which structured and executed a number of pioneering synthetic longevity/mortality deals in the financial markets. I was also internal legal counsel at Credit Suisse in New York supporting various fixed income structuring businesses including the Latin American team. I was a New York State qualified attorney (retired) and hold an MSc in International Securities, Investment and Banking as well as a Law (LLB (Hons)) degree.

4. My colleague James Rouse is also a company director of Demeter Capital as well as its Chief Investment Officer, responsible for the risk models and underwriting of life settlement assets. Prior to Demeter Capital, Mr. Rouse was a Managing Director at Fortress Investment Group where he was primarily responsible for the analysis and pricing of life settlement portfolios. Prior to Fortress, Mr. Rouse had spent 11 years at Credit Suisse most recently as a Director within the Longevity Markets Group where he was responsible for the development of structured products and longevity derivatives linked to life settlements and pension schemes. Prior to the Longevity Markets Group, Mr. Rouse was in the Risk Management Division of Credit Suisse. Prior to Credit Suisse, Mr. Rouse worked as a manager within the Risk Control division at Sumitomo Bank and as a manager in the Financial Institutions Group at Deloitte and Touche.

5. My colleague Marcos Flores is also a company director of Demeter Capital as well as its Chief Executive Officer, acting as an expert consulting advisor for institutional clients in the insurance and credit lending markets globally. Prior to Demeter Capital, Mr. Flores started Hibiscus Capital Limited ("Hibiscus") in 2012, a consultant to large Private Equity Funds and

Insurance Companies with strategic investments. Prior to Hibiscus, Mr. Flores spent 12 years working at Credit Suisse as a Managing Director within the Longevity Markets Group. In his role, Mr. Flores was responsible for the origination, structuring and distribution of longevity risk, which included life settlements. During this time, he was a SIAP (Significant Influential Approved Person) for the Financial Services Authority of the UK and worked with CARMAC (Credit and Risk Management Committee) within Credit Suisse to develop the global strategy of the longevity business at the bank. Prior to his activity in the longevity asset class, Mr. Flores led the Fixed Income structuring teams at Credit Suisse for Europe and Latin America. Mr. Flores joined Credit Suisse when the firm merged with Donaldson, Lufkin & Jenrette, where he was a member of the Latin American Structuring team. Mr. Flores had also spent three years in Commodities Sales and three years at an affiliate of the Spanish development bank, Banco Exterior de Espana, based in Mexico.

**B. Valuation Purpose and Materials Considered**

6. Demeter Capital was retained by Class Counsel to independently value the non-monetary benefits for a specific portfolio of life insurance policies (the “Class Policies”) contained in the proposed settlement of the above referenced action. These benefits include: (a) an agreement not to impose a new cost-of-insurance (“COI”) rate schedule for 5 years following final approval of the Settlement, subject only to any increase affirmatively required by Voya’s regulator (the “COI Rate Freeze”); and (b) an agreement by Voya and Lincoln not to challenge or rescind any policies on lack of insurable interest or fraud grounds or based on misrepresentations in the policy application (the “Validity Confirmation” and together with the COI Rate Freeze, the “Non-Monetary Benefits”).

7. In conjunction with my colleagues, I participated in the preparation of the valuation of the Non-Monetary Benefits. I have relied on the financial market and modeling expertise of my

colleagues in the completion of this work. The valuation methodology, valuation opinion and primary significant assumptions for the opinion, are proffered below and, in more detail, in the report, dated April 4, 2022, on the valuation of the Non-Monetary Benefits, which is attached as Exhibit A (the “Report”).

8. In determining the estimated valuations of the Non-Monetary Benefits set forth in this Declaration, I have employed methods and analyses of a type reasonably relied upon by experts in the field of life settlements in forming the opinions and inferences on the subject.

**C. Assumptions and Valuation Methodology**

9. The primary significant scenario assumptions are set forth in Section 1 of the Report. The valuation methodology is set forth in Section 2 of the Report.

10. Demeter Capital is receiving compensation for time spent on this assignment. The engagement of Demeter Capital for this assignment and the compensation for completing it are not contingent on the development or reporting of a predetermined value or any direction in value, the amount of the valuation opinion, or the attainment of a subsequent event directly related to the intended use of this valuation.

**D. Valuation Opinion**

11. As a result of procedures performed, it is my opinion that a reasonable estimate of the Non-Monetary Benefits is **\$26,231,954**. This amount represents the estimate of the COI Rate Freeze of **\$25,985,761** as detailed in the Report and the estimate of the Validity Confirmation of **\$246,193** as detailed in the Report.

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I declare that the foregoing is true and correct under penalty of perjury under the laws of the United States.

Executed this 4th day of April, 2022 at London, United Kingdom.

DocuSigned by:  
*Keith McNally*  
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Keith McNally

**CERTIFICATE OF SERVICE**

This is to certify that a true and correct copy of the foregoing instrument has been served on the following counsel, this April 4, 2022.

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*Attorneys for Voya Retirement Insurance and Annuity Company, formerly known as Aetna Life Insurance and Annuity Company*

/s/ Nicholas N. Spear  
Nicholas N. Spear

# Exhibit A

**Report On the Value of the Non-Monetary Benefits Achieved in the Class Action Settlement with Voya (the “Report”)**

**Executive Summary**

As a result of the analysis set forth in this Report, Keith McNally of Demeter Capital Limited (“Demeter”) has determined that a reasonable estimate of the value of the two Non-Monetary Benefits secured for the benefit of the Settlement Class, is the following:

<b>Commitment</b>	<b>Value</b>
COI Rate Freeze	\$25,985,761
Validity Confirmation	\$246,193
<b>Total</b>	<b>\$26,231,954</b>

For this Report “Settlement Class” is assumed as the 46,931 policies identified in the multiple data files of policy data up to May 31, 2021, provided to Demeter by Class Counsel.

