



NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

NAIC SPRING
2021 NATIONAL
MEETING VIRTUAL

Date: 3/9/21

*Virtual Meeting
(in lieu of meeting at the 2021 Spring National Meeting)*

LIFE RISK-BASED CAPITAL (E) WORKING GROUP

Friday, March 12, 2021

12:00 – 1:00 p.m. ET / 11:00 a.m. – 12:00 p.m. CT / 10:00 – 11:00 a.m. MT / 9:00 – 10:00 a.m. PT

ROLL CALL

Philip Barlow, Chair	District of Columbia	John Robinson	Minnesota
Jennifer Li	Alabama	William Leung	Missouri
Thomas Reedy	California	Rhonda Ahrens	Nebraska
Wanchin Chou	Connecticut	Seong-min Eom	New Jersey
Sean Collins	Florida	Bill Carmello	New York
Vincent Tsang	Illinois	Andy Schallhorn	Oklahoma
Mike Yanacheak/Carrie Mears	Iowa	Mike Boerner/Rachel Hemphill	Texas
		Tomasz Serbinowski	Utah

NAIC Support Staff: Dave Fleming

AGENDA

1. Consider Adoption of its Feb. 26, 2021; Feb. 11, 2021; Jan. 21, 2021; Dec. 17, 2020; and 2020 Fall National Meeting Minutes—*Philip Barlow (DC)* Attachments A–E
2. Discuss Comments Received on the American Council of Life Insurers' (ACLI) Real Estate Proposal—*Philip Barlow (DC)*
 - ACLI Real Estate Proposal Attachment F
 - American Academy of Actuaries' (Academy) Comment Letter Attachment G
3. Hear an Update from the ACLI on its Proposal—*Philip Barlow (DC)* Attachment H
4. Discuss Any Other Matters Brought Before the Working Group—*Philip Barlow (DC)*
5. Adjournment

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Draft: 3/9/21

Life Risk-Based Capital (E) Working Group
Virtual Meeting
February 26, 2021

The Life Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force met Feb. 26, 2021. The following Working Group members participated: Philip Barlow, Chair (DC); Jennifer Li (AL); Thomas Reedy (CA); Deborah Batista (CO); Wanchin Chou (CT); Sean Collins (FL); Vincent Tsang (IL); Mike Yanacheak and Carrie Mears (IA); John Robinson (MN); William Leung (MO); Rhonda Ahrens (NE); Seong-min Eom (NJ); Bill Carmello (NY); Andrew Schallhorn (OK); Mike Boerner and Rachel Hemphill (TX); and Tomasz Serbinowski (UT).

1. Adopted the Update to the Mortgage Reporting Guidance

Mr. Barlow said the proposed update to the mortgage reporting guidance was exposed for comment with two options: 1) updating the previous guidance and 2) adding new guidance. One comment letter was received from the American Council of Life Insurers (ACLI) and Mortgage Bankers Association (MBA) (Attachment). Mike Monahan (ACLI) said the ACLI and MBA support the alignment of the periods covered by the Risk-Based Capital (RBC) and troubled debt restructuring (TDR) guidance. He said operationally either approach would accomplish the objective of aligning accounting and RBC guidance on TDR. He the ACLI and MBA prefer option one with the language from the Origination Date, Valuation Date, Property Value, and 90 Days Past Due paragraph in option two that includes the accounting interpretations. Mr. Barlow said incorporating the language from option two into the option one guidance would alleviate the need for potential updates in the future. Mr. Boerner agreed and made a motion, seconded by Mr. Tsang, to adopt option one (Attachment) with the modification to replace the language on Origination Date, Valuation Date, Property Value, and 90 Days Past Due with the language from option two. The motion passed unanimously.

2. Discussed the ACLI's Real Estate Proposal

John Bruins (ACLI) provided a PowerPoint presentation (Attachment 1) of the ACLI's real estate proposal (Attachment2). He said the structural changes of the proposal were presented to the Working Group on its Jan. 21 conference call and were exposed for public comment. He said that version of the proposal had actually been presented to the Investment Risk-Based Capital (E) Working Group four years ago. He said the proposal has been updated and what is now included is new material. He noted the proposal is fundamentally the same, however, the data period now includes an additional four years since the proposal was originally drafted in 2015. As a result of a review of the modeling and the larger data period, the recommended factors were changed from 10% to 11%. Mr. Bruins said in discussions with both regulators and other interested parties, concerns were raised about having the same factor on Schedule BA real estate as for Schedule A real estate and the updated proposal increases that factor from 10% to 12%. He presented the recommended changes to Schedule A; the proposed adjustment for unrealized gains; updates to the RBC encumbrance factor; and the recommended approach for Schedule BA which are detailed on pages 3 through 11 of PowerPoint presentation.

With respect to Schedule A real estate, Mr. Bruins said the modeling was based on historical experience of the real estate portfolio and the ACLI used two databases. The first was the NCREIF database, which begins in 1977 and is the most robust database that exists on real estate and has been in continuous existence from 1977. He said this was supplemented with another study and allowed for the study done in 1997 to be extended back to 1961, which provided essentially sixty years' worth of experience in the commercial real estate marketplace. The modeling largely parallels that done for the July 2013 report on common stock to the Investment Risk-Based Capital (E) Working Group and looks at a portfolio of real estate over time given various historical data starting points. In looking at that and using a two-year time horizon, Mr. Bruins said the factor comes to about 9.5% but, if it is extended two-years out to time to worst it would result in a factor of about 10.2%. He also said that the adjustment for unrealized gains and losses are integrated with the modeling of the base factor, so these items will need to be looked at together.

Considering that the proposal is changing factors that were put in place in the early 1990s, Mr. Robinson asked if it would be part of the ACLI's recommendation to revisit these factors and, if so, what would be the recommended timeframe be. Mr. Bruins said that would be up to the Working Group to make that determination but noted that one comment made in the bond modeling was that an economic cycle was typically ten years and suggested that might be guidance on what timeline to consider. Mr. Barlow said how often factors are updated is something to be considered at the Task Force level, not just for real estate but for all factors and there is a plan to do it more periodically.

With respect to the 1.5% margin providing for still unknowns due to post-COVID and other impacts, Ms. Hemphill said in the March 2017 proposal, it was an estimated 8% with 2% for unknowns for a final 10% factor and now it is at 9.5% base with a 1.5% for unknowns. She asked how the Working Group can know that is the right amount and how it evolved from the previous proposal. Mr. Bruins said that this is a decision that the regulators have made and the margin was more backed into than derived. He said the ACLI looked at what a reasonable rounded factor would be and that the margin is the difference but is in response to regulator concerns.

Mr. Tsang said the 9.5% factor is at the 95th percentile and asked what percentile it would be if the 1.5% were added. Ms. Hemphill said it would be 96.8th percentile. Mr. Tsang asked if the interest rate would have an impact. Mr. Bruins said it would raise it slightly. Mr. Tsang asked if the 11% is a pre-tax number. Mr. Bruins said it is and that is the same as the current 15%.

Mr. Schallhorn said the foreclosed real estate changed from 23% to 11% and asked if that was appropriate. Mr. Bruins said the recommended change on foreclosed real estate is from the perspective that when a company acquires real estate through foreclosure, they are required to mark it down to market value and since it is starting at market value, that puts it on the same basis of other real estate. He said the ACLI did not understand why there was an additional margin in the first place on foreclosed and feel the way that it is treated in Schedule A and tracked through is a reasonable recommendation to make them the same.

Mr. Reedy asked if Mr. Bruins knew what proportion of life companies' assets would actually be in these real estate equity investments and if that proportion increased in recent years. Mr. Bruins said that for the industry in total, it is about 1 to 1.5% of the total general account assets and it has been increasing but not by a lot. He said part of the reason is that companies look at the 15% RBC charge and that becomes a detriment to investment. He said he could get the statistics for the Working Group. Mr. Chou said the real estate and the volatility due to the economic downturn could be very different from one region to another and asked if the ACLI have this level of detail in their analysis that they could share with the Working Group. Mr. Bruins said he would see what they could provide.

With respect to the proposed adjustment for unrealized gains and losses, Mr. Tsang expressed concern with the possibility of double counting since the RBC factors are applied to book value. Mr. Barlow suggested the ACLI look at this question further. Mr. Bruins said they would.

Birny Birnbaum (Center for Economic Justice—EJ) said the life insurance industry, among other sectors of the U.S. insurance industry is opposed to the international capital standard which is based in large part on market valuations with the argument being that using these abuses the matching of assets and liabilities, introduces volatility, and creates a pro-cyclical situation. He asked how those positions align with this proposal. Mr. Bruins said the ACLI is not recommending a change to statutory accounting reflects the value of real estate but is trying to define a risk profile that reflects varying circumstances of a property for real estate. Unlike bonds, he said we do not have rating agencies and one of the key factors that can be recognized is the relationship of the market as an indicator of the level of risk. With respect to volatility, he said when bonds get downgraded, the RBC goes up and there is volatility which he does not believe is any different. He said RBC is based on the risk profile that exists on the date of the financial statement and, if risks change because of future circumstances, then both the financial statements and the risk profiles will change. He said keeping everything stable at the worst possible point is not necessarily good for either industry or regulators.

Mr. Barlow said more discussion will take place during the March 12th meeting and subsequently as needed.

Having no further business, the Life Risk-Based Capital (E) Working Group adjourned.

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Draft: 3/8/21

Life Risk-Based Capital (E) Working Group
Virtual Meeting
February 11, 2021

The Life Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force met Feb. 11, 2021. The following Working Group members participated: Philip Barlow, Chair (DC); Steve Ostlund (AL); Thomas Reedy (CA); Deborah Batista (CO); Wanchin Chou (CT); Sean Collins (FL); Vincent Tsang (IL); Mike Yanacheak (IA); John Robinson (MN); William Leung (MO); Rhonda Ahrens (NE); Seong-min Eom (NJ); Bill Carmello (NY); Andrew Schallhorn (OK); Mike Boerner (TX); and Tomasz Serbinowski (UT).

1. Discussed the Moody's Analytics Report on Bonds

Amnon Levy (Moody's Analytics) presented Moody's Analytics' report on the proposed revisions to the risk-based capital (RBC) C-1 bond factors (Attachment 1) and as summarized in the accompanying PowerPoint presentation (Attachment 2). He discussed the background of the project and why Moody's Analytics was chosen as detailed on page 5 of the PowerPoint presentation. He discussed the request for proposal (RFP) requirements, which were to assess the proposed required capital factors for the default risk on bonds, Moody's Analytics' objective opinion and its practical recommendations. He then discussed the factors that the American Academy of Actuaries (Academy) proposed. Mr. Levy noted the defined scope of the project the Academy was given from the NAIC, which was limited to updating the data given that the bond factors were estimated some time back along with an expansion to 20 designations, recognizing that the six designations were too coarse and maintaining the modeling structure that was designed 30 years ago. He said the report is not limited to that defined scope but takes a much broader view, recognizing that the markets, techniques and data have evolved with capital markets. He presented Moody's Analytics' key findings, which include areas of concern with regard to best practices with data and modeling choices, as well as model documentation both within the defined scope and outside of the defined scope. These are detailed in pages 9–11 of the presentation. Mr. Levy discussed the next steps Moody's Analytics is proposing, which include: 1) the phase 1 delivery of factors for exposure before April 30; and 2) a longer-term phase 2, which addresses modeling and data updates outside the defined scope.

As a reminder, Mr. Barlow said the Working Group was given direction by the Financial Condition (E) Committee to have new bond factors for 2021 and to take into consideration analysis prepared by the consultant for the American Council of Life Insurers (ACLI). He said his plan is to have new factors proposed for 2021 while providing as much support as possible to the consultant on their work to try to provide factors for the Working Group to consider within the necessary time frame. However, he said he believes it is an incredibly aggressive time frame for producing something as significant as new alternative bond factors, exposing them for comment, getting consensus and considering them for adoption. Given that, he proposes moving ahead with the work from Moody's Analytics to see what it develops but also move forward with the proposed factors from the Academy so that the Working Group can expose both before the end of April. He said the Investment Risk-Based Capital (E) Working Group discussed the Academy's factors before the tax law change, so they will need to be updated. He said he would also propose a state insurance regulator modification to the portfolio adjustment to address concerns that it could be onerous to small insurers.

