AMERICAN ACADEMY *of* ACTUARIES

Proposal of the American Academy of Actuaries' Life-Risk Based Capital Committee's Codification Subgroup on Changes to the C-1 Treatment of Real Estate

Presented to the National Association of Insurance Commissioners' Life Risk-Based Capital Working Group
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Recommendation to Change the C-1 Treatment of Real Estate

Summary

This report presents a recommendation by the American Academy of Actuaries' Life Risk Based Capital Committee to change the C-1 treatment of real estate as follows:

- The factor for company occupied real estate would remain at 10% and would apply whether the property is held on Schedule A, BA, or D. Properties held on Schedule BA and D are held through a joint venture or an investment subsidiary.
- The factor for all other real estate, i.e. all real estate that is not occupied by the company, would be changed from the current system of using constant factors (10% for investment real estate, 15% for foreclosures, and 15% for real estate held through investments reported on Schedule BA) to a system under which factors are dependent on the cash-on-book return of the various real estate portfolios held by the insurer. Separate factors would be applied to the "portfolios" of real estate held on Schedule A, Schedule BA, and Schedule D.
- The factors for Schedules A and D would vary from a high of 15% for portfolios with a cash-on-book return of less than 6% to a low of 3% for portfolios with a return of 11.75% or higher. The factors would grade down linearly for cash-on-book returns between 6% and 11.75%.
- The factors for Schedule BA would be 2% higher than the comparable Schedule A and D factors to reflect the partnership risk inherent in these properties, but the factors would still be capped at 15%. In practice this would mean that the factors would vary from a high of 15% for portfolios with a cash-on-book return of less than 7% to a low of 5% for portfolios with a return of 11.75% or higher.
- The cash-on-book return would be defined as net income before interest on encumbrances and depreciation on properties owned by the insurer at year-end, divided by the average book value for such properties.
- An insurer who is unable to collect the data necessary to calculate the cash-on-book return for either its portfolio of real estate held on Schedule BA, or its portfolio of real estate held on Schedule D, would be required to use the maximum 15% factor for such a portfolio.

This formula differs from the one presented in the Academy's September 2000 report in that it uses a lower maximum factor of 15%, and it pushes the breakpoint for applying the minimum factor from 9.65% to 11.75%. The formula also does a better job of ensuring that properties sold during the year do not affect the cash-on-book return than was true in the September twenty00 report. All of these changes make the formula less sensitive to small changes in an insurer's portfolio, and eliminate much of the volatility in the results.

For properties held on Schedule A, both the originally proposed formula and the revised formula in this recommendation are designed to give approximately the same average C-1 factor over the course of one real estate cycle, as the current formula does.

Such a system offers a better estimate of the risks of a real estate portfolio because:

- Seasoned properties would typically receive lower RBC factors. This is appropriate since these properties generally have very low statement values relative to their current market values, meaning that there is little risk that these properties would be sold for less than these values. The lower RBC factors result from high cash-on-book returns, which occur because of the low statement values.

- Developmental properties (e.g., undeveloped land) would typically receive higher RBC factors. This is appropriate since these properties are more risky than most properties. The higher RBC factors result from low cash-on-book returns, which occurs due to the fact that these properties produce little (if any) income.

- The cash-on-book return reflects current conditions in the real estate market more rapidly than does a book value.

Although the Academy is currently examining the tax implications of various RBC factors, the recommendation and analysis given herein have **not** been adjusted to reflect any modification of the tax treatment. (The tax treatment for RBC C-1 Real Estate factors has always been to assume full deductibility of losses.)

Background

As part of the soon-to-be-implemented codification of statutory accounting, investment real estate, and real estate acquired through foreclosure will no longer be separately identified in the Annual Statement. Thus, in order to maintain the current RBC formula for real estate, it will be necessary to request information from company records. As an alternative, the Academy Committee considered the proposal presented herein which indirectly differentiates between investment and foreclosed real estate by way of the significantly different cash-on-book returns produced by the two categories of real estate. While the impetus for this proposal is changes in statutory accounting due to codification, as the proposal was researched an additional strong impetus is to capture the risk of real estate in a more refined fashion.

In order to research the proposal the Academy Committee requested and received twenty years worth of Schedule A data from thirteen life insurance companies. The data included the book value of real estate, gross income (after interest on encumbrances), and expenses. The thirteen companies include the largest holders of wholly owned real estate, and accounted for 60% of the entire industry's real estate holdings based on 1999 book values. The first attachment gives a list of the thirteen participating companies.

The twenty-year time period, from 1980 to 1999, roughly corresponds to one real estate cycle as shown in Graph #1 which displays the cash-on-book returns for all thirteen companies combined over the twenty-year period. Note that the returns start out high (9.70% in 1980), decline steadily until 1991 (when the return hits 6.64%), and then increase steadily through 1999. By 1999, the return was essentially equal to the level it had reached back in 1980. The Frank Russell Total Return Index displayed in Graph #2 also suggests that the twenty-year period essentially represents one complete real estate cycle.

Cash-on-book Versus Future Returns

The main prerequisite for an RBC formula is that it should appropriately anticipate the insurer's exposure to periods of substandard future performance. In order to verify that the cash-on-book return possesses this attribute, the Academy Committee examined the historical data that it received from the thirteen participating companies. This examination was performed to determine whether the cash-on-book return accurately predicted the future performance of a company's real estate portfolio, where "future performance" is defined as a weighted average of the company's statutory return *including* realized capital gains (as measured in Exhibit 3 of the Annual Statement), but before depreciation, over the next three years. The three-year time horizon was chosen as a compromise, because using a one-year period would produce fairly volatile results, making it difficult to reach definite conclusions. Also, using longer periods (five or more years) would result in too few data points, since the Academy Committee only had twenty years worth of data.

Graph #3 shows a scatter diagram of the current year's cash-on-book return plotted against the future return. There is a positive correlation between the current year's cash-on-book return and future performance. The correlation appears to be strongest from about 6% through 11%, where a majority (approximately 60%) of the observed data lies. The correlation looks fairly weak when the return is below 6%. Nevertheless, every occurrence of a negative future return happened when the cash-on-book return was less than 6%.

While the correlation looks weakest for returns greater than 11%, these account for just 19% of the actual observations. Of the observations in this category, the Academy Committee was only concerned about situations where the high current cash-on-book return was followed by relatively poor future performance, meaning that the proposed formula was not producing an adequate RBC factor. Of the 217 observations, there were only seven instances in which a current return of 11% or greater was followed by a future return of 7% or less. In other words, only a very small amount (3.2%) of the actual observations fell into this troublesome category.

Calibrating the Formula

The Academy Committee decided to calibrate the new formula so that it would give approximately the same average C-1 factor for Schedule A real estate over the last twenty years as the current formula does. The Academy Committee used a trial-and-error method to adjust the factors to arrive at the tentative proposal. The numbers the Committee experimented with were the "extreme" points: The maximum cash-on-book return subject to the largest (15%) C-1 factor was held constant at 6%. The minimum return, which qualified for the smallest C-1 factor (3%), was then adjusted to equate the average proposed and historical C-1 factors. The specific numbers underlying the calculation are given in the last page of the attachments.