Class Counsel has directed Demeter to remove from the analysis 12 policies which have been identified as excluded per paragraph 5 of the Joint Stipulation And Settlement Agreement (the “Settlement Agreement”) and a further 3 policies which have been identified to Demeter as having timely exercised their right to opt out.

The values shown above assume there are no further opt-outs; the opt-out deadline of April 19, 2022 has yet to pass, and if there are further opt-outs we reserve the right to modify the above analysis.

**Scope**

Demeter was retained by Class Counsel for the plaintiff in connection with a class action against Voya Retirement Insurance and Annuity Company (“Voya”) and Lincoln Life and Annuity Company of New York (“Lincoln”) in order to value the Non-Monetary Benefits contained in the Settlement Agreement in connection with its forthcoming motion for final approval of the settlement.

This Report provides an estimate of the value of two commitments from Voya and Lincoln with respect to the Settlement Class.

The two non-monetary benefits (the “Non-Monetary Benefits”) that are the subject of this Report are the following commitments by Voya and Lincoln:

- **COI Rate Freeze.** Agreement not to impose a new COI rate schedule for 5 years following final approval of the settlement, subject only to any increase affirmatively required by Voya’s regulator. We have been asked to value this 5-year period as starting from June 30, 2022 and ending June 30, 2027. We understand the 5 year period is likely to start from the date of final approval by the Court, and the final approval hearing is currently scheduled for June 29, 2022.

- **Validity Confirmation.** An agreement by Voya and Lincoln not to challenge or rescind any policies on lack of insurable interest or fraud grounds or based on misrepresentations in the policy application. This promise lasts in perpetuity.

### **General Approach and Data Considered**

A reasonable and fair approach to measure the value of the Non-Monetary Benefits to the Class is a present value of the expected cost of the promises— *i.e.*, the cost of providing the benefit. The discount rate applied to the calculations is representative of life insurance industry projects. A discount rate of 6% has been used. This is discussed in Section 1.8.

The calculations of the benefits' value are made by using future projections of the cashflows of the policies. The projections are performed both with and without the promises, and the value of the benefits is taken as the present value of the difference between the two projections.

The future projections require a modelling of the future mortality of the policies. Demeter has extensive experience with cash flow projections for life insurance policies including universal life insurance policies like policies in the Class. Demeter has regularly performed these types of calculations for our clients including life insurance companies and life settlement funds.

Voya's reinsurer Lincoln has provided information containing its own analysis and assumption of lapse, mortality expectations, investment earnings, premium funding, premium taxes, taxes, and surrenders for the applicable Settlement Class Policies at the time of the last policy COI redetermination in 2015 ("Lincoln's Assumptions").

Demeter has been instructed by Class Counsel for settlement purposes only and given the Court's September 30, 2020 Order on Summary Judgment and findings of fact therein (Dkt. 174) to use Lincoln's Assumptions as the starting point for all the calculations in our models throughout this Report. Demeter has used Lincoln's Assumptions without any validation or verification. Nothing in this Report should be considered as an endorsement by Demeter of the suitability outside the context of the settlement of this class action of using Lincoln's Assumptions for determining the Non-Monetary Benefits described herein.

Demeter notes that Lincoln's Assumptions have incorporated the following assumptions into our calculations of the Non-Monetary Benefits:

- Lincoln has assumed a specific premium payment pattern and lapse rate that includes a 10% increase in mortality expectations due to anti-selective lapse. This is further explained in Section 1.2.
- The mortality assumptions used by Lincoln in 2015 consisted of a set of scalars to a standard actuarial table published by the society of actuaries (SOA). The table used was the SOA's 90-95 table. The SOA calibrated this table using policy exposures that occurred during the period 1990-1995. The SOA has subsequently published updated tables (for example VBT 2001, VBT 2008 and VBT 2015), we have not reviewed the impact of changing the base table to one of these more recent tables.
- As explained in section 1.6 the calculations of value to policy holders are presented gross of corporate rate taxation.

We have been provided with data for 46,931 policies that we understand were in force on May 31, 2016 and were subjected to an increase in COI rates. We have also been provided with a file of policy data with lapses, surrenders and deaths updated through May 31, 2021<sup>1</sup>. The data reflects that 28,649 policies were in force as of May 31, 2021, the date of the last data file received by Demeter, which after removing the excluded and opt out policies as described in the Executive Summary, left 28,634 policies in force in the Settlement Class.

We were asked to assume that the Non-Monetary Benefits start on June 30, 2022. Therefore, it was necessary to update the Settlement Class from May 31, 2021 to June 30, 2022. For the purposes of this Report, we have used Lincoln's assumptions for lapse, surrender and mortality as described in section 1 of this report, to update from May 31, 2021 to June 30, 2022 as described in more detail in Section 1.1 and 1.2.

### **Approach for Valuing the COI Rate Freeze**

In providing the COI Rate Freeze, absent an affirmative requirement to do so by a state regulatory body (which is not a requirement we have ever seen imposed before by a regulator for universal life insurance on a block of policies similar in characteristics to the Class Policies), Voya and Lincoln are foregoing the ability to raise COI rates even in the event of negative changes to the mortality or investment return expectations of the Class Policies. To evaluate the benefit of the COI Rate Freeze, we considered the probabilities of various future changes in mortality and investment return scenarios of differing degrees of magnitude, and, using those numbers, the difference in what Voya and Lincoln would have been able to charge on Class Policies using a COI increase compared to what they now cannot for the next five years.