2. Exposed the Alternatives for the Requested Modification to the Mortgage Reporting Guidance

Mr. Barlow said a request was received from the ACLI and the Mortgage Bankers Association (MBA) (Attachment 3) to extend the guidance that the Working Group issued last year. He said two alternatives have been drafted, one modifying the original guidance document and one presenting the change as a new document.

The Working Group agreed to expose both alternatives for a 10-day public comment period ending Feb. 22.

Having no further business, the Life Risk-Based Capital (E) Working Group adjourned.

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Draft: 3/9/21

Life Risk-Based Capital (E) Working Group
Virtual Meeting
January 21, 2021

The Life Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force met Jan. 21, 2021. The following Working Group members participated: Philip Barlow, Chair (DC); Steve Ostlund (AL); Thomas Reedy (CA); Deborah Batista (CO); Wanchin Chou (CT); Sean Collins (FL); Vincent Tsang (IL); Mike Yanacheak (IA); John Robinson (MN); William Leung (MO); Rhonda Ahrens (NE); Seong-min Eom (NJ); Bill Carmello (NY); Andrew Schallhorn (OK); Mike Boerner (TX); and Tomasz Serbinowski (UT).

1. Exposed the ACLI's Real Estate Proposal

Mr. Barlow reminded the Working Group that this proposal was originally presented to the Investment Risk-Based Capital (E) Working Group and is now for this Working Group's consideration. He said work on this was done a few years ago but was delayed while work on the bond proposal was done, and now the goal is to implement this proposal at the same time as the proposal for bonds. John Bruins (American Council of Life Insurers—ACLI) said he believes the focus of this meeting is to review and, hopefully, expose the structural changes with a more robust discussion of the proposal and the factors during a subsequent meeting. Mr. Barlow concurred. Mr. Bruins said a brief overview of the proposal was provided during the Dec. 17, 2020, meeting. He said that Rich McLemore (MetLife—representing the ACLI) would continue that discussion but that he would discuss the two parts of the proposal that require structural changes in more detail after that.

Mr. McLemore said the proposed changes are important to industry and that the ACLI's analysis shows that they are warranted. He said the current methodology unduly limits life insurance companies' access to a large and important higher returning asset class during today's low-rate environment when stable and consistent income is already difficult to source. He said the current framework keeps life insurance company capital largely on the sidelines of a market that can provide good portfolio diversification and aid in effective asset-liability management.

The current real estate equity risk-based capital (RBC) framework assesses a 15% base RBC charge on wholly owned directly held real estate investments that are reported on Schedule A, except for foreclosures, and a higher 23% charge on foreclosures and all other real estate investments that are held through fund, joint ventures or other structures and reported on Schedule BA. This framework and charges were implemented years ago at a time when private real estate investment performance history was limited. At that time, the factor was estimated based on an assumed relationship between private real estate and common stocks. Mr. McLemore said that 30 years ago, the recommendation was for ongoing study, and to date, no subsequent complete study has been done. He said that today, the actual sector performance data depth and history required to assess an appropriate charge more accurately is available, and the appropriate charge is much lower than was originally estimated. He said this is the component of the proposal that recommends lowering the factor applied to real estate.

Mr. McLemore said in the original estimation of RBC charges for real estate, a risk premium was assessed on assets that were held in fund, joint venture or other structures, as the lower levels of investment control by the life company, and the overall lower transparency of the investments, was thought to substantially increase the potential risk. He said a subjective 50% premium was assessed in order to account for this perceived increased risk, which brought the factor for these investments up to 23%. He said that today, in many cases, real estate investments can be held in structures mostly to reduce risk. In the simplest case, he said one only has to look at limited liability companies, which is a structure implemented almost solely to protect the insurance company from the risks associated with claims at the properties, like accidents or joint ventures, which are often structures used by insurance companies to align interests with local expert investors and managers of real estate investment assets. In the proposal, he said the ACLI is asking for reconsideration of the assumed higher risk level, and higher RBC charge, associated with these Schedule BA real estate assets.

Mr. McLemore said the final key aspect of the proposal is a proposed adjustment to required individual property RBC that will account for the cushion against RBC losses that is often created in real estate assets as they are held over time. He said the RBC factors that exist today, and even the new lower factors that are proposed, are based on market value volatility in our sector. However, he said the real estate assets are reported for statutory accounting using depreciated cost, and each year the asset's statutory value declines, even though the actual market value of the asset is more likely to be increasing. He said this creates an unrealized gain, and this unrealized gain is, in effect, a cushion that must be completely eroded before there is any risk of

loss of statutory capital. He said this is a critically important concept to understand, and the ACLI believes it must be accounted for in an accurate and fair RBC methodology.

With respect to a depreciation cushion, Birny Birnbaum (Center for Economic Justice—EJ) said that in the aftermath of the savings and loan experience, what was seen was some leveraging of loans or buildings that did not add value and that the value of the buildings declined over time with, in some instances, now new commercial building from the 1980s until the early 2000s. He asked if the assessment of the depreciation cushion is based on a particular time frame as opposed to a longer time series. He said there are also questions about the value of commercial real estate going forward, with a number of companies moving to work-from-home situations and the resulting demand for office space, along with the number of shopping malls closing. He asked how this longer-term impact is being considered in the proposal.

In terms of the longer-term, Mr. McLemore said the effects of the savings and loan crisis and the global financial crisis are both incorporated in the estimation of the proposed factors. If the concern is that there is going to be a reduction in RBC for assets where the values are falling dramatically and the capital that should be held on these higher leveraged investments could be understated, he said the opposite would be the effect of the implementation of the proposed change because RBC would be allowed to go up beyond the base factor in the case of a situation where the market value was below the depreciated cost. He said those types of environments would be short-lived because that will typically trigger a real estate impairment based on the impairment testing done on an annual basis. Mr. McLemore said the question on the larger structural changes in the economy about how real estate is held in the future is a good one but is difficult to answer right now. However, he indicated that MetLife's view is that the impact is going to be more transitory. He said MetLife is seeing an acceleration of pressures that were already in place, as an example in certain segments of the retail market and the long-term sustainability of business models that are going to be more affected by online retailing and e-commerce. For hotels, he said MetLife is less convinced that the impacts are going to be more longer-term but that they will persist over the next couple of years. He said with the introduction of vaccines, the market will return to more of a stabilized demand base to pre-pandemic levels by 2023 or 2024.

Mr. McLemore said the question about office space is probably one of the bigger questions, but MetLife's research does not see the increasing work-from-home environment having as large a long-term structural change as some might suggest because it is not as effective for companies over a longer period of time as they hire new people and experience turnover. He said MetLife has seen companies that have tried to fully outsource through time, and many of those have made the decision to revert back to a more office-based employment. He said the discussion of how these structural changes should influence the calibration of RBC is a larger question and not restricted to real estate.

Mr. Bruins added that RBC is not structured to look at today's particular environment and consider that the results over the next year or two might be worse. He said factors are established looking historically at what the variations have been and take into account the worst of what the modeling shows. He said that is what the analysis for this real estate proposal has done. Mr. Barlow asked if data can be provided that illustrates the impact of how a decline in the market value of a property, and they are marked down as Mr. McLemore indicated, is reflected in the financial statements. Mr. Bruins said the ACLI would work to provide this.

Mr. Tsang said, in general, he agrees with the proposal updating the factor for real estate by looking at the more emerging statistics but expressed concern with the inclusion of unrealized gains and losses in the RBC calculation. He said real estate does not have a deep secondary market like bonds and mortgages, which probably makes the fair value less transparent. He expressed concern with real estate reported on Schedule BA because of the ability to get out of these commitments. He said bonds and mortgages do not have the unrealized gains and losses being reflected in their RBC requirements and questioned why real estate should have this element introduced.

Mr. Bruins said he may partially address Mr. Tsang's comments while going through the structural changes, but these may need more fuller discussion during future meetings. Mr. Barlow said that is fine as this proposal is going to require more discussions as these and other questions are addressed. However, he asked Mr. Bruins to address, to the extent possible, flexibility in light of these questions with respect to the final RBC charges based on the structural changes being proposed. As background, Mr. Bruins said the proposal and all of the documents were put together to be a unified proposal even though they are being addressed in pieces, with today's focus being on the structural changes. As such, all of the documents and examples use the factors that are in the proposal, and this is not a presumption that these will be the final factors but a matter of consistency in the presentation. Thus, he asked Working Group members to focus on what the formulas and relationships are. He said real estate is an equity asset but is held in statutory accounting at book value, which is a depreciated cost. RBC looks at the risk of loss of statutory capital, which is based on the statutory value. If the market value is greater than the depreciated cost, Mr. Bruins said this has no effect on the statutory values unless it gets to the point where the market value is less than the statutory

value and there is a need to review for impairment. As long as the market value is above the statutory value, he said it will never affect the statutory value. Mr. Bruins said this is where the margin Mr. McLemore alluded to comes in. He said the proposal is to recognize two-thirds of that margin and to reduce the factor proportionally on a property-by-property basis. With regard to Mr. Barlow's question on flexibility, this would be something that could be changed easily if done as a factor input. To Mr. Tsang's point, Mr. McLemore said there is some uncertainty because real estate values are not valued on a daily basis, and two-thirds is in the proposal as opposed to a 100% offset to address that concern.

Mr. Bruins discussed the examples as included on page 5 of the ACLI's presentation (Attachment 1). The other area of structural change is for encumbrances as included on page 6 of the presentation. Mr. Bruins said this is simply a redesign of the calculation, which does not affect the final result as explained and illustrated on the next two pages of the presentation. Rather, it facilitates for the inclusion of the excess of market value over book value, which would include bringing in the fair value from Schedule A and Schedule BA. Mr. Barlow asked if these fair value amounts are for informational purposes or whether they are used for something in the investment schedules. Mr. Bruins said he is not sure. He said the base real estate schedule in life RBC, LR007, will have no changes but is fed from four supporting worksheets in the forecasting file, which are identical but address different categories of real estate. He said the changes are detailed in the following pages of the presentation.

To Mr. Barlow's question and based on his time as NAIC staff support for the Investment Risk-Based Capital (E) Working Group and exam work that he has done, Ed Toy (Risk & Regulatory Consulting—RRC) said he is confident that the fair values are not actually used for anything in the investment schedules for real estate. He said what he has seen in these fields ranges anywhere from being blank to being something that probably is related to the fair value of the property or being a fair value of the mortgage, so even though there are instructions for these fields, how companies are using and populating it ranges all over the place. He expressed a similar concern with the amount of encumbrances companies are reporting. Mr. Barlow asked Dave Fleming (NAIC) to look into any review or analysis of these fields by the NAIC.

The Working Group agreed to expose the structural changes proposed for real estate by the ACLI, with a modification to make the fair value adjustment a stand-alone factor and not an embedded amount, for a public comment period ending March 8, noting that the proposal includes factors and instructions that are not final.

2. Discussed the Guaranty Fund Memorandum to the Capital Adequacy (E) Task Force

Mr. Barlow said this item has been discussed during previous meetings, and the consensus was that there was no action by the Working Group required in response to the changes to the *Life and Health Insurance Guaranty Association Model Act* (#520). He said a memorandum to that effect has been drafted (Attachment 2) and addressed to the Capital Adequacy (E) Task Force. He asked if there were any concerns before forwarding the recommendation to the Task Force. The Working Group directed NAIC staff to forward the memorandum to the Task Force.

Having no further business, the Life Risk-Based Capital (E) Working Group adjourned.

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Draft: 3/5/21

Life Risk-Based Capital (E) Working Group
Virtual Meeting
December 17, 2020

The Life Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force met Dec. 17, 2020. The following Working Group members participated: Philip Barlow, Chair (DC); Steve Ostlund (AL); Thomas Reedy (CA); Deborah Batista (CO); Wanchin Chou (CT); Sean Collins (FL); Vincent Tsang (IL); John Robinson (MN); William Leung (MO); Seong-min Eom (NJ); Bill Carmello (NY); Andrew Schallhorn (OK); Mike Boerner (TX); and Tomasz Serbinowski (UT).