Note, that the average returns are a strict arithmetic average and not a weighted one. This is the same as assuming the total book value of real estate is equal in every year. While this was clearly not the case (the book value, excluding encumbrances, varied from $6.5 billion in 1980 to a maximum of $26.5 billion in 1993), the Committee felt it was best to use the assumption of a constant real estate portfolio. This way, the timing and volume of new purchases and sales of the thirteen participating companies did not influence the analysis.

The final step was to graph and analyze the results of the proposed formula. Graph #4 shows the proposed C-1 factor plotted against future returns. For this graph, the data from all companies was combined for each year, and hence it displays only seventeen observations. Based on this graph, there is a *very* strong negative correlation between the proposed C-1 factor and future returns.

Graph #5 shows the same data as Graph #4 except it plots the future return and proposed C-1 factors for each company and each year. Once again, there is a definite correlation between the proposed C-1 factor and future returns, although the correlation is much weaker than that based strictly on total data. Since the proposed factor is capped and floored at 15% and 3% respectively, Graph #5 contains vertical columns of points (observations) which occur at both the 3% and 15% levels. The final graph, #6, compares the proposed and current factors in total for all participating companies for each year dating back to 1980.

Company Occupied Real Estate

Anecdotal and empirical evidence indicates that there is consistency lacking between insurers on the market rate of rent an insurer charges itself. Some of this is due to the difficulty of determining a fair market rent in those cases where the home office property is a unique piece of real estate in its geographic area. Since rent on company occupied property may have a significant impact on the cash-on-book return, the Committee recommends that such properties be excluded from the cash-on-book calculation and instead use a flat 10% factor.

Real Estate on Schedule BA

The recommendation would also apply the cash-on-book methodology to real estate held through investments reported on Schedule BA. This will eliminate the possibility of "gaming" the formula by moving properties between Schedule A and Schedule BA. Since the net income needed to calculate the new C-1 factors is not available in the Annual Statement for Schedule BA properties, it is not possible to quantify the effect of this change in the treatment of Schedule BA real estate. At first, the net income would be calculated from company records, but going forward the Committee recommends that this data be inserted into the blue book or the independent auditor's checklist, so that it can be better audited.

The Academy Committee is recommending that a separate cash-on-book calculation be performed for Schedule BA real estate in order to more readily identify the effect of the new calculation on this portfolio. The separate calculation also allows for different factors to be used. Initially the factors for Schedule BA real estate will be set 2% higher, but capped at 15%, to reflect the risk of having a partner in owning the properties. The Committee believes that 2% is an adequate margin (as opposed to 5% implicit in the current factors) since much of the partnership risk will be captured in lower cash-on-book returns. The 2% "partnership factor" will be reviewed in the next year or two once there is enough data from RBC filings.

Real Estate on Schedule D

The proposal would also apply the new C-1 treatment to real estate in investment subsidiaries held on Schedule D that receive look through RBC treatment. As with the Schedule BA real

estate portfolio, at first, the net income would be calculated from company records, but going forward the Academy Committee recommends that this data be inserted into the blue book or the independent auditor's checklist so it can be better audited.

The Academy Committee is recommending that a separate cash-on-book calculation be performed for Schedule D real estate in order to more readily identify the effect of the new calculation on this portfolio.

Leveraged Properties

Under the proposal, leveraged properties would be handled similar to the way they are handled under the current formula. The calculated C-1 factor applies to the statement value of the real estate holding, which is the value of the property less the encumbrance. The factor, which applies to the encumbrance, is equal to the calculated C-1 factor minus 2.25%, the factor for mortgages in good standing.

Implementation Issues

In the event that an insurer is unable to collect the data necessary to calculate the cash-on-book return for either its portfolio of real estate held on Schedule BA or Schedule D, the Committee recommends that the insurer would be required to use the maximum factor, 15%, for such portfolios.

The current methodology brings in involuntary reserves from the "aggregate write-ins for liabilities" on page 3 of the blue book to "write down" the statement value of each property for purposes of calculating the RBC amount. Under SSAP #40, companies will no longer be able to hold involuntary reserves. So the cash-on-book return system does not consider these reserves.

Further Considerations

A concern has been raised that at the high and low points of the real estate cycle the RBC factors are (respectively) at their lowest and highest points. This may seem illogical to some observers given that at the high and low points things are going to get (respectively) worse and better. However, the result is explained by the simple fact that insurers are not recognizing the unrealized gains in their real estate portfolios. Although market values may decline from the high point of the cycle, they generally have a longer way to go before the book values are called into question.

The Academy Committee did examine whether the introduction of a second independent variable associated with the state of the real estate market would improve the ability of the formula to anticipate future losses. In particular, we examined the possible inclusion of the trailing four quarter total return on the Frank Russell index. The Academy Committee concluded that such a modification to the formula added little to its explanatory power.

A concern has also been raised that the system based on cash-on-book returns would result in factors that are too volatile. The Academy Committee made two adjustments to the methodology presented in September 2000 to make the system less volatile. First, the cash-on-book return calculation has been changed to ensure that the properties sold in the current year do

not impact the return. The average book value in the denominator of the return calculation includes data on only those properties still in-force at year-end. Secondly, a smaller range of factors now vary over a wider range of cash-on-book returns which makes the grading of factors from 3% to 15% more gradual. The Academy Committee also researched whether, to reduce volatility, it would be helpful to use an average of quarterly book values or two years of book values in the denominator. These ideas did not help reduce volatility and in some cases introduced data from properties that are no longer on the books; it doesn't make sense to measure the risk of properties no longer in an insurer's portfolio.

Cash-on-book return is not a perfect measure. While it generally does a good job of distinguishing between risky developmental properties and older, leased-up buildings, it may not do as good a job distinguishing between good and poor quality buildings.

The 13 Participating Companies:

1. Connecticut General

2. Equitable Life

3. Lincoln National

4. Mass Mutual

5. Metropolitan Life

6. Mutual of Omaha

7. New York Life

8. Northwestern Mutual

9. Principal Financial

10. Prudential

11. TIAA

12. Travelers

13. United of Omaha

Graph #1

Cash on Book Returns by Year for All Companies Combined
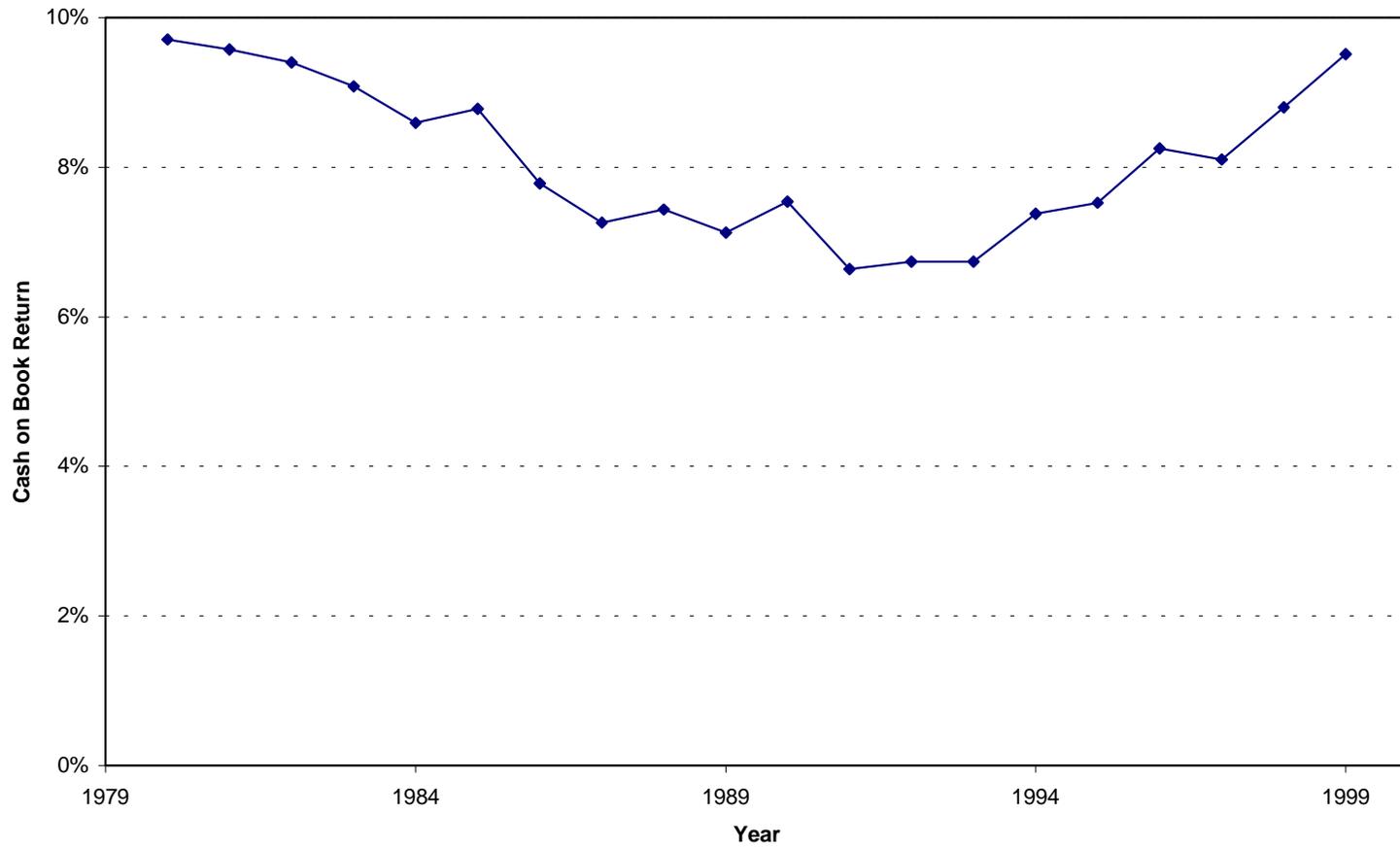
Graph #2

NCREIF Property Index Rolling 4-Quarter Total Returns
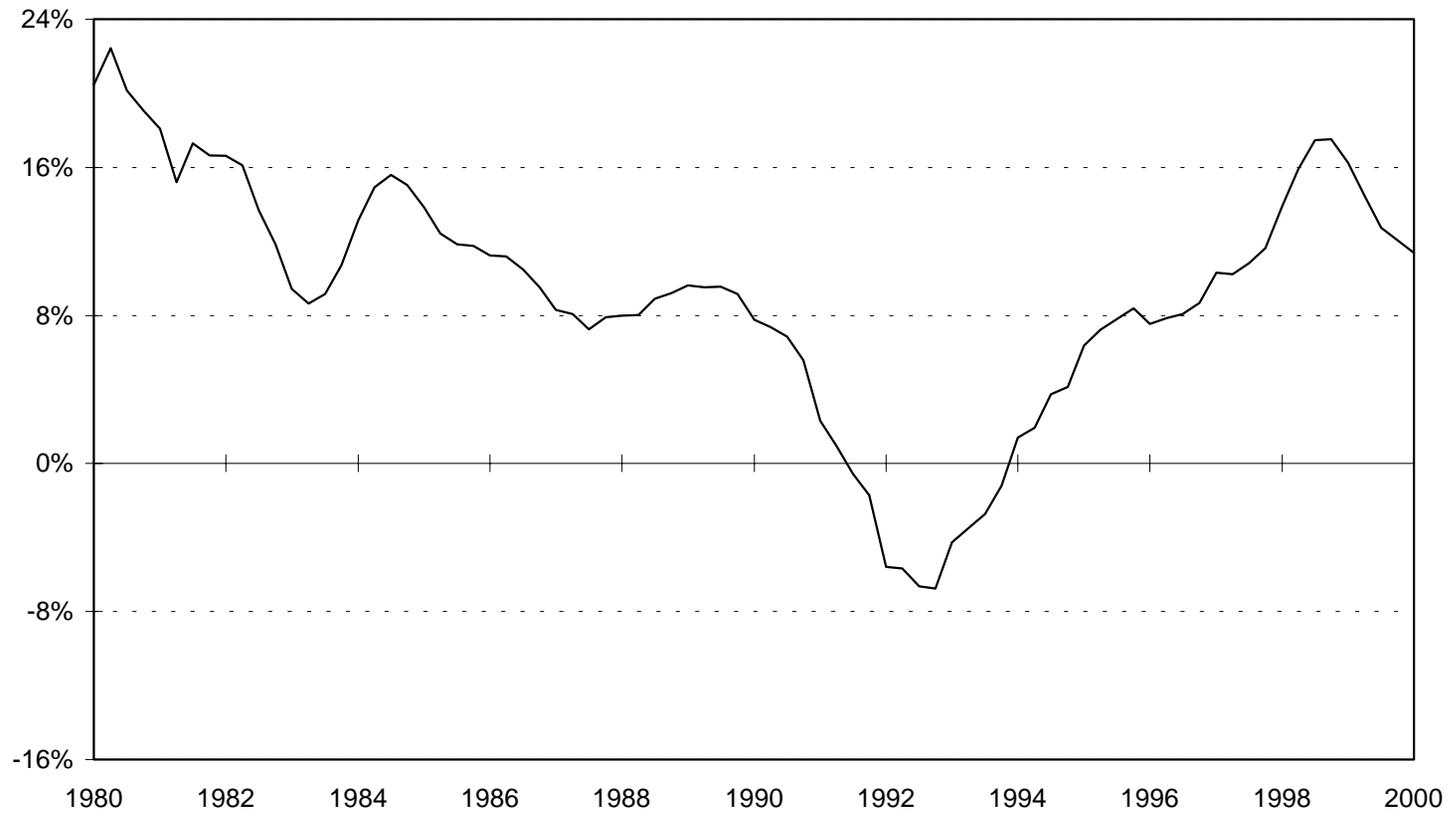
Graph #3