### **Methodology for COI Rate Freeze Valuation**

The main drivers of a potential COI increase on Class Policies we have considered are:

- The mortality performance of the eligible Class Policies.
- The investment returns earned on the account values of the eligible Class Policies.

The rationale for focusing on these two factors is presented in section 1.

The methodology for the COI Rate Freeze valuation is to project death benefits and COI deductions for the policies in five probability weighted scenarios:

Scenario 1: Voya's and Lincoln's mortality and investment return expectations improve slightly

Scenario 2: Voya's and Lincoln's mortality and investment return expectations improve significantly

Scenario 3: Voya's and Lincoln's mortality and investment return expectations stay consistent

Scenario 4: Voya's and Lincoln's mortality and investment return expectations worsen slightly

Scenario 5: Voya's and Lincoln's mortality and investment return expectations worsen significantly

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<sup>1</sup> The most complete set of experience data is through May 31, 2021 and thus that is the data set that is used.

The COI Rate Freeze provides meaningful benefits in the scenarios where Voya's and Lincoln's expectations worsen, and Voya and Lincoln might have implemented a COI increase but for the freeze – i.e., Scenarios 4 & 5. We therefore combine scenarios 1-3 into a single scenario.

The probability weights applied to the scenarios are calculated using the Gaussian Quadrature rule with inputs of the distribution assumption and variable volatility. The settings of the volatility and distributions for mortality and interest spread are described in section 1.

We have then calculated the value in these scenarios with a present value calculation of the resulting cash flows, using a discount rate of 6%.

The calculations use cashflows through June 2027, which is the end of the COI rate freeze period. Cashflows after June 2027 are not included in the calculation as the COI Rate Freeze promise ends.

Each of the scenarios needs to be quantified for

- Extent of the change in mortality and interest spread expectations; and
- Probability of the scenario.

The quantification of the scenarios and outcomes are detailed in Section 2.

### **Approach for Valuing the Validity Confirmation**

The Validity Confirmation is an agreement by Voya and Lincoln not to challenge or rescind any policies on lack of insurable interest or fraud grounds or based on misrepresentations in the policy application.

The eligible Class Policies have been in force for more than 2 years and are all outside of their contestable periods. This means the risk for a policy holder of a contest to a death claim for reasons such as suicide or inaccuracy in medical statements has now passed. As a result, absent trivial issues (e.g. failure to present a death certificate), fraud or lack of insurable interest now present the main reasons why Voya and Lincoln would not pay a death benefit claim.

The calculation of the value of the Validity Confirmation was performed as the present value of the difference between two projections:

- Base case mortality and lapse rate assumptions, and a risk of a challenge to the death benefit payment.
- Base case mortality and lapse rate assumptions, and no risk of a challenge to the death benefit payment.

In providing the Validity Confirmation, Voya and Lincoln are foregoing the ability to challenge and resist death benefit claims in the future for the eligible Class Policies. In order to provide a valuation of the Validity Confirmation, we estimated the following:

- timing of the future claims for death benefits for the eligible Class Policies;
- the probability that Voya or Lincoln could successfully resist a claim; and

- the amount of payout that Voya and Lincoln would have saved in the event of successfully resisting a claim that Voya and Lincoln are now foregoing (and that is therefore a settlement benefit).

The timing of the future claims was projected using mortality and the lapse assumptions described in Section 1.2. However, whereas the projections for the COI Rate Freeze ended June 30, 2027, the Validity Confirmation has no end date and therefore projections were extended for 40 years – after the likely last policy maturity of investor owned policies at issue.

The probability that Voya and Lincoln could successfully resist a claim took into account that the Class Policies have a lower than average face value than is typical in the market, lower than average ownership by life settlement investors and also that the majority of the policies at issue were issued prior to widespread use of non-recourse premium finance and other structures that some insurance companies have used to assert that a policy lacks insurable interest. Therefore, the Validity Confirmation is worth substantially less than it potentially might be for other blocks of policies with different properties and is substantially less than Demeter has valued for similar promises in other cases where the policies had higher average face value, high rates of investor ownership and more recent issue dates.

The present value of the death benefit claims was calculated by discounting at 6%.

Values are shown in Section 2.

## **Section 1 - Scenario Assumptions**

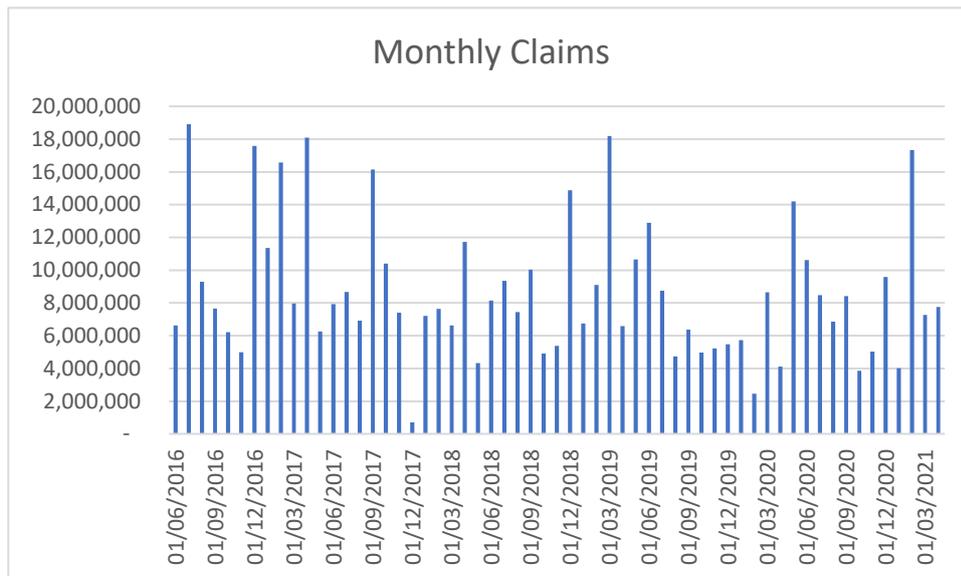
For purposes of this Report, Demeter has considered only the potential for COI increases driven by the projected performance of the eligible Class Policies. We take no position in this litigation and offer no opinion here as to when a COI increase by Voya and Lincoln would be permissible under the terms of the Class Policies, or what factors may appropriately be considered under those terms, or what grouping of policies into classes is permitted under the terms of the Class Policies.