1. Received an Update on ESGs

Mr. Barlow reminded the Working Group that work is being done on economic scenario generators (ESGs). While this will affect both reserves and capital, he said the work is being done primarily at the Life Actuarial (A) Task Force. Pat Allison (NAIC) said there will be a meeting of the Task Force later today that will be focused on the new ESG. She said there was a discussion on Dec. 3 about the interest rate generator, and today's discussion will be on the equity and corporate bond models and the potential exposure of a variety of materials for comment. She said these discussions also present goals for the ESG, along with the decisions that state insurance regulators will need to make. The work includes the development of a set of recommendations for each of those decisions for exposure. Ms. Allison said the NAIC's selected vendor, Conning, has calibrated its model to reflect those recommendations, so a full set of what is being referred to as the basic data set, which is what is intended to be prescribed, will be exposed. She said this is not what is intended for a field test, and it is certainly not final, as numerous comments are expected.

2. Discussed the ACLI's Real Estate Proposal

Mr. Barlow reminded the Working Group that the American Council of Life Insurers (ACLI) developed a real estate proposal as part of the work of the Investment Risk-Based Capital (E) Working Group. He said this has now been moved to the Life Risk-Based Capital (E) Working Group, along with the work on the bond factors, and the intention is to address both at the same time to have them in place for year-end 2021, but it has been some time since this proposal was reviewed.

Steven Clayburn (ACLI) presented an overview of the proposal to assist the Working Group in determining the next steps to be taken (Attachment 1). As Mr. Barlow indicated, he said this proposal was presented to the Investment Risk-Based Capital (E) Working Group in 2015, and it was exposed for comment on two occasions. He said there was some, although not universal, consensus at the time that the factors were too high, but what to do to lower those factors remained outstanding. With feedback from state insurance regulators and industry, he said the proposal was revised in 2017, but it was put on hold in 2018 to focus on the proposed revision to bond factors. He provided a recap of the most recent discussions and the concerns expressed, as shown on page 4 of the presentation. The proposal has four parts, as included on page 5 of the presentation, and Mr. Clayburn discussed these in more detail, as provided in the remaining pages of the presentation. He said there are structural changes associated with the proposal, and he thanked the Life Risk-Based Capital (E) Working Group for making time for this presentation. Dave Fleming (NAIC) said the structural change is actually to underlying worksheets that are included in the forecasting file, and the deadline for exposure of those is the end of January 2021.

Mr. Barlow said the analysis behind the proposal is a few years old, and he asked if the ACLI has any updates to that information. Mr. Clayburn said he believed there had been updates to the modeling in response to previously raised items, but he said he would verify that. Mr. Barlow asked if there is some analysis or commentary that can be provided to address the current situation. Mr. Clayburn said he would take this back to the ACLI membership. With respect to additional analysis, Mr. Chou asked about the analysis used in the derivation of the current factors. Mr. Clayburn said he believes this information is included in the original proposal document, but he said he believes the current factor for Schedule A real estate is based on 60% of the common stock factor and Schedule BA was then 150% of that result. He said this was not based on true analysis, but because there was not much data at the time, it was a conservative approach. Paul S. Graham (ACLI) said there was data from two companies used back in the 1980s that resulted in the use of a percentage of the stock equity factor for real estate. At the time, he said it was not that material because there was not a lot of industry invested in it, but in the current environment of lower interest rates where companies are trying to back their promises to policyholders with assets that have a little higher return, it is becoming more important. He said the original study the ACLI did in 2015 showed factors below the 8% that was recommended, and the fact that there may be more current experience that is not as good because of COVID-19 coupled with the factor now being discussed at 10%, it is likely covered. Mr. Barlow asked if the growth is in real estate or items reported

on Schedule BA. Mr. Graham said he believes it is both, but he noted that the proposal is to look not only at the book value but also the market value so investments, other than those done at the beginning of 2020, would have that buffer. Mr. Tsang asked if the ACLI could include information with respect to the materiality of these investments to its member's portfolios and the impact of the proposed factors on its capital requirements. Mr. Clayburn said the ACLI would work with the members on impact. Mr. Barlow asked if the exposure would be something captured in the NAIC's database. Mr. Fleming said it is and he would work on providing that information.

Having no further business, the Life Risk-Based Capital (E) Working Group adjourned.

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Draft: 12/8/20

Life Risk-Based Capital (E) Working Group
Virtual Meeting (*in lieu of meeting at the 2020 Fall National Meeting*)
November 10, 2020

The Life Risk-Based Capital (E) Working Group of the Capital Adequacy (E) Task Force met Nov. 10, 2020. The following Working Group members participated: Philip Barlow, Chair (DC); Steve Ostlund (AL); Wanchin Chou (CT); Sean Collins (FL); Vincent Tsang (IL); John Robinson (MN); Derek Wallman (NE); Seong-min Eom (NJ); Bill Carmello (NY); Andrew Schallhorn (OK); Mike Boerner (TX); and Tomasz Serbinowski (UT).

1. Adopted its Oct. 9, Sept. 25, Sept. 11, Aug. 21, and Summer National Meeting Minutes

Mr. Ostlund made a motion, seconded by Mr. Chou, to adopt the Working Group's Oct. 9 (Attachment Four-A), Sept. 25 (Attachment Four-B), Sept. 11 (Attachment Four-C), Aug. 21 (Attachment Four-D) and July 30 (*see NAIC Proceedings – Summer 2020, Capital Adequacy (E) Task Force, Attachment Four*) minutes. The motion passed unanimously.

2. Received an Update on ESGs

Pat Allison (NAIC) provided an update on the work being done on economic scenario generators (ESGs). She said there was a joint meeting of the Working Group and the Life Actuarial (A) Task Force on Oct. 27. During that meeting, she said the background and the deliverables that Conning will have for the ESG project were discussed, and these are posted on both groups' websites. She said there will be a meeting of the Task Force on Dec. 3; it will discuss the timeline for the project, and Conning will provide some overview information and start discussion of the interest rate generator in particular.

3. Discussed Possible Modifications to the Life and Fraternal Statistics

Mr. Barlow said the Working Group has discussed the statistics previously and the possibility of modifying them in a manner that will lend itself more to driving action on the part of the Working Group. He asked if there are Working Group members willing to review the statistics and propose possible modifications. Mr. Boerner, Mr. Tsang, Mr. Robinson and Mr. Chou said they would be willing to support that effort. Mr. Barlow said this effort will start with Working Group members, but it will clearly involve feedback from interested parties before changes are made.

4. Adopted Revisions to the Working Agenda

Mr. Barlow said the Working Group made changes to the life risk-based capital (RBC) calculation for the 2018 tax reform changes; although, there were a few minor considerations that the Working Group believed might merit further consideration. After the initial work was done, he said nothing further has been undertaken, and he asked if there is interest or a need to go back and look at the work that was done for possible additional changes. Paul S. Graham (American Council of Life Insurers—ACLI) said the items that were being contemplated were from the perspective of setting it up so future changes to the tax rates would be easier to incorporate, and he suggested that it might make sense in the current environment to wait and get some clarity on what any possible changes might be since any changes would not affect the end result of the calculation but would be moving any tax adjustments from one bucket to another. The Working Group agreed to delete this item from the working agenda and consider tax rate changes as they arise.

With respect to contingent deferred annuities, Mr. Barlow suggested that this item could be included in the work that the American Academy of Actuaries (Academy) is doing on updating the C-3 Phase I and C-3 Phase II methodologies. Link Richardson (Academy) agreed with that approach, and he said he would suggest it to the Academy's C3 Life & Annuities Work Group. He said if needed, the Work Group could reach out to other Academy groups as well. The Working Group agreed to delete this item and combine it with the Academy's work on C-3.

With respect to the items relating to review of the primary security and RBC shortfalls, Mr. Barlow noted that NAIC staff review this annually. He suggested that these items be removed from the working agenda and considered as part of the review of the RBC statistics. The Working Group agreed.

With respect to determining if any adjustment is needed due to the changes made to the *Life and Health Insurance Guaranty Association Model Act* (#520), Mr. Graham said one of the changes has to do with losses on long-term care (LTC) where

previously these were included only in the health assessments, they would now be split between life and health. He said he believes the reason for this item being referred to the Working Group was concern with the fact that the C-4a risk component is based on the amount of guaranty fund assessments. He said the risk charge is tied to the maximum amount of assessments in any one year for a life company, and that is not affected by the changes to Model #520; therefore, he does not believe there is any need to change the C-4a charge. Mr. Barlow said he is inclined to agree, but he wants to ensure that the Working Group appropriately addresses the item before removing it. Dave Fleming (NAIC) said he agrees with Mr. Graham, and he suggested that a memorandum from NAIC staff noting the reasons for no change being needed was appropriate for the Working Group to consider. The Working Group agreed.

Lou Felice (NAIC) said the item relating to determining if any adjustment is needed to the reinsurance credit risk in light of changes related to collateral is related to the “Bilateral Agreement Between the United States of America and the European Union on Prudential Measures Regarding Insurance and Reinsurance” (Covered Agreement). He said the issue has to do with how the life RBC formula pulls in this information for authorized and unauthorized reinsurers. He said it may only require simple changes, but the formula’s treatment must be in conformity with the Covered Agreement for those treaties subject to it. Mr. Fleming said he believes this may require only instructional changes. He said the Academy is considering a separate reinsurance proposal for the life RBC formula’s treatment of items from the liabilities page that may be tangent to this, and he believes these may be addressed in one proposal.

Mr. Ostlund made a motion, seconded by Mr. Robinson, to adopt the Working Group’s working agenda (Attachment Four-E) with the modifications suggested on this call. The motion passed unanimously.

Having no further business, the Life Risk-Based Capital (E) Working Group adjourned.

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Capital Adequacy (E) Task Force

RBC Proposal Form

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|---|---|--|
| <input type="checkbox"/> Capital Adequacy (E) Task Force | <input type="checkbox"/> Health RBC (E) Working Group | <input type="checkbox"/> Life RBC (E) Working Group |
| <input type="checkbox"/> Catastrophe Risk (E) Subgroup | <input type="checkbox"/> Investment RBC (E) Working Group | <input type="checkbox"/> Operational Risk (E) Subgroup |
| <input type="checkbox"/> C3 Phase II/ AG43 (E/A) Subgroup | <input type="checkbox"/> P/C RBC (E) Working Group | <input type="checkbox"/> Longevity Risk (A/E) Subgroup |

<p style="text-align: center;">DATE: <u>February 26, 2021</u></p> <p>CONTACT PERSON: <u>Steve Clayburn</u></p> <p>TELEPHONE: <u>(202) 624-2197</u></p> <p>EMAIL ADDRESS: <u>steveclayburn@acli.com</u></p> <p>ON BEHALF OF: <u>American Council of Life Insurers (ACLI)</u></p> <p>NAME: <u>Steve Clayburn</u></p> <p>TITLE: <u>Senior Actuary, Health Insurance & Reinsurance</u></p> <p>AFFILIATION: <u>ACLI</u></p> <p>ADDRESS: _____</p>	<p>FOR NAIC USE ONLY</p> <p>Agenda Item # _____</p> <p>Year _____</p> <p>DISPOSITION</p> <p><input type="checkbox"/> ADOPTED _____</p> <p><input type="checkbox"/> REJECTED _____</p> <p><input type="checkbox"/> DEFERRED TO _____</p> <p><input type="checkbox"/> REFERRED TO OTHER NAIC GROUP _____</p> <p><input type="checkbox"/> EXPOSED _____</p> <p><input type="checkbox"/> OTHER (SPECIFY) _____</p>
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IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

- Health RBC Blanks Property/Casualty RBC Blanks Life and Fraternal RBC Instructions
 Health RBC Instructions Property/Casualty RBC Instructions Life and Fraternal RBC Blanks
 OTHER _____

DESCRIPTION OF CHANGE(S)

To update the RBC calculation for Real Estate to reflect updated experience and analysis since RBC was first developed.

REASON OR JUSTIFICATION FOR CHANGE **

When RBC was developed, there was limited experience on the default and loss for commercial real estate. Since then data sources have been compiled and tracked in the industry, and can now be accessed to provide more meaningful analysis and information for development of capital standards.