Current Year Cash-on-Book Returns Vs. Future Returns:
13 Companies

$R^2 = 0.3476$

Y-axis: Future Return (3-yr Average)

X-axis: Current Year Return
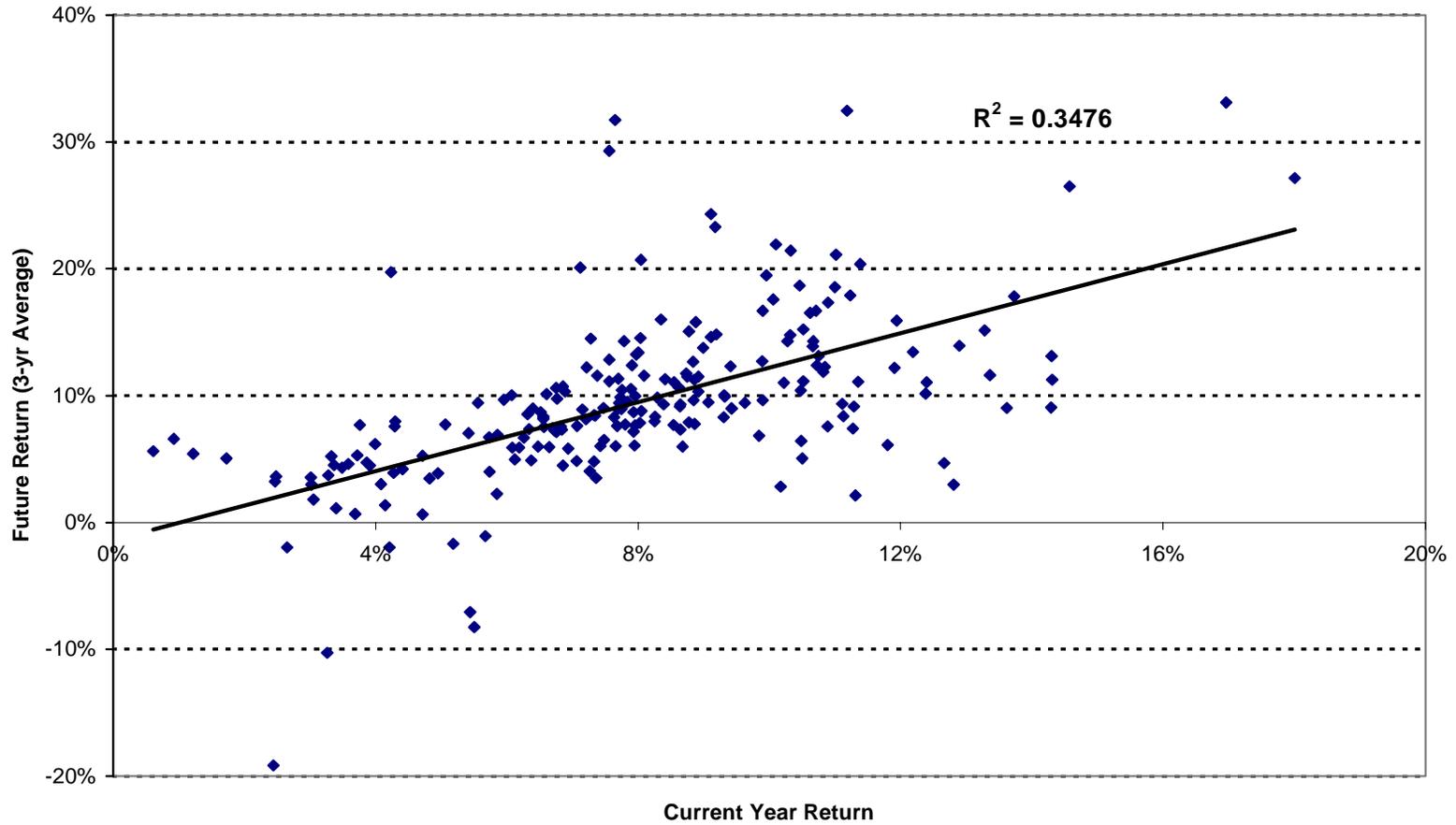
Graph #4