Our projections make use of the following assumptions.

### **1.1 Mortality**

Lincoln's mortality assumptions at issue here consisted of a set of scalars which varied by underwriting class and smoker status, and a base table. The base table used was the 90-95 SOA table. The mortality assumptions also included a provision for future mortality improvement that varied by attained age of the insured. Nothing in this Report should be taken as an endorsement of these mortality assumptions, other than that it records Lincoln's own expectations of mortality as of 2015 for the policies at issue here.

Demeter received the mortality experience of the Settlement Class during the period May 31, 2015 to May 31, 2021. The monthly death benefit claims for the Settlement Class are shown in the graph below.



The Class Policies were issued to insured individuals with three different classes of policy for non-smokers: select, standard, preferred, and two classes for smokers: standard and preferred. Some of the life insurance policies have extra rating factors, also known as substandard.

Breakdown of the in force policies as at May 31, 2021

Class	F	M	Grand Total
N	10,545	12,240	22,785
P	1,476	1,609	3,085
Q	20	7	27
R	0	0	0
S	1,343	1,283	2,626
V	37	46	83
W	20	21	41
X	2	0	2
Grand Total	13,443	15,206	28,649

Legend:

Code 1	Code 2	Long	Tobacco	Class
N	NS	Non-Smoker	Non-Smoker	Standard
P	PN	Preferred Non-Smoker	Non-Smoker	Preferred
Q	QX	Select Non-Smoker	Non-Smoker	Select
R	RX	Select Smoker	Smoker	Select
S	SM	Smoker	Smoker	Standard
V	PS	Preferred Smoker	Smoker	Preferred
W	SN	Substandard Non-Smoker	Non-Smoker	Substandard
X	SS	Substandard Smoker	Smoker	Substandard

This classification was due to medical underwriting which leads to a Select and Ultimate rate pattern, and SOA 90-95 is a Select and Ultimate rate table.

The average duration of the policies for the period May 31, 2016 –May 31, 2021 was 29.7 years and average issue age 32.9. The average attained age of the Settlement Class was 60.4 during the period May 31, 2016 to May 31, 2021.

In providing the COI Rate Freeze, Voya and Lincoln are foregoing the ability to raise COI rates in the event of negative changes to Voya's and Lincoln's best estimate mortality expectations of the Class Policies. To evaluate the benefit of the COI Rate Freeze, we considered the probabilities of various future changes in Voya's and Lincoln's best estimate mortality by using scenarios of differing degrees of magnitude, and, using those numbers, the difference in what Voya and Lincoln would have been able to recover using a COI increase compared to what Voya and Lincoln now recover because it cannot increase COI rates for the next five years.

To calculate the probabilities of changes in mortality we required estimates of the volatility of mortality rates. In August 2015 Demeter published a report using base Qx shock variance of 12% and mortality improvement variance of 0.75%. Demeter reviewed industry data around expectations of shock changes in mortality rates to see what changes or updates should be made to this.

Sources for this review included insurance industry regulators who require life insurance companies to hold surplus capital above what might be expected, for unexpected shocks to risk factors.

Demeter reviewed publications from the following authorities:

The European Insurance and Occupational Pensions Authority's<sup>2</sup> Solvency II capital adequacy program.

The International Association Of Insurance Supervisors<sup>3</sup>

The Financial Stability Board<sup>4</sup>

Office of the Superintendent of Financial Institutions (OSFI)<sup>5</sup>

Australian Prudential Regulation Authority (APRA)<sup>6</sup>

The American Academy of Actuaries provided a presentation to the NAIC<sup>7</sup> in a report dated November 9, 2019, by the Mortality Work Group of which considered a number of risk factors to mortality, including,

- Volatility risk: The risk of natural statistical deviations in mortality experience.
- Level risk: The risk of incorrect experience mortality assumptions.
- Trend Risk: The risk that future mortality improvement is different than assumed
- Catastrophe Risk: The risk of a short-term spike in mortality or a longer-term increase in mortality from a currently unknown health event, including Pandemic or Terrorism

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<sup>2</sup> <https://eiopa.europa.eu>

<sup>3</sup> <https://www.iaisweb.org>

<sup>4</sup> <https://www.fsb.org/>

<sup>5</sup> <https://www.osfi-bsif.gc.ca/Eng/Pages/default.aspx>

<sup>6</sup> <https://www.apra.gov.au/>

<sup>7</sup> [https://content.naic.org/sites/default/files/call\\_materials/Agenda%20%26%20Materials%20LRBC%2011-9-21.pdf](https://content.naic.org/sites/default/files/call_materials/Agenda%20%26%20Materials%20LRBC%2011-9-21.pdf) at attachment C

Many regulators work towards high degrees of confidence. For example, the American Academy of Actuaries work uses the 95% percentile of risk.

For the purposes of this Report, we need to estimate the expected value of the Non-Monetary Benefits, and not the 95% percentile. To do this we have assumed a log normal distribution for mortality changes.