Additional Staff Comments:

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1. REAL ESTATE

LR007

Basis of Factors

Companies that have developed their own risk based capital factors for real estate have used a range of factors from 5 percent to 20 percent. One study indicated real estate volatility is about 60 percent of common stock, suggesting a factor in the range of 18 percent. Assuming a full tax effect for losses, a pre tax factor of 15 percent was chosen. Foreclosed real estate would carry a somewhat higher risk at 23 percent pre tax. Schedule BA real estate also has a 23 percent factor pre tax because of the additional risks inherent in owning real estate through a partnership. The pre tax factors were developed by dividing the post tax factor by 0.65 (0.65 is calculated by taking 1.0 less 0.35). The pre tax factors are not changing for 2018 due to tax reform. The base factor for equity real estate of [11%] was developed by adding a margin for conservatism to the results of an analysis of real estate performance over the period of 1978 – 2020. The analysis was conducted by a group of life insurance company real estate investment professionals coordinated by the ACLI. The data used was a national database of real property owned by investment fiduciaries and supplemented by data on real estate backing mortgage securities. The analysis is documented in a report to the NAIC dated February 26, 2021. In addition to modifying the factor for company owned and investment real estate, this updated factor will also be used for real estate acquired in satisfaction of debt (Foreclosed real estate). For assets with the characteristics of real held estate (partnership or other structure) reported on Schedule BA, a higher factor is used to account for the lower transparency involved with these structures. Foreclosed real estate is recognized in the statutory statements as having acquisition cost equal to market value at time of foreclosure. Schedule BA real estate was originally given a higher factor under a presumption that it was more highly levered. Analysis has shown these assets to have experience very similar to directly held and will therefore use a modestly higher factor.

While the experience analysis was done based on analysis of fair value impacts, Real Estate is reported at depreciated cost in the Statutory statements. The difference in values impacts the risk to statutory surplus. Therefore, an adjustment is made to the factor based on the difference between fair value and statutory carrying value on a property by property basis. The adjustment is defined as

$$\text{Adj Factor} = \text{RE Factor} * (1 - [\text{factor}] * (\text{MV} - \text{BVg}) / \text{BVg})$$

factor is [2/3]

The resulting adjusted RBC factor is subject to a minimum of zero. In the RBC calculation, see Figure 7, fair value is taken from Schedule A Column 10 plus encumbrances, or from Schedule BA column 11 plus encumbrances, respectively, while BVg is the net Book Adjusted Carrying Value plus the encumbrance.

Encumbrances have been included in the real estate base since the value of the property is held net of the encumbrance, but the entire value is subject to loss—would include encumbrances. Encumbrances receive the base real estate factor of [11%] reduced by the average factor for commercial mortgages of 1.752 percent pre-tax. In the past this was computed as a base factor applied to the net real estate value plus a separate factor applied to the amount of the encumbrance. Beginning in 2021, the equivalent result will be obtained by applying a base factor to the gross statutory value of the property, and a credit provided for the amount of the encumbrance. for real estate encumbrances not in foreclosure and 20 percent pre tax for real estate encumbrances in foreclosure and encumbrances on Schedule BA real estate.

The final RBC amount is subject to a minimum of the Baa bond factor (1.30%) applied to the BACV, and a maximum of 45% of the BACV.

All references to involuntary reserves as it relates to real estate were removed to comply with the codification of statutory accounting principles.

Specific Instructions for Application of the Formula

Column (1)

Calculations are done on an individual property or joint venture basis in the worksheets and then the summary amounts are entered in this column for each class of real estate investment. Refer to the real estate calculation worksheet (Figure 7) for how the individual property or joint venture calculations are completed.

Line (1) should equal Page 2, Column 3, Line 4.1.

Line (2) should equal Page 2, inside amount, Line 4.1.

Line (4) should equal AVR Equity Component Column 1 Line 20.

Line (5) should equal AVR Equity Component Column 3 Line 20.

Line (7) should equal AVR Equity Component Column 1 Line 19.

Line (8) should equal AVR Equity Component Column 3 Line 19.

| Line (14) should equal Schedule BA, Part 1, Column 12, Line 1799999-2199999 plus Line 18999992299999, in part.

Line (15) should equal Schedule BA, Part 1, Column 12, Line 1799999 plus Line 1899999, in part.

Line (17) should equal AVR Equity Component Column 1 Line 75.

Line (18) should equal AVR Equity Component Column 1 Line 76.

Line (19) should equal AVR Equity Component Column 1 Line 77.

Line (20) should equal AVR Equity Component Column 1 Line 78.

Line (21) should equal AVR Equity Component Column 1 Line 79.

Low income housing tax credit investments are reported in Column (1) in accordance with *SSAP No. 93—Low Income Housing Tax Credit Property Investments*.

Column (2)

The average factor column is calculated as Column (3) divided by Column (1).

Column (3)

Summary amounts are entered for Column (3) based on calculations done on an individual property or joint venture basis. Refer to Column (8) of the real estate calculation worksheet (Figure 7).

Line (17)

Guaranteed federal low-income housing tax credit (LIHTC) investments are to be included in Line (17). There must be an all-inclusive guarantee from an ARO-rated entity that guarantees the yield on the investment.

Line (18)

Non-guaranteed federal LIHTC investments with the following risk mitigation factors are to be included in Line (18):

- a) A level of leverage below 50 percent. For a LIHTC Fund, the level of leverage is measured at the fund level.
- b) There is a tax credit guarantee agreement from general partner or managing member. This agreement requires the general partner or managing member to reimburse investors for any shortfalls in tax credits due to errors of compliance, for the life of the partnership. For an LIHTC fund, a tax credit guarantee is required from the developers of the lower-tier LIHTC properties to the upper-tier partnership.

Line (19)

State LIHTC investments that at a minimum meet the federal requirements for guaranteed LIHTC investments.

Line (20)

State LIHTC investments that at a minimum meet the federal requirements for non-guaranteed LIHTC investments.

Line (21)

State and federal LIHTC investments that do not meet the requirements of lines (17) through (20) would be reported on Line (21).

|

(Figure 7)

Real Estate Worksheet

Fair value adjustment factor [factor]

(4)(3)		0.11450	0.01750	0.120		
(399) Total Investment Real Estate						
Total Real Estate (Line (199) +						
(499) Line (299) + Line (399))						
<u>Schedule BA Assets with characteristics of Real Estate</u>						
(+) <u>All Assets Without Encumbrances</u> [†] <u>All Joint Ventures w/o Encumbrances</u> [#]	XXX	0.12230	XXX		XXX	
(1)						
(2)						
<u>All Assets With Encumbrances; All Properties With Encumbrances:</u>						
(3)(2)		0.12230	0.01750	0.200		
(4)(3)		0.12230	0.01750	0.200		
(899) Total Schedule BA Real Estate						

Note that column (2) is the book/adjusted carrying value net of any encumbrances, while column (4) is the fair value of the property not reduced for any encumbrances.

[†] For each category, each property Line (1) should also exclude properties or joint ventures that have a negative book/adjusted carrying value. These should be listed individually, including those for which there is no encumbrance.

[&] Column (7) is Column (5) times (1-(factor) * (Column (4) – (Column (2) + Column (3))) / (Column (2) + Column (3)))

[#] Column (86) is calculated as (Column (2) plus Column (3)) multiplied by Column (74).

[§] Column (97) is calculated as Column (3) multiplied by Column (65).

* Column (108) is calculated as the sum of Column (86) minusplus Column (97), but not less than zero or more than Column (2).1.3% nor more than 45% of column (2), and not less than zero.

Proposal
Risk Based Capital for Real Estate Assets
February 26, 2021

Executive Summary

The following recommendations are the product of analyses conducted or sponsored by the ACLI, the NAIC, and industry real estate specialists. These recommendations represent the final product of discussions and deliberations that began in 2012 and are inclusive of changes meant to address questions and recommendations posed by members of the Investments Risk Based Capital (IRBC) and Life Risk Based Capital (LRBC) NAIC working groups, the American Academy of Actuaries (AAA) and other interested parties.

The objective of the recommendations described below is to ensure that the RBC assessment methodology and charges for the real estate sector more accurately reflect the sector's underlying risks and to promote consistency with the methodology used in other asset sectors.

- A. Schedule A Real Estate Factor. Update the C-1 factor for real estate assets held on Schedule A to be a base factor of **11%**. This recommended factor is based on an estimated worst cumulative loss at a 95th – 96th percentile confidence level based on historical experience, which suggested a base factor of 9.5%. As was done with common stock, we used values at 2 years loss horizon. An additional 1.5% charge is recommended to account for potential disparity in individual life company real estate portfolio composition and uncertainty surrounding the longer-term implications of the COVID-19 pandemic on the commercial real estate sector. The proposed factor would be applicable for all categories of real estate reported in Schedule A of the Life and Health Annual Statement. (See Section A)
- B. Unrealized Capital Gains/Losses. Adjust the based RBC factor using a ratio of 2/3 of the percentage difference between the reported fair value and statutory book value to the statutory book value. This adjustment would account for the cushion against statutory losses that is often created in real estate assets as they are held through time. The recommended RBC factor for Section A is calibrated based on volatility of market values through time. In contrast, real estate assets are reported for statutory accounting using depreciated cost. Real estate assets depreciate annually, so each year the asset's statutory value will be adjusted downward, even though the actual market value of the asset is more likely to be increasing. This creates an "unrealized gain" that serves as a cushion that must be completely eroded as market values fall before there would be any risk of loss of statutory capital. (See Section B)
- C. Encumbrances. Revise the RBC factor for real estate encumbrances following the principles of the current RBC with factors to be consistent with the commercial mortgage RBC framework adopted in 2013. (See Section C)
- D. Schedule BA Real Estate Factor. Update the factor for Schedule BA real estate to **12% on a look-through basis**, equivalent to the proposed factor for Schedule A (11%) plus a premium of about 10% of the amount, to more accurately reflect the risk of real estate assets reported on Schedule BA. All other mechanics would parallel the proposal for Schedule A Real Estate. (See Section D)

Scope

This proposal is developed for the Life and Fraternal Risk Based Capital formulas. This proposal does not address possible adjustment to the Asset Valuation Reserve (AVR) or tax adjustments for these assets. Finally, this proposal does not directly address the factors for the Health Risk Based Capital or for the Property & Casualty Risk Based Capital.

Background

RBC is used to measure potential future excess losses and their effect on statutory capital. The goal is to help regulators identify weakly capitalized companies, given risks that individual companies are taking. This proposal is consistent in methodology with recent RBC development work for common stock and bonds in areas such as the confidence levels for statistical analyses, while recognizing real estate's unique characteristics.

There is limited historical perspective available on the original construction methodology supporting the currently applied RBC factors for real estate investments. The following general description is taken from a 1991 report covering RBC C-1 (default) factors:

"There is little data upon which to base requirements for this asset group. Company practice, as shown by the 1990 intercompany survey, indicates factors in the range of 5 percent to 20 percent. An article in the May-June 1991 Financial Analysts Journal (Ennis and Burk) proposes that real estate volatility is about 60 percent of that for common stock, suggesting a factor in the range of 18 percent. If one assumes full tax credit for losses, this converts to a factor of about 10 percent which is the Subcommittee's recommendation for all real estate subcategories, except real estate acquired by foreclosure for which the factor is 15 percent. This is one of several asset groups which deserve continuing study to assure that risk-based capital requirements are adequate and appropriate."

Since the original real estate factor estimation, which was based on the somewhat rudimentary analysis described above, there has been a very significant improvement in the availability of performance data for the sector. While there have been additional analyses conducted for this sector since the initial methodology and factor adoption (i.e., AAA proposals in September and December 2000), to date there have been no significant changes made to the C-1 factor for real estate.

Since 2000, the pre-tax base C-1 factor for real estate applied in the sector has been 15%. The derivation of this factor, as described above, was based on 60% of the common stock factor, adjusted for taxes. The logic at the time was that the volatility of real estate was assumed to be around 60% of common stock volatility¹. This assumption was reportedly based on inferences made from historical real estate investment trust (REIT) performance, as a robust private market performance history was not available at that time. REITs are companies that use debt in owning and managing properties and have performance characteristics different from that of the underlying commercial real estate.² The same 15% C-1 factor currently applies to virtually all directly held real estate, including company occupied properties, investment properties for long-term hold, and properties held for sale, but excludes properties acquired through foreclosure which were perceived to be riskier.

It is also important to note, that while real estate is considered an equity asset, statutory accounting requires it to be valued at depreciated cost. Any capital improvements are added to the statutory book value, and then

¹ Various studies have since shown that equity real estate in general has volatility well less than 60% of that of the S&P 500.