Current Year C1 RE RBC Factors Vs. Future Returns:
13 Companies

$R^2 = 0.834$

12
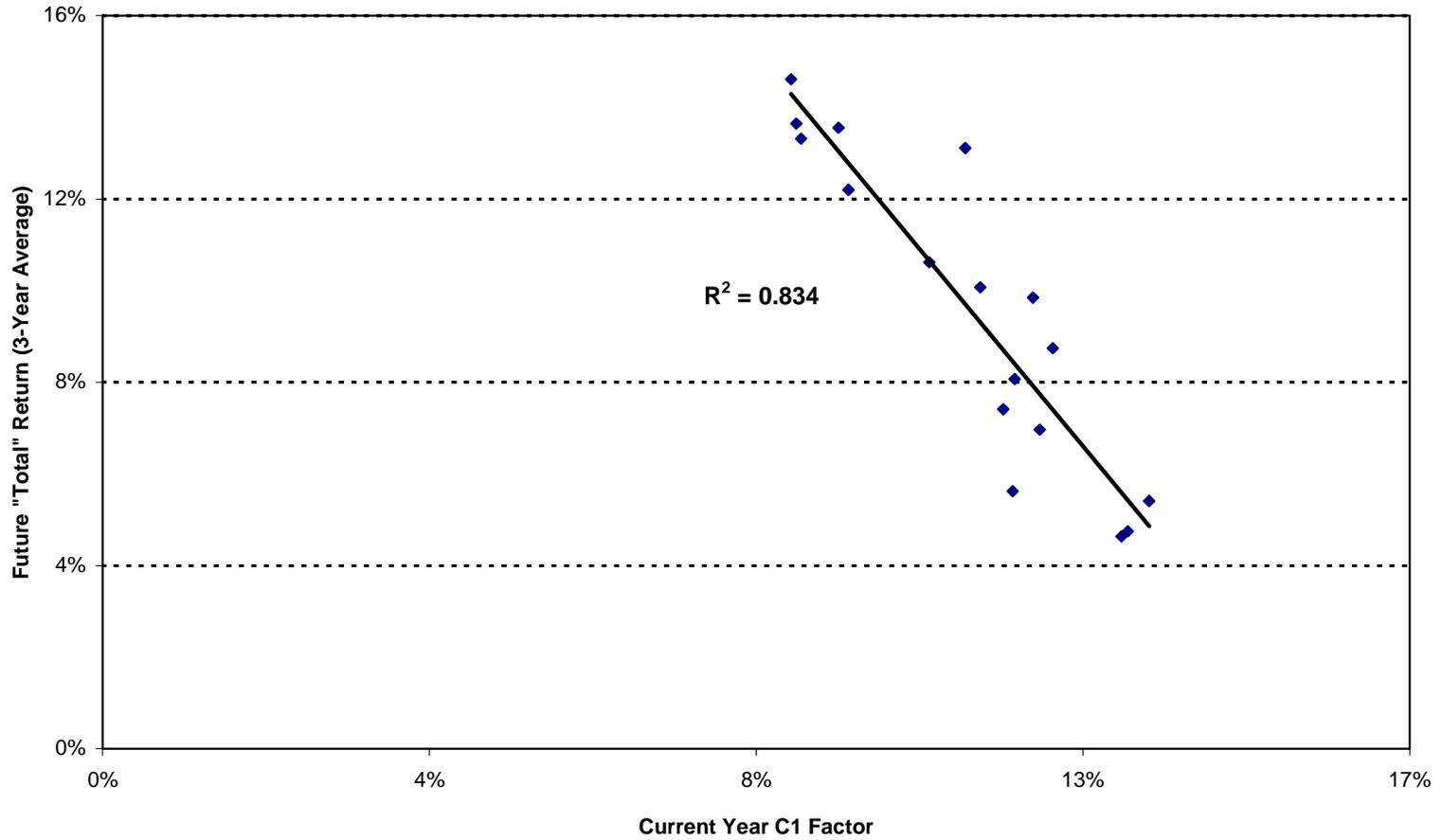
Graph #5

Current Year C1 RE RBC Factors Vs. Future Returns:
13 Companies
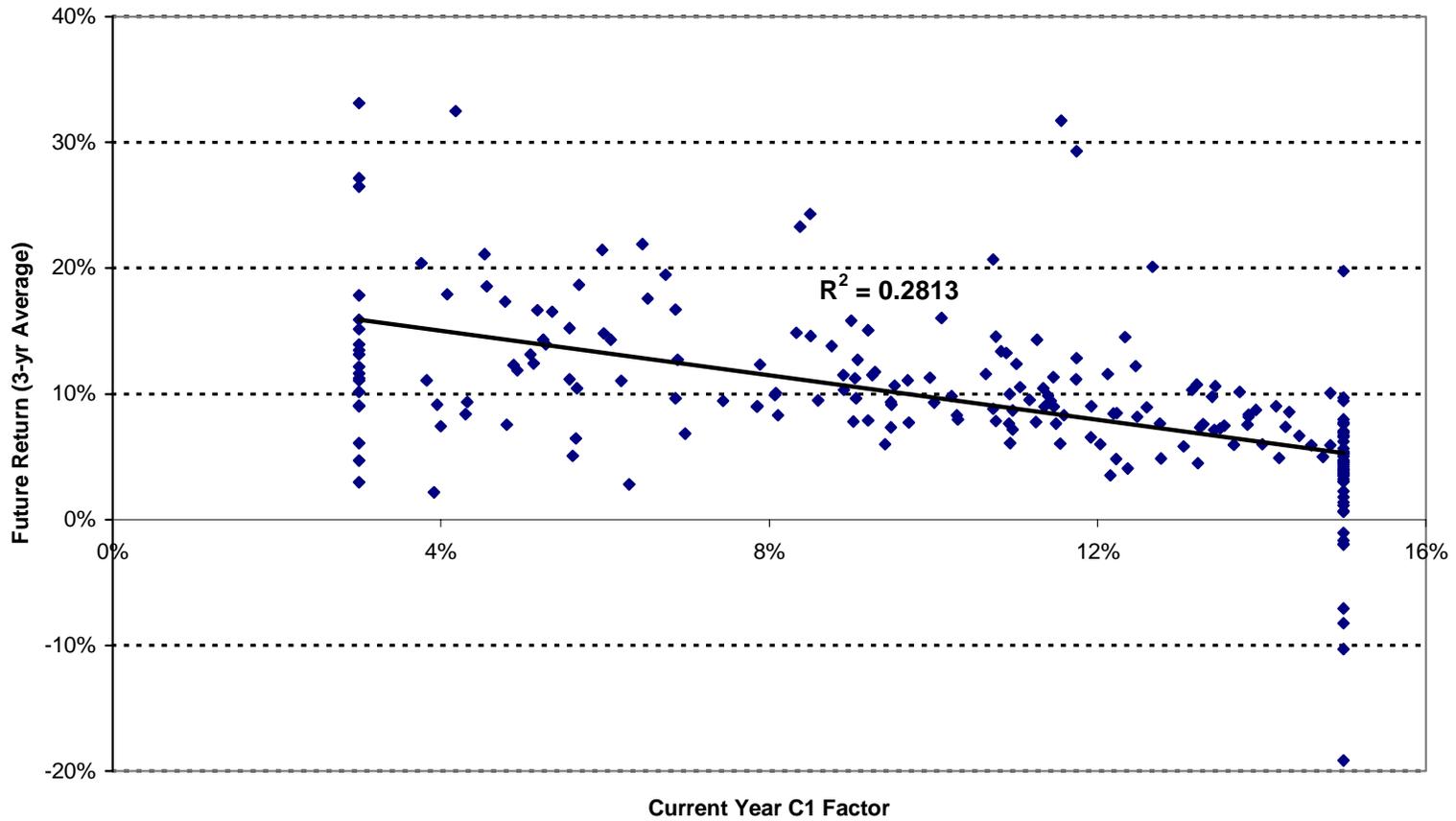
Graph #6