Review of the literature sources listed above revealed nothing that would conflict with Demeter's report of 2015; if anything the events of the past few years have confirmed the reasonableness of the settings used in that report and this Report uses the same settings.

Using the starting point assumptions explained above, Demeter then applied its estimates of volatility in mortality to generate the following shock scenarios:

Scenario	QX Shock	FMI <sup>8</sup> Shock	Scenario Weight <sup>9</sup>
Scenario 4 – Worsen Slightly	109.2%	-0.55%	23.9%
Scenario 5 – Worsen Significantly	122.3%	-1.26%	11.8%
Scenarios 1, 2 & 3 - No COI rate adjustment	100%	0%	64.2%

For comparison, the life insurance industry incurred an increase in claims of 15% in 2020 (Source: NAIC data) during which the Covid-19 pandemic occurred. The CDC have reported excess population mortality for 2020 of 10.9% and 12.5% for 2021.

## **1.2 Lapse, Premium Payment Pattern and Surrenders**

The starting assumptions provided for above include lapse, premium payment pattern and surrenders to generate the stress scenarios. Lincoln attributed a 10% mortality increase due to anti-selective lapse where the healthier insureds lapse and obtain new policies, leaving behind the less healthy insureds.

Lincoln's projections show that they do not consider the policies to be lapse supported.

Insurance companies make pricing for universal life policies in two different fashions, policies can be priced either to

- make large profits in early durations but lose money in late durations – with the intention that the large upfront profits more than compensate for the losses later on, or
- alternatively, to make a profit at all durations.

<sup>8</sup> FMI means future mortality improvement.

<sup>9</sup> Weights use the Gaussian Quadrature rule.

Total profits of the first method (upfront profits followed by later losses) are highly dependent on lapse rates, while total profit of the second process (profit at all duration) is not so dependent on lapse rates. Lincoln's profit projections are for profits at all durations – i.e., they do not use lapse supported pricing for the policies at issue, therefore it is unlikely that lapse rates vary in a manner to cause a COI increase in the next 5 years. Accordingly, no stress to lapse rates has been applied to the projection scenarios to evaluate the Non-Monetary Benefits and Lincoln's assumptions have been used for all the scenarios.

### **1.3 Investment Returns**

Many of the policies at issue have guaranteed minimum crediting rates of 4.5%<sup>10</sup> and many of the products are now operating at their minimums. The policies were issued several decades ago when interest rates were higher. The policies at issue do not display the low account value balances of life settlement policies and in the most recent data provided to Demeter, account values at issue were \$614m or 15.4% of death benefit.

We have used the investment return assumptions set forth in Lincoln's confidential memoranda at the time of the 2015 COI redetermination, and by comparing this to the crediting rates, we have calculated the difference ("spread") that Lincoln was aiming to capture on the account value of the policies.

Lincoln/Voya is at risk that its investment returns could fall resulting in a squeeze on its investment spread. It will not be able to react to a fall in investment returns by lowering account value crediting rates because of the guaranteed minimums.

To the extent that it considers that it would be entitled to recover that reduction in forecast profitability by a COI increase, the COI Freeze will now prevent this from happening.

For the purposes of this report, I have assumed that Voya/Lincoln are likely to assert that loss of investment spread would be a suitable cause for a COI increase and upon instruction of Class Counsel, Demeter has factored it into the Non-Monetary Benefit valuation scenarios.

We have used an expected volatility of long term interest rates of 80bp. This value was chosen after considering:

- Volatility of historical 30 year treasury yield data since Voya and Lincoln redetermined the COIs in 2015
- The current 30 year treasury yield than when Voya and Lincoln redetermined the COIs in 2015.

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<sup>10</sup> Whilst a number of products have different guaranteed minimum crediting rates than 4.5% (three (3) of a lower of 4%, one (1) has a higher rate of 4.75% and five (5) have a higher rate of 5%,) we have used 4.5% as a conservative average assumption for our calculations



Data from <https://home.treasury.gov/>

The distribution chosen was log-normal, this is consistent with swaption pricing models and assumes that interest rates will never be negative. Although some countries have recorded negative interest rates, it has never occurred in the United States.

The volatility and distribution assumptions resulted in the following scenario settings:

Scenario	Spread Shock	Scenario Weight <sup>11</sup>
Scenario 4 – Worsen Slightly	-59bp	23.9%
Scenario 5 – Worsen Significantly	-135bp	11.8%
Scenarios 1, 2 & 3 - No rate adjustment	0	64.2%

These settings result in Voya and Lincoln earning almost no spread in Scenario 4 –that is earning roughly 4.5% return on investment and simultaneously crediting 4.5% to policy holder’s account values. The spread is negative in Scenario 5. The negative spread represents the situation that Voya and Lincoln are earning a lower return from their investments while crediting a higher rate – the minimum permitted - to the Class Policies’ account values.

<sup>11</sup> Weights use the Gaussian Quadrature rule.

### 1.4 Expenses and Premium Taxes

As explained below we found there was insufficient variation in expenses and premium taxes factors to cause a COI increase and they are not material for the purposes of this report.

The average face size of the policies at issue is \$144,000, this is slightly smaller than the industry average new policy size of \$183,780,<sup>12</sup> and reflects the older issue dates of the policies at issue.