² The volatility of REIT performance is higher than the volatility of direct property performance primarily because REITs are leveraged investments, which results in greater volatility of results. Further, privately held property is not marked-to-market daily, trades infrequently, and tends to exhibit price changes rather slowly.

depreciated from that time. If and when there is an other-than-temporary impairment, the book value is revised down to then market value, if lower, and depreciated going forward. Throughout this document this is referred to as depreciated cost.

The real estate sector has matured significantly in the last 30 plus years, as institutional investment has become prevalent and public capital markets have become more developed. Information transparency has increased materially and the market has become much more “efficient”. Valuation and accounting policies and standards, and increased regulation, have also increased standardization and invest ability. Ownership of commercial real estate is now much more widespread across institutions, including pension funds, than in the earlier period.

A. Review of Base C-1 RBC Factor – Support for Change to 11%

Analyses conducted or sponsored by the ACLI, the NAIC, and industry specialists suggest that the base C-1 RBC factor applicable to Schedule A real estate (including investment, foreclosed and held for sale real estate) should be set at 9.5%. An additional 1.5% cushion is recommended to account for potential disparities between the composition of the index used and individual life insurance company real estate portfolios and uncertainty surrounding the impact of COVID-19 on the longer term performance of commercial real estate. This recommendation is based primarily upon the NCREIF National Property Index (NPI) Price Variation Analysis presented below.³

Note that the support presented in this Section A represents an updated methodology meant to address certain concerns expressed by the American Academy of Actuaries regarding representation of the Global Financial Crisis in the data set. The original supporting methodology and support can be found in Appendix 3, for reference only.

The primary methodology employed to determine the recommended charge is analyses based on actual historical real estate investment performance data from the NCREIF Property Index (NPI), appended by data from FRC/Kelleher to extend the series through earlier years of 1961-1977.⁴ This data set is collectively referred to as “NPI” in this analysis.

Results of Price Variation Model of NCREIF Property Index (“NPI”)

	1 YR HP Cumulative Loss	2 YR HP Cumulative Loss	3 YR HP Cumulative Loss	4 YR HP Cumulative Loss
95-PCT	4.3	9.3	10.1	10.1
96-PCT	5.6	9.7	10.6	10.6

The above table presents the results of analyses of historical NPI total return data. The table presents the results of analyses based on both 95th percentile (PCT) and 96th PCT worst results in the historical data set. Further, the table presents cumulative losses at varying periods ranging from 1 to 4 years. Historically, downturns in real estate tend to last no longer than 3 years, so this period also represents the worst cumulative decline that would be observed even if the assumed period was extended further. The “cumulative” observations represent the largest cumulative loss experienced at any point in the period.

The recommendation of 9.5% is based on consideration of the maximum cumulative losses at both the 95th and 96th percentiles (“PCT”) during the observed period. This assumed period of loss is consistent with the assumption used for common stock. Importantly, based on historical performance data for the sector, the 11% recommended base factor would cover cumulative losses during a 2-year period at a 96.8% confidence level.

³ See Appendix 1 for a detailed description of NCREIF and the NPI.

⁴ Kaiser, Ronald W., The Long Cycle in Real Estate, Journal of Real Estate Research, Volume 14, Number 3, 1997.

We also note that in using cumulative losses over time, there is no discounting for time value of money, and all analysis are conducted without any consideration of the federal income tax impact of the losses.

The use of actual historic quarterly returns across 60 years of industry experience provides for the incorporation of the impact of several economic cycles on supply and demand for commercial real estate and the impact on market values. This lengthy time period also allows for incorporation of the effects from earlier governmental impact on prices, such as from changes in the tax code in the 1980s.

Considerations

1. Applicability of Index to Individual Life Company Portfolios

The recommended decrease in the RBC factor for Real Estate is based on the performance of a large and well diversified commercial real estate benchmark performance index (i.e., NCREIF-National Property Index, NPI). The index includes quarterly data from all the major property types (office, retail, industrial, multifamily and hotel) across all regions of the US, which makes it broadly applicable to all of these major property types nationwide. Additionally, we compared the distribution of properties by type and by geographical region in the NCREIF database to the distribution of those held by the life insurance companies and found the distributions to be quite similar.

The question of the potential need for increased granularity for the RBC factor was considered thoroughly. In particular, we considered a different factor for company occupied as a class with lower risk than investment properties. However, granularity beyond the single factor representative of all US commercial real estate was deemed inappropriate due to 1) the relatively small size of the asset class, 2) the alignment of composition between the NPI and the life industry portfolio, and 3) regulations separate from RBC factors that address concentration risks and assure diversification of life company real estate portfolios.

Additionally, segmenting the NPI dataset into smaller granularities can be problematic. The NPI as of 2nd Quarter 2013 consisted of just over 7,000 properties but roughly 30,000 properties have been in the index at some point during its 30+ year history. Over that history, the geographic and property type distribution of NPI has been constantly evolving. While the database of properties is large in total, segmenting it into more granular levels can produce sample sizes too small to be statistically sound. Beyond this, segmenting can add only limited additional value. The primary driver of real estate property performance is the national real estate cycle⁵ as portrayed in the NPI. The pattern of real estate losses for both the industry and for individual companies is aligned with that cycle. In other words, the overall real estate cycle tends to dominate other effects including geography and property type. The strength of that national real estate cycle has been found in academic research to explain roughly 50% of the variation in property performance across all properties in the index.

2. Impact of Select Key Assumptions

- **Loss Horizon:** The period of time assumed for the accumulation of losses in the analysis (loss horizon) plays an important role in determining the appropriate amount of required capital. In this updated proposal, we suggest an 11% RBC factor, which is based on cumulative losses over 3 years. Real estate assets are typically held longer-term, often five years or greater. As the assets are more illiquid than publicly traded bonds or other securities, they are often used to back surplus, or longer-term liabilities. Liquidity is managed such that the timing of sale of real estate assets can often be strategically determined, thus

⁵ Risk and Returns of Commercial Real Estate: A Property Level Analysis, Liang Peng, Leeds School of Business, April, 2010, http://www.reri.org/research/article_pdf/wp173.pdf

avoiding realization of the larger maximum potential losses. The key focus is the length of economic cycles with losses. In past real estate cycles, the duration of losses typically spans a 2 to 3-year period, with the majority of losses during past downturns being materially concentrated within one year. Average holding periods for real estate assets are typically much longer than one year, averaging 10 years or longer, based on analysis periods and investment targets for most institutional investors. As such, and given the statutory accounting for the asset class with declining book value and rigorous impairment requirements, it is normal for the actual recognized impairment rates by insurance companies to be lower in both frequency and severity than market averages. This is primarily related to the existence of unrealized gains that must be exhausted prior to any recognition of losses.

- **Confidence Level:** The confidence level also plays an important role in determining the appropriate amount of required capital. The 9.5% suggested base factor generally corresponds to the losses modeled at between the 95th and 96th percentiles (PCT) over a worst cumulative period. The recommended 11% factor covers losses at a 96.8% confidence level, assuming maximum cumulative losses during a 2-year period.
- **Reserve Offset:** The development of the bond factors includes an offset for expected losses based on the principle that expected losses are covered by reserves. Real estate and common stock are both treated as equity assets which are generally to support surplus and not reserve, and for which expected loss is not considered. The current RBC methodology for real estate equity does not include an offset for the expected loss, as the basic contribution to AVR used as a proxy for expected loss is zero. Similarly, this proposal does not include an offset for expected loss.⁶ The rationale for excluding the mitigating effects of the expected loss include:
 - There is no basic contribution to AVR for real estate investments.
 - Real estate is a small asset class, and analyses required to develop appropriate offsets for expected loss are deemed unnecessary.
 - Discussions around the appropriate relationship between expected loss, AVR, and RBC are ongoing. In the future, as precedent is set in the other larger asset classes where the effects are likely even more important, the potential integration of an offset in the real estate equity sector should be reconsidered.
- **Income:** In the development of RBC factors for bonds, income in excess of the expected loss offset discussed above is not included in the modeling and is assumed to be used for policyholder liabilities and not available as a loss offset. For common stock, and for real estate as equity investments, the total return is used. First, since the equity assets are generally presumed to back surplus and not policyholder reserves, the policyholder does not have claim to the income. Consistent with the lack of offset for expected loss, the income is available. When bonds default there is no subsequent income available to the investor. Real estate does not default, and even if subject to impairment, continues to produce income. The real estate values were therefore developed consistent with common stock using a total return view of the assets.
- **Taxes:** All of the modeling discussed in this project was done on a “cash” basis. No consideration has been given to the effect of these losses on the tax liability of the investor. Since losses reduce taxes that otherwise would be paid by the investor, this will result in a lower post-tax RBC factor than the recommended level.
- **Property acquired through foreclosure:** Property acquired through foreclosure should be treated the same as any other real estate. If the insurer forecloses on a mortgage and obtains the property, statutory

⁶ There are currently discussions at the NAIC regarding whether RBC assessments should be adjusted to remove the expected losses for sectors. In real estate equity's case, we are uncertain as to the materiality of adjusting for expected losses. The same could be said for common stock, as expected loss is a fixed income concept and would be difficult to apply to equities.

accounting requires the property to be brought onto the company's books at then current market value. As a result, the value is no different than any other property purchased in the course of business. If the property has low income potential, that will be reflected in its market value.

3. Application of Stochastic Approaches

While we considered stochastic approaches, a fully stochastic model was deemed inappropriate by the working group due in large part to the limited amount of quarterly historical observations (limited when compared to the amount of daily transaction data available for public stocks and bonds). It is possible that a stochastic analysis could be performed wherein an algorithm would be built and calibrated to actual history.

However, if the algorithm is calibrated to historical performance, we believe that the results of such an analysis would be consistent with our work, which includes periods of very significant market stress in the sector. Note that the work performed in both common stocks and bonds excluded significant periods of stress in those markets, given changes in the economy from the advent of the creation of the Federal Reserve. Both asset classes have public data going back to early in the 19th century, though of varying quality. We used the full historic track record for Commercial Real Estate (CRE) that is available and includes the downturn in CRE from the S&L crisis in the 1990s, the effects of the dot-com bubble, the global financial crisis and the most recent effects of COVID-19 pandemic in 2020.

B. Adjust RBC to recognize risk impact of unrealized gains and losses

We also recommend implementation of an adjustment to individual property RBC that will account for the cushion against statutory losses that is often created in real estate assets as they are held through time. The RBC factor that is recommended in Section A is calibrated based on volatility of market values through time. However, real estate assets are reported for statutory accounting using depreciated cost. In real estate, the assets depreciate annually, so each year the asset's statutory value will be adjusted downward, even though the actual market value of the asset is more likely to be increasing. Annual depreciation rates in real estate are often 2% or higher. This creates an "unrealized gain" that serves as a cushion that must be completely eroded as market values fall before there would be any risk of loss of statutory capital.

Fair value of real estate assets held by life companies is reported in Schedule A for each individual property. This fair value includes the changing market value of the asset and the impact of any improvements that have been capitalized. This excess of market value over the statutory value is a cushion against loss of statutory capital.

We propose that the applied base RBC factor be adjusted using a ratio of 2/3 of the percentage difference between the reported fair value and statutory book value to the statutory book value. That value applied to the gross book value and after being reduced for any encumbrance would be floored to the RBC using the NAIC bond factor for a Baa equivalent (currently 1.30%)⁷ applied to the BACV. Note that in situations where fair value is less than statutory, the RBC factor will be increased.

Examples of the application of the adjustment are presented in the below table and are hypothetical. If a market value were lower than book value, that property would be reviewed for possible impairment. If the value were down temporarily, this adjustment would provide a short-term increase in RBC. If the value is down on a permanent basis, this may provide an early increase in RBC prior to taking an impairment.

⁷ See Appendix 2 for sample calculation.

The specific formula including adjustment would be: $RBC\% = \text{Max} [NAIC2\%, 11.0\% * (1 - 2/3 * (MV - BVg) / BVg)]$

BV	MV	RBC
100	50	14.7%
100	100	11.0%
100	150	7.3%
100	200	3.7%
100	250	1.3%

BVg is the book value gross (prior to netting the encumbrances); NAIC2 is the NAIC2 corporate bond RBC charge.

In an effort to assess the effects of statutory accounting on actual life insurance company experience, a simulation was constructed to analyze hypothetical life company portfolio performance given statutory accounting. The results of this study demonstrate the materially lower statutory losses as compared to market value losses during downturns, and thus provide support for the proposed adjustment.