Proposed C1 Factor Vs. Current C1 Factor:
13 Companies
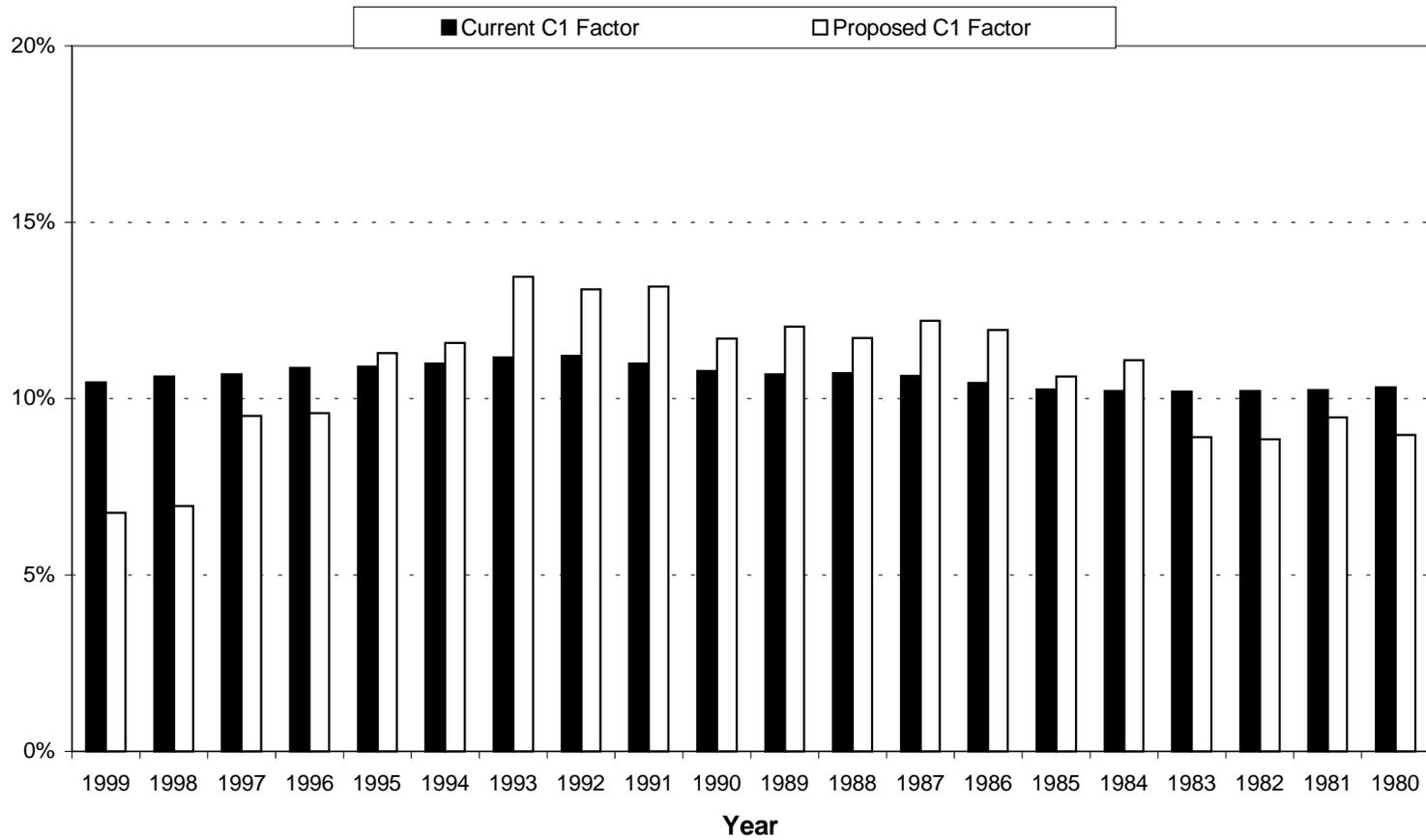
Impact of Proposed Changed in RBC Treatment of Schedule A Real Estate

Proposal:

3% RBC Level:	11.75%
15% RBC Level:	6.00%
Max. RBC Percent:	15.00%
Min. RBC Percent:	3.00%

| Year	Return / Year-End BV	Current C1 Component	Current C1 Factor	Proposed C1 Factor	Proposed C1 Component	Difference
1999	9.88%	1,634,386,798	10.46%	6.76%	1,052,044,819	-582,341,980
1998	9.88%	1,797,709,592	10.63%	6.95%	1,168,922,657	-628,786,935
1997	8.59%	2,227,266,760	10.69%	9.50%	1,978,267,184	-248,999,577
1996	8.57%	2,544,489,192	10.88%	9.58%	2,239,893,686	-304,595,506
1995	7.64%	2,776,213,375	10.91%	11.28%	2,873,416,116	97,202,742
1994	7.56%	2,881,839,414	11.00%	11.57%	3,034,573,678	152,734,265
1993	6.37%	3,068,365,079	11.16%	13.45%	3,703,818,012	635,452,933
1992	6.35%	2,748,578,482	11.21%	13.10%	3,216,503,945	467,925,462
1991	6.22%	2,391,055,430	10.99%	13.18%	2,871,728,869	480,673,440
1990	7.14%	2,059,956,267	10.78%	11.70%	2,237,503,764	177,547,497
1989	6.98%	1,839,541,060	10.69%	12.04%	2,076,143,892	236,602,832
1988	7.24%	1,774,742,942	10.72%	11.72%	1,942,894,606	168,151,664
1987	7.01%	1,684,881,299	10.64%	12.21%	1,938,708,208	253,826,909
1986	7.43%	1,526,285,258	10.44%	11.95%	1,751,542,714	225,257,455
1985	8.15%	1,368,357,199	10.26%	10.62%	1,417,188,769	48,831,569
1984	7.95%	1,168,260,188	10.21%	11.08%	1,269,431,721	101,171,533
1983	8.83%	994,565,365	10.20%	8.91%	866,810,904	-127,754,461
1982	8.90%	949,169,519	10.21%	8.85%	820,422,714	-128,746,805
1981	8.83%	866,225,981	10.24%	9.46%	798,223,265	-68,002,716
1980	9.14%	738,410,314	10.32%	8.98%	639,846,958	-98,563,356
1979						
		Average:	10.63%	10.65%		

Cash on Book Return Instructions

Basis of Factors

The risk in real estate portfolios can be analyzed in many ways, but two of the key issues are: 1) where are we in the real estate cycle? and 2) what is the relationship between book and market value in the portfolio? This last issue is especially germane since risk-based capital deals with the risk of statutory surplus declining; if book values are low compared to market values this risk is mitigated. Both of these issues are addressed by relating risk-based capital for real estate to the "cash on book return". Low cash on book returns generally imply higher risk portfolios while high cash on book returns generally imply lower risk portfolios. This should work especially well for risky developmental properties that tend to have low cash on book returns. For cash on book returns of 6% and below, the factor is 15%. For cash on book returns of 11.75% and higher, the factor is 3%. For cash returns between 6% and 11.75%, the factor grades from 15% to 3%. For company occupied real estate anecdotal and empirical evidence indicates that there is consistency lacking between insurers on the market rate of rent an insurer charges itself. Some of this is due to the difficulty of determining a fair market rent in those cases where the home office property is a unique piece of real estate in its geographic area.. Therefore, the factor for company occupied property is remaining at 10%.

Schedule BA real estate will be handled very similarly to the Schedule A real estate described in the paragraph above. For cash on book returns of 7% and below, the factor is 15%. For cash on book returns of 11.75% and higher, the factor is 5%. The factors are about 2% higher (but still capped at 15%) because of the additional risks inherent in owning real estate through a partnership. (A separate cash on book return will also be used for all Schedule D real estate on LR033, using the factors in the first paragraph above rather than the Schedule BA factors). In some cases it may be difficult for a company to provide the data necessary to calculate cash on book returns for Schedule BA real estate. If data cannot be provided for all Schedule BA real estate then the company will use the highest factor (15%). Company occupied real estate, if it resides on Schedule BA (or Schedule D), will receive a 10% factor.

Encumbrances have been included in the real estate base since the value of the property subject to loss would include encumbrances. Encumbrances receive a factor 2.25% lower than the factors in the paragraphs above, i.e. factors will vary from .75% to 12.75% for Schedules A and D and 2.75% to 12.75% for Schedule BA.

Specific Instructions for Application of the Formula
Note that after codification involuntary reserves can no longer be held on page 3, line 25 as part of aggregate write-ins for liabilities. This information is no longer requested on page LR007 or Figure 3.
<u>Column (1)</u>
Calculations are done on an individual property or joint venture basis 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 3) for how the individual property or joint venture calculations are completed.