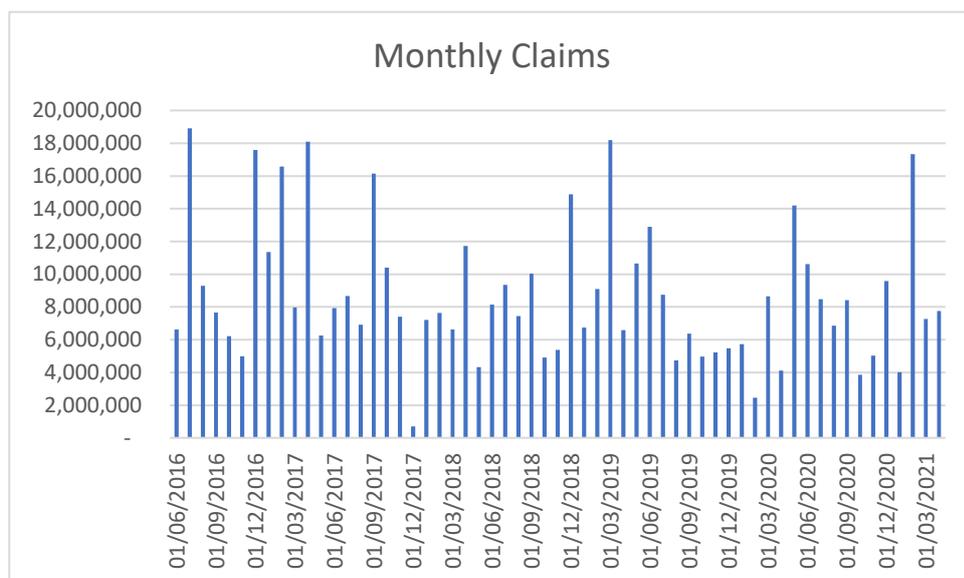
In 2015 Lincoln assumed a 2% inflation rate on expenses, and a Premium Tax rate of 2%.

Lincoln’s projections show that administrative expenses will be small compared to death benefits and cost of insurance charges

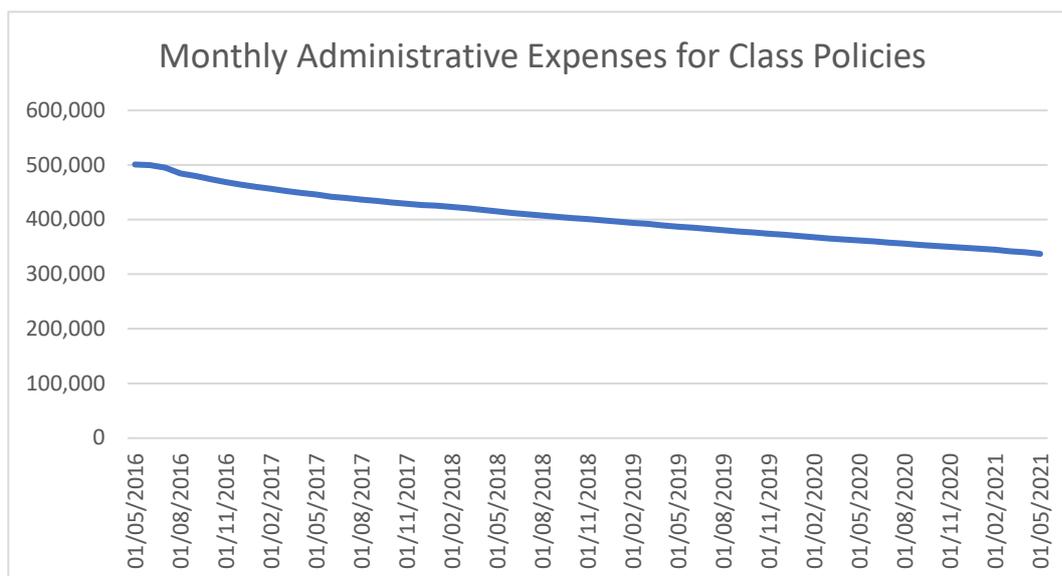
For example for the period May 2016 – May 2022, Lincoln’s expense assumptions forecast \$23.5m of expenses, compared to \$511.5m of incurred death benefits.

Furthermore expense costs fluctuate less than death benefits, in other words volatility in death benefits will be far more significant than volatility in expenses.

This can be seen in the following charts, the first presents death claims for the period May 2016 - May 2022, the second presents policy expenses for the same time period.



<sup>12</sup> Source ACLI data for 2020.



The expenses decline gradually as the book amortises due to lapse, mortality and surrenders.

Note the significantly higher volatility exhibited in the first graph than the second.

Changes in Premium Taxes rates are infrequent and tend to be for small amounts.

For these reasons potential variations in expenses and premium taxes were considered immaterial for the purposes of this Report. As a result, expenses and premium taxes have not been included in the projection scenarios.

### **1.5 Premium Funding Pattern**

There is a risk to Voya and Lincoln that a fall in account value balances will cost them future investment earnings spread income, however the degree of fluctuation caused by this is insignificant compared with volatility between earnings and crediting rates described at section 1.3.

This is due to the mathematical property that the difference between two numbers is more volatile than either of the individual figures.

Worked example: consider the value of  $A - B$

Set  $A = 10$  and  $B = 8$

The difference between  $A$  and  $B = 10 - 8 = 2$

A 10% increase in  $B$  results in a 40% drop in the difference between them:

$B$  changes by 10% to 8.8 (10% increase)

$A - B$  changes to  $10 - 8.8 = 1.2$  (40% decrease)

This property is particularly true when taking the difference between two numbers of similar magnitude:

Set  $A = 10$  and  $B = 9$

The difference between  $A$  and  $B = 10 - 9 = 1$

A 10% increase in  $B$  results in a 90% drop in  $A-B$ :

$B$  changes by 10% to 9.9 (10% increase)

$A-B$  changes to  $10-9.9 = 0.1$  (90% decrease)

Thus we can see that  $A-B$  is more volatile than  $A$  or  $B$  alone. This is particularly true when  $A$  and  $B$  are of similar magnitude.