In 2013 the ACLI, NAIC, and Industry real estate specialists engaged Jeff Fisher (Academic Consultant), who is a special academic consultant to NCREIF, to use the historical property level performance data in the NPI to construct simulated historical performance under statutory accounting rules. The analysis leveraged all available NPI data history at the required level of granularity at that time, which included the period of 1978Q2 through 2013Q1. This analysis was performed to provide additional insight around the impact of statutory accounting (recognition of depreciation, impairment rules, etc.) on the historical performance and risk to capital for insurance companies.

The simulation used the actual historical market experience of the NPI at the individual property level, wherein estimates of statutory accounting were applied. This hypothetical exercise was not intended to serve as the primary basis for determination of an appropriate RBC factor. Rather, the results of this hypothetical exercise illustrate the effect that statutory accounting (i.e., with depreciating book values and impairment rules/requirements) can have on the timing and severity of loss recognition relative to market value changes and provide additional evidence that the primary analysis is reasonable, if not conservative, given the effect of statutory accounting.

The simulation made the following assumptions:

1. Beginning Book Value for statutory accounting when properties enter the data set is set equal to then current market value.
2. For Book Value projections, depreciation is over 20 years (5% per year) for all properties.
3. Properties are tested for impairment quarterly, with impaired properties removed from index after recognizing the loss from the impairment. Any income received to that point is retained in the modeling.
4. As in statutory accounting, there is no accounting for property value increases, only losses are recognized in the analysis.
5. There is no offset related to expected loss (i.e., there is no accounting for AVR).

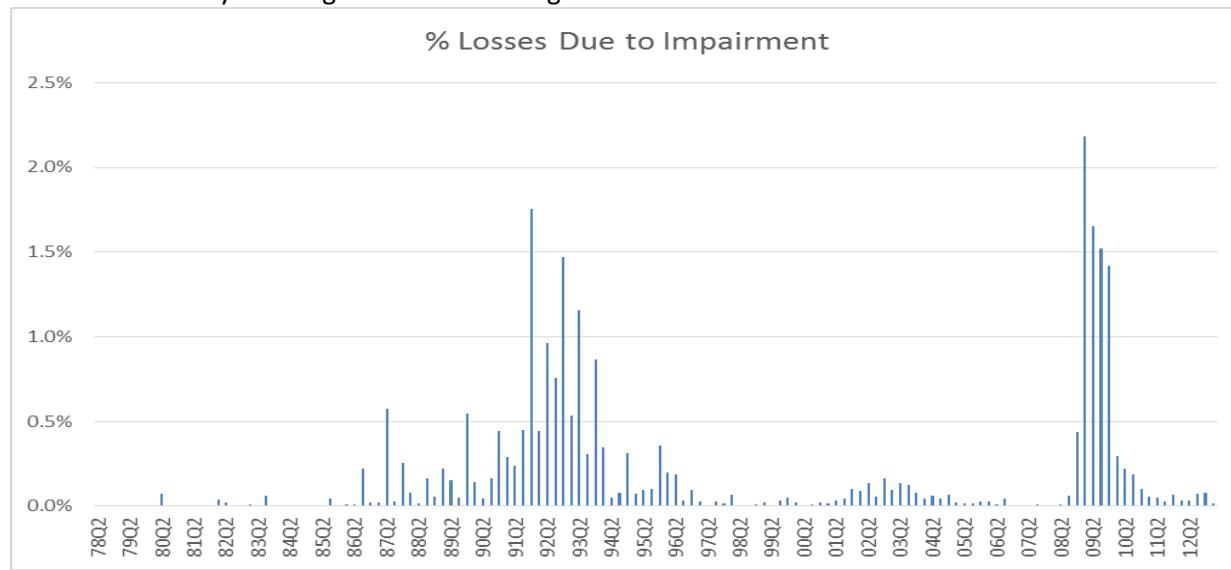
Example of Simulated Statutory Property Performance: In the simulation, individual asset market values are recorded in the quarter a property enters the index. At this beginning quarter, book value is set equal to market value, which is assumed to be the cost to acquire and is therefore consistent with statutory accounting. Every

quarter forward, NCREIF has updated estimates of market value for the asset.⁸ Future statutory carrying value of the asset (depreciated book value) is estimated using the generic depreciation assumptions listed above. In every quarter, we estimate whether an impairment would have been recognized using statutory accounting rules, the then current market value, anticipated future property cash flows as implied from that market value, and then current statutory carrying value. Aggregate impairment rates by quarter are tracked through time, which are useful for comparison to actual market value losses reported for the index.

Using the above assumptions in the simulation model and including all properties over the entire history of the NPI, the following chart presents quarterly total losses as a percent of market value. As the chart below illustrates, the largest quarterly loss rate for the simulated index performance was just slightly over 2% during the recent Great Recession. Further, over this entire simulated history there are only a few quarters with significant simulated statutory losses. Losses were concentrated in the real estate market downturns of the early 1990s and in 2009 following the Great Recession.

The largest one-year loss for the full history of the simulated data occurred during the Great Recession, when the simulated one-year cumulative statutory loss was approximately 7% during the year 2009.⁹ During 2009, the actual recorded total return for properties in the NPI was a cumulative loss of 17%. This decline occurred amid the most severe downturn in history, based on its intensity. However, the value decline during this period was relatively short-lived, as the negative quarterly total returns persisted for only six quarters.

Given the event was an extreme outlier in the history of real estate performance, the probability of it reoccurring is extremely low within the modeled random sampling. In simple terms, since the 17% decline in one year occurred once in the 36-year exposure, the implied frequency is 2.8% probability (i.e., one year out of 36) while RBC is set to a 5% (or 95% confidence) level. In addition, this temporary reduction in market value would not necessarily have led to equal statutory impairments both since market value is typically in excess of book value, and requirements for statutory impairments do not immediately recognize all changes to market price. Thus, statutory accounting can lessen the severity of recognized losses during market downturns.



⁸ The NCREIF database relies on appraisals to establish value where there has not been a transaction. The simulation projected MV could be viewed as projected appraised value. Various studies of CRE appraisals have been performed and show that the appraisals are good estimates of MV, though they may lag actual market changes. This assumption does not affect the validity or applicability of the results.

⁹ While the 7% maximum simulated loss should provide a degree of comfort in the reasonableness of the proposed factor, it is not directly comparable in concept to either the proposed factor or the cited actual historic market value based index returns.

As further evidence of the impact of statutory accounting, we examined actual losses incurred during the Global Financial Crisis, which is the most severe real estate market downturn within the 60-year data analysis period. The ACLI conducted an analysis of the life insurance industry's actual performance during 2008 through 2012. The analysis examined all impairments of real estate investments, along with recognized losses on sale of real estate investments, during the period using data from Annual Statement exhibits Schedule A Parts 1 and 2. The industry reported cumulative losses of about 3.5% over that 5-year period, significantly lower than the 9.5% recommended factor. These reported industry losses include Other-Than-Temporary Impairments and losses on sale as reported in the Annual Statement schedule. Note that the analyses did not account for the declines in value of assets that are reported at fair value for statutory purposes.

C. Update RBC charge on real estate encumbrances

Under Statutory Accounting rules, real estate is held at depreciated cost net of encumbrances. Under the current proposal, RBC will be assessed by estimating the risk on the total property, then providing a credit for the value of the encumbrance based on the equivalent risk of the mortgage. The rationale for this is that the total underlying risk of loss on the property is the same whether or not there is an encumbrance, but the holder of the encumbrance bears part of the risk and the holder of the property bears the balance. Therefore, the risk is split effectively by developing the risk for the entire real estate value, then subtracting the amount of risk ascribed to the mortgage. We chose the approach of a reduced factor based on the average factor for mortgages in light of the small size of the real estate asset class, and the even smaller amount of encumbrances. For implementation, we recommend changing the RBC worksheet to show the RBC for the entire real estate, then a credit for the amount of the encumbrance. The final RBC will be subject to a minimum of the NAIC factor for a Baa bond (currently 1.30%) of the net book adjusted carrying value of the real estate, and not more than 45% of the net book adjusted carrying value.

The current encumbrance factors were based on the current RE factor of 15% reduced by the average RBC for commercial mortgages, which was 3.00% under the prior RBC formula. The proposed factor for Real Estate is 11.0%, and the average commercial mortgage factor that was developed as part of the Commercial Mortgage proposal in 2013 was 1.75%. As an example, consider the following:

Property Value	Amount	RBC factor	RBC
No encumbrance	100	11.0%	11.0
With 60% LTV mortgage			
- Property Value	100	11.0%	11.0
- Equity value	40		
- Encumbrance	60	- 1.75%	-1.05
- Real Estate RBC	40	24.9%*	9.95
- Mortgage RBC**	60	1.75%	1.05
- Total	100		11.0

* Equals the RBC value (9.95) divided by the real estate equity value (40).

** This is an estimate of the value of the risk attributable to the mortgage by assuming that the mortgage was held by a life insurance company and estimating the resulting RBC.

This table illustrates our suggestion that the same amount of total capital be held whether a property is held with no encumbrance, or if it has an encumbrance, to reflect the constant level of risk of loss at the property irrespective of the capital stack. The RBC calculated on the encumbrance derives from the price risk of the

property. It is to reflect that there is more risk as a percent of the equity investment, though not in total risk, to the equity investment of an investor in a property when leverage is used compared to when there is no leverage and a property is owned outright. In the case of having an encumbrance, the RBC held by the lender, when added to the RBC held by the owner on its equity and its encumbrance, sum to the same amount as if the property was held with no encumbrance.

In the current RBC, the result of this formula on encumbrances includes a maximum amount equal to 100% of the book adjusted carrying value of the real estate. While recognizing that the loss is generally limited to 100% of the carrying value, we believe that an RBC factor of 100% is excessive, and that the limit should be set at 45% of the carrying value. We note that for common stock, the combined factor at the maximum Beta is 45%.

D. Update Schedule BA Real Estate Factor

Real Estate held in joint ventures (JVs), limited liability companies (LLCs) or similar structures are recorded in Schedule BA, on lines 2199999 and 2299999. Currently, these assets are assessed RBC with a factor (23%) that is 50% higher than the factor for wholly owned real estate reported in Schedule A. The documentation for Schedule BA assets from the original RBC development articulates a premium over the RBC for Schedule A assets to account for additional risk associated with potentially lower transparency and control within the structures. However, since that time, data availability and industry experience has provided evidence that this premium is overly conservative, if not altogether unnecessary for the assets classified as real estate. We propose that the factor for Schedule BA real estate be adjusted to **12%**, equivalent to the proposed factor for Real Estate recorded on Schedule A (11%) plus a premium of about 10% of that amount for conservatism. All of the other mechanics and components described above for Schedule A real estate would also apply consistently for the real estate recorded on Schedule BA. This proposal is supported by the following:

- Real estate investments today are very often executed through corporate structures such as LLCs simply to mitigate risks. Institutional investors regularly use these structures to reduce the risk of loss from contingent liabilities. Contingent liabilities could be associated with the operations of the property (e.g., slip-and-falls), disputes with vendors or tenants, or debt. LLCs insulate investors from losses above the value of the net equity in an individual investment. Institutional investors also often use LLCs as holding companies for a series of single-asset LLCs, in order to better organize a portfolio in a manner that limits liabilities along each level of the corporate ownership structure.
- The NAIC recently approved the reclassification of certain wholly owned single owner, single asset LLCs to be reported on Schedule A. This was due to the recognition that the LLC structure itself did not produce additional risk. In this approval, the NAIC also agreed that additional reclassification could be proposed and approved when additional supporting materials were submitted. Rather than seeking a change in the accounting, we are proposing to adjust the RBC to reflect the risk.
- Partnership structures are often used to align interests between the life insurance company and local partners who have superior access to the market and property development, asset management and property management skills, while still maintaining control of significant investment decisions, especially around liquidity. This better execution and alignment of interest can result in better investment performance and even lower market risk.
- Partnership structures reduce the capital commitment of the life insurance company to an individual transaction, and thus can add portfolio diversification.