Line (1) should equal Page 2, Column 4, Line 4.1.
Line (3) should equal Page 2, inside amount, Line 4.1.
Line (5) should equal Page 2, Column 4, Line 4.2.
Line (7) should equal Page 2, inside amount, Line 4.2.
Line (9) should equal Page 2, Column 4, Line 4.3.
Line (11) should equal Page 2, inside amount, Line 4.3.
Line (17) should equal Schedule BA, Column 10, Line 0999999.
Line (19) should equal Schedule BA, Column 7, Line 0999999.

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 3).

(Figure 3)

Real Estate Worksheet

	Description	(1) Statement Value	(2)	(3) Encumbrances	(4) Statement Value Factor	(5) Encumbrances Factor	(6) Statement Value Requirement@	(7) Encumbrances Requirement&	(8) RBC Requirement
	Company Occupied Real Estate								
(1)	All Properties Without Encumbrances^			XXX	.1000	XXX		XXX	
	All Properties With Encumbrances:								
(2)					.1000	.0775			
(3)					.1000	.0775			
(199)	Total Company Occupied Real Estate								
	Held for Income Real Estate								
(1)	All Properties Without Encumbrances^			XXX	**	XXX		XXX	
	All Properties With Encumbrances:								
(2)					**	***			
(3)					**	***			
(299)	Total Held for Income Real Estate								
	Held for Sale Real Estate								
(1)	All Properties Without Encumbrances^			XXX	**	XXX		XXX	
	All Properties With Encumbrances:								
(2)					**	***			
(3)					**	***			
(399)	Total Held for Sale Real Estate								
(499)	Total Real Estate (Line (199) + Line (299) + Line (399))								
	Company Occupied Sch BA Real Estate								
(1)	All Joint Ventures w/o Encumbrances^			XXX	.1000	XXX		XXX	
	All Properties With Encumbrances:								
(2)					.1000	.0775			
(3)					.1000	.0775			
	Total Co. Occ. Schedule BA Real Estate								

18

	Not Co. Occupied Sch BA Real Estate								
(1)	All Joint Ventures w/o Encumbrances^			XXX	**	XXX		XXX	
	All Properties With Encumbrances:								
(2)					**	***			
(3)					**	***			
(899)	Total Not Co. Occ. Sch BA Real Estate								

^ For each category, Line (1) should also exclude properties or joint ventures that have a negative statement value. These should be listed individually.

@ Column (6) is calculated as Column (1) multiplied by Column (4).

& Column (7) is calculated as Column (3) multiplied by Column (5).

* Column (8) is calculated as the sum of Column (6) plus Column (7), but not less than zero or more than Column (1).

** This is calculated in Figure 4, which has two parts. The Schedule A factor, which applies to held for income and held for sale real estate, is in the Schedule A part, row (15). The Schedule BA factor is in row (15) of the Schedule BA part.

*** Column (5) is calculated as Column (4) - .0225.

(Figure 4)

Cash on Book Return Worksheet - Schedule A excluding company occupied real estate

	Description	Source	(1)
(1)	End of Year Book Value	Current Year LR007, Column (1), Line 6 + Line 9	
(2)	Beginning of Year Book Value	Prior Year LR007, Column (1), Line 8 + Line 12 +++	
(3)	Book Value on Current Year Sold Properties	Schedule A, Part 3, Column (10), Line 9999999 - Line 0399999	
(4)	**Average Book Value +**	((1) + (2) - (3)) / 2	
(5)	Gross Income Earned Less Interest Incurred on Encumbrances	Schedule A, Part 1, Column (14), Line 9999999 - Line 0399999	
	In Force Property Interest Incurred on Encumbrances:		
(6)	Total Interest Incurred on Encumbrances	Exhibit 2, footnote (d), second figure	
(7)	In Force Property Encumbrances	Schedule A, Part 1, Column (7), Line 9999999 - Line 0399999	
(8)	Sold Property Encumbrances	Company Records (it isn't in Schedule A, Part 3)	
(9)	Acquired Property Encumbrances	Schedule A, Part 2, Column (7), Line 9999999 - Line 0399999	
(10)	In Force Property Interest Incurred on Encumbrances*	(5) X ((6) - .5 X (8))/((6) - .5 X (8) + .5 X (7))	
(11)	Gross Income Earned	(5) + (10)	
(12)	Taxes, Repairs, and Expenses Incurred	Schedule A, Part 1, Column (15), Line 9999999 - Line 0399999	
(13)	**Cash Income ++**	(11) - (12)	
(14)	**Cash on Book Return**	(13) / (4)	
(15)	**Schedule A Statement Value Factor**	3% + (12% / 5.75%) X (Line 14, Column 1 - 6%) ++++	

* This assumes that all properties sold and acquired happened in the middle of the year. This is an adequate approximation if interest incurred on encumbrances is small. However, if Column (1) row (8) is greater than 10% of Column (1) row (13) than the interest incurred on encumbrances has to be calculated from company records precisely.

+ This average book value relates to just in-force properties, since these are the only properties that contribute to the risk of the real estate portfolio going forward. The sold property information is used to "take out" the sold property from the beginning of year book value. An average book value is used to smooth out the effect of properties acquired during the year. The average implicitly assumes that properties acquired came in half way through the year.

++ The cash income figures reflect income only on properties in-force at the end of the year.

+++ For 2002 instructions this reference will have to be updated to read line 6 + line 9.

++++ In this formula, 3% is the lowest factor possible, 12% is the difference between lowest and highest factors, 5.75% is the difference between highest and lowest cash on book returns, and 6% is the lowest cash on book return. This formula interpolates between 3% and 15% as cash on book returns vary between 6% and 11.75%.

Cash on Book Return Worksheet - Schedule BA excluding company occupied real estate ***

	Description	Source	(1)
(1)	End of Year Book Value	Current Year LR007, Column (1), Line 19	
(2)	Beginning of Year Book Value	Prior Year LR007, Column (1), Line 20, in part +++	
(3)	Book Value on Current Year Sold Properties	Schedule BA, Part 2, Column (6), Line 0999999, in part ++++	
(4)	**Average Book Value +**	((1) + (2) - (3)) / 2	
(5)	Gross Income Earned Less Interest Incurred on Encumbrances	Company Records	
	In Force Property Interest Incurred on Encumbrances:		
(6)	Total Interest Incurred on Encumbrances	Company Records +++++	
(7)	In Force Property Encumbrances	Schedule BA, Part 1, Column (7), Line 0999999, in part ++++	
(8)	Sold Property Encumbrances	Company Records (it isn't in Schedule BA, Part 2) +++++	
(9)	Acquired Property Encumbrances	Company Records +++++	
(10)	In Force Property Interest Incurred on Encumbrances*	(5) X ((6) - .5 X (8))/((6) - .5 X (8) + .5 X (7))	
(11)	Gross Income Earned	(5) + (10)	
(12)	Taxes, Repairs, and Expenses Incurred	Company Records +++++	
(13)	**Cash Income ++**	(11) - (12)	
(14)	**Cash on Book Return**	(13) / (4)	
(15)	**Schedule BA Statement Value Factor**	5% + (10% / 4.75%) X (Line 14, Column 1 - 7%) ++++++	

* This assumes that all properties sold and acquired happened in the middle of the year. This is an adequate approximation if interest incurred on encumbrances is small. However, if Column (1) row (8) is greater than 10% of Column (1) row (13) than the interest incurred on encumbrances has to be calculated from company records precisely.