Currently investment earnings are of similar magnitude to crediting rates and crediting rates are close to guaranteed minimums, therefore it was decided that volatility in investment earnings modelled at section 1.3 adequately captures the majority of Voya's and Lincoln's income spread risk and it was decided not to include a factor for variation in premium funding patterns.

### **1.6 Non-Premium Taxes**

When Voya performed its COI redeterminations, using Lincoln's 2015 assumptions, Voya and Lincoln claimed that they equalised future expected profits post increase to the projected profits at time of pricing. This claim was disputed by the Plaintiff and nothing in this report should be taken as endorsement of either group's opinion.

For the purposes of this report, we have considered that any future increase that Voya and Lincoln might have made (but cannot because of the COI Freeze) would have to equalise future expected profits to the projected profits at time of the last redetermination.

As tax rates are (mostly) multiplicative in nature and using a fixed tax rate assumption means that Voya's marginal losses from changes in mortality and interest spread described in sections 1.1 and 1.3 would need to be matched by equal and opposite COI charge increases in order to maintain the same net after tax profit.

The corporation tax rates are applicable to Voya/Lincoln; the tax rates applicable to policy holders are different.

The eligible policies have low rate of investor ownership (see section 1.7) and the large majority are held in trusts with a tax advantaged position where they will suffer the full impact of COI increases gross of tax.

For this reason the results in section 2.1 are shown gross of taxes as this presents the value from a policy owner's perspective. The cost to Voya and Lincoln in net profit of providing the freeze will be lower than this as they would have had to pay tax on the additional profits generated from a COI increase.

### **1.7 Contest Success Probability and Pay-out Rates of Resisted Claims**

The Class Policies have been in force for more than 2 years and are all outside of their contestable periods. This means the risk for a policy holder of a contest to a death claim for reasons such as suicide or inaccuracy in medical statements has now passed. As a result, absent

trivial issues such as a failure to present a death certificate, fraud or lack of insurable interest now present the main reasons why Voya and Lincoln would not pay a death benefit claim.

Data from market aggregate figures provides information about how often carriers resist a death claim:

Year	Disputes Settled (\$millions)	Amount Paid (\$millions)	Amount Denied (\$millions)	Incurred Claims (\$billions)	Denied / Incurred Ratio
2015	829.1	206.5	622.5	73.5	0.85%
2016	805.9	153.8	652.0	74.8	0.87%
2017	812.2	247.9	564.3	77.0	0.73%
2018	855.8	110.4	745.4	78.4	0.95%
2019	868.8	303.0	565.8	79.8	0.71%
2020	669.1	320.5	348.6	92.0	0.38%
Total	4840.9	1342.2	3498.7	475.5	0.74%

Source: ACLI tabulations of NAIC data.

The last few years have seen a resurgence of STOLI litigation.<sup>13</sup> By making this settlement, Voya and Lincoln are foregoing the option to take part of this wave of new STOLI litigation and instead provides payment certainty on the policies and thus value to the eligible policies. Also new in this trend has been an increase in success rates where some carriers have been able to convince courts to permit the retention of some or all the premiums received.

For these reasons, it is reasonable for settlement purposes to use the aggregate market rate data to provide the settings for the model scenario that includes risk of a challenge to payment of death benefit:

- Probability of resisting claim =  $\$4,840.9\text{m} / \$475.5\text{bn} = 1.02\%$
- Payout amount for resisted claim =  $\$1,342.2\text{m} / \$4,840.9\text{m} = 27.7\%$

However these values can only be reasonably applied to policies where there is some likelihood of making a STOLI claim. Many of the policies do not realistically carry the risk of a successful STOLI litigation by Voya and Lincoln. This is consistent with what the Court already found: “there is no reason to expect that it would be a large percentage of the class”. Dkt. 277 at 2, n.1.

- Many of the policies do not exhibit properties associated with life settlement investors

<sup>13</sup> See, e.g., *Pacific Life Ins. Co. v. Wells Fargo Bank, N.A.*, C.A. No. 8:21-cv-737 (PJM) (D. Md.), *Columbus Life Ins. Co. v. Wilmington Trust, N.A.*, C.A. No. 20-735-MN-JLH (D. Del.); *Sun Life Assurance Co. of Canada v. Bank of Utah*, Case No. 21-CV-3973-LMM (N.D. Ga.).

- The average policy has \$144k of face value, compared to average life settlement policies of \$3m+
- Life Settlement investors tend to minimally fund their policies, and maintain account values less than 2% of death benefit, where the Class Policies have average account value of 15.4% of death benefit
- Life Settlement investors tend to own policies where the insureds at issuance are over the age of 70 and on average hold policies with attained age greater than 75, where the policies at issue here have an average attained age of 61.
- Many of the recent STOLI litigation claims are grounded on concepts such as whether a borrower in a non-recourse premium finance loan bore the economic cost of paying a premium. Non-recourse premium financing was most common between 2004 and 2009 and the Class Policies were issued at a time when non-recourse premium finance was rare.

We stratified the portfolio into two groups, those where STOLI litigation risk was remote and those where, although unlikely, it might be a risk (low risk group). We did not consider it worthwhile to create a high risk group given the issue dates of the policies are all prior to the main era of non-recourse premium finance.

The probability of contest for the remote group was set to zero, and we used the market rates described above for those where it might be a risk.

The stratification used the following criteria, all of which had to be present for a policy to be considered in the low risk group.