- A study was performed to compare the actual realized risk of institutional real estate investments held through JV's to those of directly-held real estate investments. Jeffrey Fisher, Ph.D. and consultant for NCREIF, broke down all properties in the NCREIF Property Index into joint venture and wholly owned properties to compare the performance since 1983. Mr. Fisher's analysis found as follows:
 - Since 1983, the average quarterly return for JV properties was 2.35% versus wholly owned properties at 1.97%. This performance gap widened over time.
 - The standard deviation of returns for JV properties (2.4%) was only modestly higher than the standard deviation of wholly owned properties (2.2%).
 - Values of the wholly owned properties fell more than the values of JV properties from peak-to-trough during the Global Financial Crisis (GFC).
 - In terms of return dispersion during the GFC's worst quarter, wholly owned properties had the largest negative return and JV properties had the highest positive return.
 - JV properties were found to have shorter average holding periods than wholly owned properties, suggesting potentially higher liquidity in JV structures.

In summary, real estate held through joint ventures has performed consistently with and perhaps even slightly better than, wholly owned real estate. Based on this research, and in recognition of the several legitimate risk/return benefits of ownership through structures, we propose that real estate held on schedule BA use the Schedule A factor (11%) plus a premium of 10% of that amount, totaling approximately 12%.

Appendix 1

The historical National Council of Real Estate Investment Fiduciaries (NCREIF) database goes back to December 31, 1977, and as of 2nd Quarter 2013 consisted of approximately 7,000 properties. NCREIF collects 67 data fields each quarter that consist of financial information such as Market Value, NOI, Debt, and Cap Ex, as well as descriptor data such as Property Type and Subtype, Number of Floors, Square Footage, Number of Units, and Location.

The flagship index of NCREIF is the NCREIF Property Index (NPI), which is a quarterly index tracking the performance of core institutional property markets in the U.S. The objective of the NPI is to provide a historical measurement of property-level returns to increase the understanding of, and lend credibility to, real estate as an institutional investment asset class. The NPI is comprised exclusively of operating properties acquired, at least in part, on behalf of tax-exempt institutions and held in a fiduciary environment. Each property's return is weighted by its market value. The NPI includes properties with leverage, but all returns are reported on an unleveraged basis. The NPI includes Apartment, Hotel, Industrial, Office and Retail properties, and sub-types within each type. The index covers all regions of the US, which makes it broadly applicable to all of these major property types nationwide. Additionally, we have also done a comparison of the distribution of properties by type and by geographical region between those in the NCREIF database and those held by the life insurance companies and found them to be quite similar.

Over the history of the NPI data, there have been two severe downturns, in the 1990s and the recent GFC; as well as a shallow recession corresponding to the 2001 economic recession that did not produce negative total returns for real estate. Given the time series of the data, the index does reflect 'tail events' such as the Great Recession thus appropriately capturing the downturn in the employed primary methodology for estimation of the appropriate RBC charge.

Additional information on NCREIF and the NCREIF Property Index (NPI) can be found here:
https://www.ncreif.org/public_files/NCREIF_Data_and_Products_Guide.pdf

Appendix 2

The difference between market value and statutory value (depreciated cost) is not included in surplus within statutory accounting. As a result, the risk of future impairments of statutory value would be much less for a company where the current market value of its portfolio of properties is well in excess of statutory carrying value, especially compared to one where market value is much closer to statutory carrying value.

Our primary analysis was based on market values, and therefore overstates the risk relative to statutory accounting. We are not proposing that statutory accounting for commercial real estate should change, but rather partially leveling the playing field for properties that have been held for extended periods with market value well in excess of statutory carrying value, versus recent acquisitions with no such unrealized gains. And we are proposing a floor charge equal to that for an NAIC 2 bond (currently 1.30%) so that capital will never be lower.

The following provides a numerical example. Assume a property held at a book value of \$100 with a market value of \$150. The NCREIF data measures changes in market value, and the **11%** proposed factor would make provision for a loss of value to a value down to \$133.50. Under the RBC process, factors are applied to the book value and normally do not recognize that unrealized gain. Since real estate is held at book value which in this case is \$100, and is below this market value, effectively there is an increased margin against the loss of statutory capital in excess of the amount of RBC.

For an asset with a market value well in excess of the carrying value, the reduction in RBC is minimal compared to the large-implied reserve. Similarly, in those relatively few circumstances where an asset will have a market value less than book value, the RBC amount would increase, to reflect the increased likelihood of a loss to carrying value. This increase in RBC would likely be in advance of an actual impairment, which would provide earlier visibility and recognition of weakening market conditions.

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March 8, 2021

Philip Barlow
Chair
Life Risk-Based Capital (E) Working Group
National Association of Insurance Commissioners (NAIC)

Dear Philip,

On behalf of the American Academy of Actuaries¹ C-1 Work Group (C1WG), we appreciate the opportunity to provide comments on the exposed January 21, 2021, proposal to restate the capital requirements for real estate in the Life Risk-Based Capital (LRBC) formula. The C1WG is generally supportive of a different approach for calculating capital requirements for real estate. As 30 years have passed since the current real estate factors were set, a review of the capital requirements is a prudent exercise. The C1WG has reviewed the proposal and is unable to find agreement with the proposal without additional justification/explanation. In reviewing the proposal, we have the following conceptual concerns:

1. Market Value vs. Statutory Value Issues

Establishing capital requirements based on market value inputs when real estate is carried at amortized cost in statutory financial statements is a departure from RBC precedents. Clearly, changing statutory accounting to a market value basis and determining capital requirements directly on those market values would be a more direct approach. With a restatement to market value, both total adjusted capital and the required capital calculation would be different (i.e., both the numerator and the denominator of the RBC ratio would change).

It appears that the proposed structure is an attempt to fix the current LRBC approach that overstates capital requirements by applying a market risk measure to depreciated book value by inserting an adjustment involving unrealized capital gains. Taken together, this approach is intended to reflect the likely lower risk of loss to statutory surplus.

¹ The American Academy of Actuaries is a 19,500-member professional association whose mission is to serve the public and the U.S. actuarial profession. For more than 50 years, the Academy has assisted public policymakers on all levels by providing leadership, objective expertise, and actuarial advice on risk and financial security issues. The Academy also sets qualification, practice, and professionalism standards for actuaries in the United States.

While the work group agrees there should be work to refine the capital charge to recognize the likely lower risk to statutory surplus than the current approach has produced, the use of a market basis risk measure combined with the offset of a portion of unrealized gains to state the risk to capital of an asset valued under statutory rules on a book value basis is unsupported by either fact or theory. Statutory accounting holds real estate at cost less accumulated depreciation unless there is an impairment. At impairment, a restated holding value at market incurs a loss (if less than current book value).

Assuming real estate generally increases in value over time, losses measured on a book value basis will be less than those determined on a market value basis.

The use of an arbitrary portion of unrealized gains to convert the market risk measure to the actual book value measure of this asset class is not a supportable approach in the determination of statutory capital requirements. Simply stated, the proposed 2/3 adjustment is not supported by a factual analysis. The capital requirements should be derived based on the likelihood of the occurrence of loss measured as the amounts of future book loss amounts over an appropriate horizon and stated degree of statistical confidence. Developing the adjustment directly from a statutory-based model would provide support for the proposed 2/3 adjustment. A more direct approach could involve a factor for a specific market to book value combination applied directly to depreciated book without further adjustments.

Because of these issues, we have concerns over the reliability of using market measures and unrealized gains to replicate the actual risk of loss on a statutory book basis. As noted above, we suspect the risk is lower than a pure market risk, but do not know how much lower it might be. If this recommended approach were used, is the 2/3 adjustment too high or too low, and could it vary depending on specific conditions? Without more information shared about how the adjustment converts the market measure to a book value, we are unable to come to disposition on the proposed approach. Further, we are concerned that using one scalar applied to the difference between market value and book value would achieve the desired result. If there is a linear relationship between the unrealized loss and the 95th percentile of book value impairments, a scalar might be appropriate, but the C1WG is not convinced of this linear relationship.

We also would question the minimum condition of the NAIC 2 bond factor because there is no clear rationale provided for the relationship between the bond factor used to capture credit risk and real estate capital requirements.

Lastly, we too would raise the question from the February 26, 2021, Life RBC Working Group meeting as to whether it is appropriate to use a market determined risk measure,

the base factor, in combination with unrealized gains where gains (and losses) are already implicit in the statutory base measure itself.

2. Implementation Issues with the Use of a Market Value Measure

If the capital requirements are amended to include a market value measure, specific instructions are needed to define how market value is to be calculated. The LRBC formula needs to be calculated using a consistent definition of the market value calculation, as was done in establishing capital requirements for commercial mortgages.

3. Recommended Statistical Safety Level

The proposal is based on a Statistical Safety Level at the 95th percentile over a 2.5-year time period; what is the basis for the recommended time horizon? The time horizon for bonds was set at 10 years, the typical credit cycle for bonds; what does the 2.5-year period represent? This recommendation moves away from current capital requirements determined relative to those for common stock (i.e., based on a 60% correlation); as such, a time horizon based on the volatility of market returns for an asset carried at amortized cost does not seem consistent with the principles of statutory RBC.

4. Assuming Same Risk Profile for All Types of Real Estate

- a. The proposal is recommending nearly identical treatment for all types of real estate. The C1WG would need to see the data that supports the conclusion that the risk profiles for real estate reported on Schedule A are similar to the risk profiles for real estate reported on Schedule BA; our understanding is that the difference in risk drives different reporting. In particular, we would need to better understand how encumbrances can be determined and reported on a look-through basis on Schedule BA so that the implementation of the proposal will reflect the spirit of accurately identifying risk on a look-through basis.
- b. While real estate is a relatively small asset class for the life insurance industry (approximately 1% of invested assets), using one factor for all types of real estate may not be an appropriate representation of the various risks within the real estate sector. We note that commercial mortgages on hotel properties receive different LRBC treatment, establishing a precedent for different experience for hotel properties. Further, as noted during the February 26, 2021, Life RBC Working Group meeting, using the same factor for distressed properties raises additional concerns.

- c. Properties in development are riskier than properties that are producing income.
While there may be materiality and other practical considerations, should different capital requirements be established?

We recognize the importance of this asset class for life insurers and support the review of the capital requirements. However, we continue to have concerns with several aspects of the proposal. We acknowledge that the current LRBC capital requirements may be overstated for certain real estate investments (e.g., where the market value exceeds statutory value by a large amount). Fundamentally, the risk to statutory surplus is less for real estate properties whose statutory value is less than the market value. Consequently, a reduction to the capital requirements has merit, but the proposal's approach to start with market value returns and then adjust statutory values is complex and may not achieve the desired level of required capital that a more direct calculation could produce.

Again, thank you for the opportunity to provide the C1WG comments and should you have any questions or wish to discuss anything in these comments, please contact Khloe Greenwood, the Academy's life policy analyst (greenwood@actuary.org).

Sincerely,

Nancy Bennett, MAAA, FSA, CERA—Co-Chairperson, C1WG
Jerry Holman, MAAA, FSA, CFA—Co-Chairperson, C1WG

Copy: Dave Fleming, NAIC

TO: NAIC Life Risk-Based Capital Working Group
FROM: American Council of Life Insurers
DATE: March 9, 2021
RE: Review of Proposals from the PFML Federal Strategies Working Group

On Life RBC Working Group's conference call of February 26, 2021, several questions were raised during ACLI's presentation and discussion of the proposed changes to the RBC for Real Estate. The questions follow, and responses are provided on the following pages. We can further discuss these on an upcoming call of the Working Group.

- 1) Please provide additional detail and documentation of the modeling.
- 2) Please provide documentation of volumes of Real Estate.
- 3) Given that you apply the RBC charge to the smaller depreciated cost, and not to the full fair value, aren't you somewhat double-counting by then adjusting the RBC rate based on the unrealized gain?
- 4) What is the confidence that the adjustment to the risk factors based on the relation of market and statutory book value does not result in an appropriately low RBC factor?
- 5) What happens when the market value declines to be less than the book value?

American Council of Life Insurers | 101 Constitution Ave, NW, Suite 700 | Washington, DC 20001-2133

The American Council of Life Insurers (ACLI) is the leading trade association driving public policy and advocacy on behalf of the life insurance industry. 90 million American families rely on the life insurance industry for financial protection and retirement security. ACLI's member companies are dedicated to protecting consumers' financial wellbeing through life insurance, annuities, retirement plans, long-term care insurance, disability income insurance, reinsurance, and dental, vision and other supplemental benefits. ACLI's 280 member companies represent 94 percent of industry assets in the United States.