** The factors mapped to each cash on book return may end up higher for Schedule BA than the ones for Schedule A to reflect the risk of having a partner.

*** If company record information is unavailable, this worksheet can be skipped and the factor associated with the lowest cash on book return can be used.

+ This average book value relates to just in-force properties, since these are the only properties that contribute to the risk of the real estate portfolio going forward. The sold property information is used to "take out" the sold property from the beginning of year book value. An average book value is used to smooth out the effect of properties acquired during the year. The average assumes that properties acquired came in half way through the year.

++ The cash income figures reflect income only on properties in-force at the end of the year.

+++ The part that is not included is the company occupied real estate. This reference will need to be updated in the 2002 instructions to read line 19 (and it wouldn't read "in part").

++++ The part that is not included is the company occupied real estate.

+++++ This should exclude company occupied real estate.

++++++ **In this formula, 5% is the lowest factor possible, 10% is the difference between lowest and highest factors, 4.75% is the difference between highest and lowest cash on book returns, and 7% is the lowest cash on book return. This formula interpolates between 5% and 15% as cash on book returns vary between 7% and 11.75%.**

REAL ESTATE

		Annual Statement Source	(1) Statement Value		(2) Average Factor		(3) RBC Requireme
	Real Estate						
(1)	Company Occupied Real Estate	Page 2 Column 4 Line 4.1	▓▓▓				
			▓▓▓				
(2)	Company Occupied Encumbrances	Page 2 Inside Amount Line 4.1	▓▓▓				
(3)	Total Company Occupied Real Estate	Line (1) + (2)		X	*	=	
(4)	Held for Income Real Estate	Page 2 Column 4 Line 4.2	▓▓▓				
			▓▓▓				
(5)	Held for Income Encumbrances	Page 2 Inside Amount Line 4.2	▓▓▓				
(6)	Total Held for Income Real Estate	Line (4) + (5)		X	*	=	
(7)	Held for Sale Real Estate	Page 2 Column 4 Line 4.3	▓▓▓				
			▓▓▓				
(8)	Held for Sale Encumbrances	Page 2 Inside Amount Line 4.3	▓▓▓				
(9)	Total Held for Sale Real Estate	Line (7) + (8)		X	*	=	
(10)	Total Real Estate (pre-MODCO/Funds Withheld)	Lines (3) + (6) + (9)					
(11)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	Company Records					
(12)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	Company Records					
(13)	Total Real Estate (including MODCO/Funds Withheld.)	Lines (10) - (11) + (12)					
	Schedule BA Real Estate						
(14)	Company Occupied Real Estate	Company Records ***	▓▓▓				
(15)	Company Occupied Encumbrances	Company Records ****	▓▓▓				
(16)	Total Company Occupied Real Estate	Line (14) + (15)					
(17)	Not Company Occupied Schedule BA Real Estate	Company Records ***	▓▓▓				
			▓▓▓				
(18)	Not Company Occ Schedule BA Real Estate Encumbrances	Company Records ****	▓▓▓				
(19)	Total Not Company Occupied Real Estate	Line (17) + (18)					

				X	*	=	
(20)	Total Schedule BA Real Estate (pre-MODCO/Funds Withheld)	Line (16) + (19)		X	*	=	
(21)	Reduction in RBC for MODCO/Funds Withheld Reinsurance Ceded Agreements	Company Records					
(22)	Increase in RBC for MODCO/Funds Withheld Reinsurance Assumed Agreements	Company Records					
(23)	Total Schedule BA Real Estate (including MODCO/Funds Withheld.)	Lines (20) - (21) + (22)					

* Column (2) is calculated as Column (3) divided by Column (1).

** The RBC requirement is calculated for each individual property and then summarized on this page. Refer to the worksheet included in the Real Estate portion of the instructions.

*** The total of lines 17 and 20 should balance to Schedule BA Column 10 Line 0999999.

**** The total of lines 18 and 21 should balance to Schedule BA Column 7 Line 0999999.

LROO7

AFFILIATED INVESTMENTS
LR033, LR034, and LR035

Basis of Factors

Affiliated Preferred and Common Stock

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Insurance and Investment Subsidiaries that are Subject to **a Look-Through** Risk-Based Capital **Calculation**

The risk-based capital requirement for the reporting company for those insurance subsidiaries that are subject to a risk-based capital requirement is based on the Total Risk-Based Capital After Covariance of the subsidiary, prorated for the percent of ownership of that subsidiary. (Note: For Life and Investment subsidiaries, the Total Risk-Based Capital After Covariance and the Company Action Level Risk-Based Capital are identical.) The risk-based capital for those subsidiaries must be calculated prior to completing this risk-based capital worksheet. The subsidiaries affected by this rule are:

1. Directly Owned Property and Casualty Insurance Subsidiaries Subject to a Look-Through Risk-Based Capital Calculation
2. Directly Owned Life Insurance Subsidiaries Subject to a Look-Through Risk-Based Capital Calculation
3. Indirectly Owned Property and Casualty Insurance Subsidiaries Subject to a Look-Through Risk-Based Capital Calculation
4. Indirectly Owned Life Insurance Subsidiaries Subject to a Look-Through Risk-Based Capital Calculation
5. Investment Subsidiaries

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Investment Affiliates

An investment affiliate is an affiliate that exists only to invest the funds of the parent company. The term "investment affiliate" is strictly defined in the NAIC's *Annual Statement Instructions* as any affiliate, other than a holding company, engaged or organized primarily to engage in the ownership and management of investments for the insurer. An investment affiliate shall not include any broker, dealer or a money management fund managing funds other than those of the parent company. The risk-based capital charge for the ownership of an investment affiliate is based on the risk-based capital of the underlying assets, pro-rated for the degree of ownership. The basis for this calculation is the assumption that the charge should be the same as it would be if the Life insurer held the assets directly.

Report information regarding any investment affiliates. Subsidiaries reported in this section will be assigned an affiliate code of "5" for investment subsidiaries. The amount of reported common stock should be the same as Schedule D, Part 6, Section 1, Line 1499999. Preferred stock information should be the same as Schedule D, Part 6, Section 1, Line 0699999. RBC for real estate investments should be determined consistent with the RBC rules for Schedule A real estate.

This means that factors are determined by the cash on book return approach. All real estate from all Schedule D investment subsidiaries are aggregated to determine the cash on book return. In some cases it may be difficult for a company to provide the data necessary to calculate cash on book returns for Schedule D real estate. If data cannot be provided for all Schedule D real estate then the company will use the highest factor (15%). Company occupied real estate, if it resides on Schedule D, will receive a 10% factor.