- A) Face Amount > \$1m
- B) Attained Age > 70
- C) Account value < 3% of death benefit
- D) Issue Date > 1995

This gave 28,624 policies in the remote risk group and 25 policies with death benefit of \$103m in the low risk group. This is consistent with Demeter's experience of trading life settlement portfolios where eligible Settlement Class policies almost never appear.

The death benefit of the low risk group were projected in perpetuity using the mortality and lapse rate assumptions of section 1.1 and 1.2.

The results of the calculation are shown in section 2.2

## **1.8 Discount Rates**

To define the value today of the Non-Monetary Benefits provided by the Settlement, we have to present value the future cash flows with a certain discount rate.

The owners of the portfolio are likely to fall into two disparate groups.

- Individuals who are currently receiving low rates of interest on their bank deposits, often less than 1% and who rarely use discounting to assess the value of a project. Their UL life insurance policy represents a tax deferred savings mechanism and competes for investment with treasury bonds, municipal bonds and insurance company savings products. They are currently earning 4.5% in the crediting account rate of the policies.

- Life settlement funds who target high returns on capital and who are typically earning 8-9% returns on capital.

Few of the policies in the portfolio display characteristics of investor ownership such as low lapse rates and minimal account value funding – see section 1.7 for details.

We have used a 6 percent discount rate for this Report which represents a blended average of the low rates of return expected by individuals and the higher rates being earned by life settlement funds, with a predominance of individual owners rather than life settlement investors.

## 1.9 Reinsurance

Reinsurance is excluded from all the calculations in this Report. Reinsurance is not relevant to the value that policyholders would obtain from the Non-Monetary Benefits.

## Section 2 - Results

### 2.1 COI Rate Freeze Valuation

We assumed a starting balance of the in-force data as of May 31, 2021 and rolled this to June 2022 using the mortality and the lapse rate assumptions described at section 1.1 and 1.2.

The assumed in-force balance was then projected forward for 60 months using the scenarios described earlier, including lapse, premium payment, investment earnings, tax and mortality assumptions. The projections were for account balance and death benefits of the policies.

The present value (PV) in each scenario was calculated for the following variables:

- Net death benefit payments<sup>14</sup>
- COI charges:
- Net Investment Income (“Spread”) this is Voya’s profits from investment earnings less amounts credited to account values

Scenario	PV DB	PV Spread	PV COI Charges	Total	Freeze Impact	Scenario Weight	Weighted Value
Scenario 1-3	308,317,751	14,137,708	434,054,415	139,874,371	0	0.642	0
Scenario 4	304,959,832	1,160,917	389,465,835	85,666,920	54,207,451	0.239	12,972,620
Scenario 5	338,788,890	-13,559,304	382,373,141	30,024,948	109,849,423	0.118	13,013,141

The COI Rate Freeze Value was calculated as

(Worsen Slightly Scenario Benefit x Scenario Weight) + (Worsen Significantly Scenario Benefit x Scenario Weight)

The benefit is the difference between the scenario and the COI Rate freeze that Voya will be stuck with due to the settlement.

$$\text{Worsen Slightly Scenario Benefit} = \$139,874,371 - \$85,666,920 = \$54,207,451$$

<sup>14</sup> Net means difference between death benefit and account value.

Worsen Significantly Scenario Benefit = \$139,874,371 - \$30,024,948 = \$109,849,423

Total weighted benefit = \$54,207,451 x 0.239 + \$109,849,423 x 0.118 = \$25,985,761

## **2.2 Validity Confirmation Valuation**

To determine the value of the Validity Confirmation, we performed a probability weighted net present value calculation using the assumptions set forth above. We utilized the data provided to project for the Settlement Class policies death benefits, and account balances for the period from June 2022 to maturity. The projection includes the future probability of lapsing a policy, starting at June 2022 using the Lincoln lapse rate assumption described in section 1.1 and 1.2. We assumed a starting balance of death benefits given the in-force data as of May 31, 2021 and rolled this to June 2022 using the Lincoln's mortality and the lapse rate assumptions described at section 1.1 and 1.2.

We then applied Lincoln's mortality and future mortality improvements to generate forward Qx, i.e., mortality rates, for each eligible policy and built a set of future survival probabilities starting at June 2022. The future death benefits of the low risk policies were projected using the probability of lapse and death for each month.

For the without Validity Confirmation scenario, the death benefits were reduced for a probability of being contested of 1.02% and a payout ratio of 27.7%.

Estimates of legal expenses incurred in resisting policies were not considered

The results of each life insurance policy at issue were then aggregated and discounted to reach our estimated value of the Validity Confirmation.

PV of future death benefits without Validity Confirmation = \$33,137,658

PV of future death benefits with Validity Confirmation = \$33,137,658

Value of Validity Confirmation = \$246,193

## **Section 3 – Impact of Opt Outs**

We understand that the opt out period is still ongoing, and that some of the Class Policies may opt out of the settlement by the opt out deadline of April 19, 2022. As policies opt out of the class, the value of the Non-Monetary Benefits will likely decrease. Because the number of opt outs is unknown at this point, the analysis in this Report assumes zero opt outs beyond those already identified to us by Class Counsel. We will update this analysis when the final number of opt outs becomes known.

## **Conclusion**

Using the methodology and assumptions set forth above as well as our own expertise in the subject matter, we calculated the values of the COI Rate Freeze and the Validity Confirmation. A summary of our findings are set forth in the table below.

<b>Commitment</b>	<b>Value \$</b>
COI Rate Freeze	\$25,985,761

Validity Confirmation	\$246,193
Total	<b>\$26,231,954</b>

We have performed a qualitative review of these results and believe that they are a reasonable calculation of the value of the Non-Monetary Benefits, using the assumptions above.

Demeter Capital

April 4, 2022