1) Please provide additional detail and documentation of the modeling.

This recommendation is based on analyses of actual historical performance of the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index, appended by data from a couple of other similar studies to extend our historical data back to 1961. The NCREIF Property Index (NPI) is the premier industry benchmark for measurement of institutional commercial real estate investment performance in the US. The NPI data begins in 4Q 1977 and is comprised of quarterly market value-based investment performance of assets acquired and held for investment purposes in a fiduciary environment. There is no minimum property size, and the asset can be held as wholly owned or through a joint venture. It includes a wide array of the primary institutional investment property types, including Office, Retail, Industrial, Apartment and Hotels. As of 4Q 2020, this index included more than 9,000 properties with over \$700 billion in real estate market value. It is a robust and directly applicable index for measurement of the market value performance of life insurance company investment real estate, and it is the same data that is currently being used for updating of market values of Commercial Mortgage LTVs in support of the reporting of Commercial Mortgage Loan RBC.

We analyzed the historical sector performance and present the results in Section A of the proposal. We present results across 1, 2, 3 and 4 year analysis periods. In each of these four assumed analysis periods, we examine the historical data and calculate the largest cumulative losses that were observed at any time during the analysis period. The process was to take the index value as of a quarter, e.g., Q1-1961, and track the performance in each subsequent quarter of the respective analysis period. We started with index values at the beginning of the period and found the lowest index value at any quarter during the analysis period and calculated the change from the beginning. For example, for the 2-year analyses, we examined every potential 2-year period within the full data history, which resulted in 232 data points in the full data history. Our analysis found that for a 2-year analysis period, the 95% worst cumulative loss was 9.2% and the 96% worst cumulative loss was 9.7%. We thus recommend adoption of a 9.5% factor.

Lastly, we recommend a 1.5% cushion be added to the 9.5% factor that was estimated using the actual real estate performance history. This cushion is meant to address two primary areas of concern that surfaced in our individual outreach discussions: 1) that individual life insurance company portfolios may not be as diversified as the index used in estimation of the factor; and 2) that future real estate performance may not be similar to the past, especially in light of COVID-19. We believe the 1.5% is a reasonable cushion, and is supported by the following:

- The 1.5% cushion represents an additional 15% conservatism built in on top of the data-supported 9.5% factor. In effect, this means that market downturns can be 15% more severe than in the past, and the factor will still be sufficient to cover losses over two years at a 95% confidence level.
- At 11%, the applied factor would cover historical actual 2-year cumulative losses at an almost 97% confidence level.
- Thus far, the impact of COVID-19 on commercial real estate investments has been significant but have been concentrated in a relatively small segment of the market. The most impacted segments have been hotels and select lower quality regional malls. Overall, the NCREIF Property Index reports around a 1% return on real estate investments in 2020, which is meaningfully below the returns over the last few years, but still positive. Most industry experts do not expect COVID-19 to result in as rapid or severe deterioration as happened in the GFC.

- As we cite in our proposal, we examined the distribution of properties by type and geographic region within life insurance company portfolios and found it to be similar in mix to that of the NCREIF Property Index. This suggests that the distribution of life insurance company investments in real estate are similar in composition to the index. However, given the risk that individual life insurance company portfolios' composition could deviate meaningfully from the diversity of the overall life insurance company space, we believe that the 1.5% cushion is sufficient to cover this risk. Also, we note in our proposal that there are regulations separate from RBC factors that address concentration risks and assure diversification of life company real estate portfolios.

2) Please provide documentation of volumes of Real Estate.

- Real estate investments are a very small component of most life insurance portfolios. The following information is taken from 2019 Annual Statement data.
- Real estate investments represent only 1.29% of Life Company GA assets.
 - Total General Account is \$4,812,938 million
 - Total Real Estate \$ 61,972 million
 - Schedule A \$ 23,358 million
 - Schedule BA \$ 38,613 million
- Life company real estate investments are spread across both Schedule A and Schedule BA, with Schedule A accounting for 0.49% and Schedule BA accounting for 0.80%.
- Of 761 life insurance companies, 587 (77%) have less than 0.25% of assets in Schedule A real estate, and 677 (89%) have less than 0.25% of assets in Schedule A real estate.
- Company occupied real estate accounts for a meaningful component of Schedule A real estate exposures in many companies.
 - Of the 174 companies with 0.25% or greater of their assets in Schedule A real estate, 64 (36.8%) of these companies are solely invested in company occupied properties.
 - The remaining 110 companies account for 96.7% of Sch. A real estate, and it constitutes 1.14% of their General Account assets.
 - Approx. 20% of this real estate is company occupied.
 - 59 of these 110 companies have less than \$1B in assets. 3.3% of their GA assets are in RE, split 40% company occupied and 60% investment.
- For Schedule BA, ACLI conducted a survey in 2018 in response to similar questions from the Investments RBC Working Group. Appendix A is the memo that summarizes the results of that survey.

3) Given that you apply the RBC charge to the smaller depreciated cost, and not to the full fair value, aren't you somewhat double-counting by then adjusting the RBC rate based on the unrealized gain?

- We do not believe there is "double-counting", as that implies making two adjustments based on the same reason.
- When determining RBC generally, there are two facets to consider: 1) how much is at risk; and 2) what is the level of risk. Statutory Book Value is the amount that is included as the value of the company's assets, and therefore determines the amount of surplus. A factor is applied to this book value, because that is the amount of surplus that is at risk. In statutory accounting, that value is a decreasing value as it is defined to be the depreciated cost.

- The factor that is used should reflect the likelihood of a loss. In the case of real estate, the relation of market and book values is a proxy to determine the amount of risk, where the greater the excess of market value over book value, the lower the risk to statutory surplus.
- Thus, that statutory values use a depreciated value, and that the factor adjustment uses the difference between market and book, are addressing two separate issues even though they appear to be making adjustments that are directionally the same.

4) What is the confidence that the adjustment to the risk factors based on the relation of market and statutory book value does not result in an appropriately low RBC factor?

We start with the premise of RBC - If a company holds assets equal to the existing book assets plus an amount of surplus equal to the RBC, then historically there have not been more than 5% of instances where the value declines by more than the RBC amount, and therefore assets do not fall below the book value. Thus, with an RBC factor of 11%, if market value provides unrecognized gain of more than 11% compared to book value, then 95% of the time the book value will not be reduced. In theory, any gain in excess of that creates a situation of zero risk relative to the 95% standard.

Assumptions:	Credibility	2/3
RBC factor	11.0%	
RBC max factor	45%	
RBC min factor	1.30%	
95% max loss MV	9.50%	

Table - Illustrate 95% certainty level of max BV loss

Book Value (BV)	Market Value (MV)	95%			RBC%
		Max Loss MV	Implied BV loss	95% loss as % of BV	
100	100	9.5	9.5	9.5%	11.00%
100	102.5	9.7	7.2	7.2%	10.82%
100	110	10.5	0.5	0.5%	10.05%
100	120	11.4	-	0.0%	9.53%

As you can see from the table above, the loss to book value in the event of a 95% level of certainty loss of market value is in all cases less than the adjusted RBC percentage, which is applied to book value. So we are more than 95% certain that the adjusted RBC factor is sufficient.

5) What happens when the market value declines to be less than the book value?

- Market value dropping below book is a trigger for review for impairment. However, all circumstances around property performance should be considered, for example loss of a major tenant in a specialized asset.

- There is robust statutory guidance (SSAP 90) around recognizing impairment of wholly-owned real estate. Joint ventures are accounted for under the equity method, and as such are financial assets.
- A write-down is taken if an impairment is present and is not temporary.
- Impairment review is based on modeling of cash flows and not on market values. There is a recoverability test that is based on comparing the expected undiscounted cash flow to the carrying value of the real estate. If cash flows are greater than carrying value, then there may not be an impairment. If the sum of the undiscounted cash flows are less than the carrying value, then the real estate would most likely be impaired. The actual impairment is measured as the difference between the carrying value and fair value of the real estate.
- Rules exist to distinguish temporary vs other than temporary. This a mechanical process so once carrying value is greater than the undiscounted cashflows, life companies are required to recognize a permanent (other than temporary) impairment.
- Thus, capital markets may indicate a lower current market value even when there is not a need to recognize a permanent Impairment.
- In our proposal, the MV/BV adjustment increases the RBC charge in this case, reflecting the possibility of a write down.

APPENDIX A – 2018 Memorandum on Schedule BA Real Estate



American Council of Life Insurers

FROM: Steve Clayburn

RE: Real estate RBC proposal to the NAIC
Schedule BA Characteristics – summary of survey results

DATE: August 8, 2018

BACKGROUND

Since the inception of RBC, Schedule BA real estate has used a factor that is 150% of Schedule A's factor. This premium was intended to account for the potential of additional risk associated with Schedule BA assets. The ACLI¹ conducted a survey of its member companies on the characteristics of these assets, to provide transparency and support for its recommendation of equivalent factors for both Schedule A and Schedule BA assets.

SCHEDULE BA SURVEY RESULTS

Survey respondents represented approximately 70% of all real estate (Schedule A) reported by life insurance companies and nearly 50% of total general account assets. Of these real estate portfolios, approximately 40% is reported on Schedule A and 60% on Schedule BA.

The following is a summary of the real estate characteristics as reported on Schedule BA based on reported book value as of December 2017:

Ownership

- 80% Affiliated and 20% Unaffiliated
- 50% controlling interest that's either wholly-owned or held in a joint venture with control, and 50% non-controlling interest held in a joint venture

Jeffrey Fisher, Ph.D., a consultant for NCREIF, found that real estate held in joint ventures performed consistently with, and perhaps slightly better than, wholly-owned real estate. For reference, based on assets in the NCREIF index, approximately 60% are wholly-owned and 40% are joint ventures by market value.

Risk Profile

- 71% Core – at least 80% leased and less than 10% under construction
- 16% Value-Add – less than 80% leased with less than 25% under construction

¹ The American Council of Life Insurers (ACLI) advocates on behalf of approximately 290 member companies dedicated to providing products and services that contribute to consumers' financial and retirement security. ACLI members represent 95 percent of industry assets, 93 percent of life insurance premiums, and 98 percent of annuity considerations in the United States. 75 million families depend on our members' life insurance, annuities, retirement plans, long-term care insurance, disability income insurance and reinsurance products. Taking into account additional products including dental, vision and other supplemental benefits, ACLI members provide financial protection to 90 million American families.

- 13% Opportunistic – greater than 25% under construction

Diversification

- Property Type
 - o 22% Office
 - o 20% Multi-family
 - o 11% Retail
 - o 5% Industrial
 - o 3% Lodging
 - o 2% Mixed-Use
 - o 37% Diversified – diversified real estate fund investments allocated to various property types, and also land, timber, parking garages and golf courses
- Geography
 - o 26% Western U.S. (AS, AK, AZ, CA, CO, GU, HI, ID, MT, NMI, NV, NM, OR, TX, UT, WA, WY)
 - o 23% Northeast U.S. (CT, DC, DE, ME, MA, MD, NH, NJ, NY, PA, RI, VT)
 - o 11% Southeast U.S. (AL, AR, FL, GA, KY, LA, MS, NC, PR, SC, TN, VA, VI, WV)
 - o 5% Midwest U.S. (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, OK, WI)
 - o 12% International (mostly South American agricultural land/timber)
 - o 23% Diversified with less than 50% of an asset(s) in a specific zone

CONCLUSION

ACLI believes that these results provide more detail and allow one to assess Schedule BA asset characteristics and therefore risk.

Life insurance companies use local partners to source real estate investments and execute asset business plans, which leads to placement on Schedule BA. Jeffery Fisher's study found use of joint venture partners can be beneficial to performance.

Over 70% of assets on Schedule BA are well-leased, long-term hold investments. Only 13% of assets are undergoing meaningful construction activity.

Similar to the NCREIF National Property Index, Schedule BA assets are diversified by both property type and geography.

The ACLI's proposal to the NAIC adjusts real estate RBC factors for leverage as appropriate for both Schedule A and Schedule BA assets.

In conclusion, our survey demonstrates Schedule BA real estate is similar in ownership, risk and diversification to the properties underlying the NCREIF index which we used in developing our proposed real estate factors for Schedule A. Therefore, these results support our recommendation to equate Schedule A real estate factors to Schedule BA real estate factors.