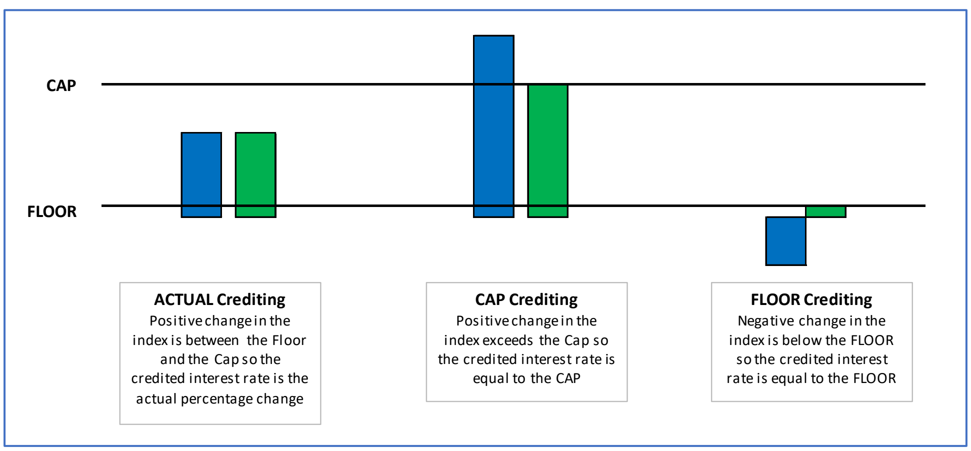
The IUL Investment Allocation Decision

Which Index Option Should I Choose in My Insurance Policy?

Indexed Universal Life (IUL) accounts for nearly a quarter of all life insurance sales in the United State. A key benefit of IUL is the ability to allocate policy cash value to a market index (e.g., the S&P 500 Index, excluding dividends) and earn interest credits based on the performance of the index over a 1-year period. Further, the risk of loss – or negative crediting rates – is eliminated because the floor, or minimum crediting rate, is usually guaranteed at 0% or 1%, in exchange for a cap on the maximum crediting rate.

Index investing is particularly prevalent in Loan Regime Split Dollar arrangements like those used by nonprofit organizations to compensate key executives without incurring the 21% excise that was implemented as part of the 2017 tax bill. The premiums paid by the organization are treated as loans to the executive that are repaid at death. Having an investment option that guarantees no negative returns but with upside potential based on the S&P 500 can be very attractive.

The graphic below demonstrates how the IUL crediting rate works. If for example the floor was 1% and the cap was 9%, and the S&P 500 Index went up by 5%, then the crediting rate would equal the change in the S&P Index. If the S&P went up by 12%, then the crediting rate would be capped at 9%. But if the S&P 500 Index lost 10% for the year, the crediting rate would still be positive, at 1%.



Most IUL policies include several Index options to choose from. For example, Penn Mutual's Accumulation Builder Flex IUL policy has 5 index options. The table below provides information about each index as of May 2021:

	High Floor S&P 500	Enhanced S&P 500	"Classic" 1 Yr S&P	High Cap S&P 500	Uncapped 1 Yr S&P
Floor	2.00%	1.00%	1.00%	1.00%	1.00%
Cap	6.75%	6.75%	8.00%	10.00%	999.00%
Participation Rate	100.00%	100.00%	100.00%	100.00%	100.00%
Guaranteed Enh	15.00%	25.00%	15.00%	15.00%	15.00%
Asset Charge				0.75%	
Spread					9.00%

Given these 5 options, how should a policyowner decide which one to use?

- What is the difference between the "Classic" 1 Year S&P index and the High Floor S&P 500?
- Under what conditions would one Index option do better than another?
- Is there a systematic way to compare how each of the Index options does across a range of market results for the S&P 500 – down markets, average markets, and booming markets?
- Which Index would be best in each market?

EBS has developed a methodology for thinking about how to compare Index options. We call it the "IUL Investment Allocation Decision". It is essentially a grid that has several rows, each representing an S&P 500 market return, e.g., -1.0% or less, 0%, 1%, 2%, etc., and a column for each Index option available in the insurance policy. The numbers on the grid provide the crediting rate for the Index option given that S&P 500 return.

Let's walk through how the grid is constructed to gain a better understanding of what it tells us.

Starting with column 1 below, we have the change in the S&P 500 Index over a 1-year period. The first row is for any negative return. We do not need to have multiple rows for negative returns because all negative returns result in a crediting rate of a least 1% based on Penn's guaranteed Floor. The second row is for a 0% market return, and each subsequent row represents an incremental 1% increase in the annual return. The last row is for a 25% return.

	S&P 500 Index Returns (x Dividends)		
	(1)	(2)	
	Change in the S&P 500 Index (x Div's)	# of 1 Year Periods With This Return	
Low Return Market	-1%	89	23%
	0.00%		
	1.00%		
	2.00%		
Average Return Market	3.00%	64	17%
	4.00%		
	5.00%		
	6.00%		
	7.00%		
	8.00%		
Above Average Market	9.00%	102	26%
	10.00%		
	11.00%		
	12.00%		
	13.00%		
	14.00%		
	15.00%		
	16.00%		
High Return Markets	17.00%	130	34%
	18.00%		
	19.00%		
	20.00%		
	25.00%		
		385	100%

The objective will then be to calculate the interest credit that Penn would provide under each of the 5 Index options given that change in the S&P 500 index indicated in each row of the grid.

Column 2 provides some additional context that may be helpful. The various returns in column 1 are categorized by EBS into 4 types of markets: Low Return Market (2.00% or less), Average Return Market

(3.00% to 8.00%), Above Average Market (9.00% to 16.00%), and High Return Markets (17.00% or more).

Between June 15, 1988, and June 15, 2021, there were 385 1-year periods that began on the 15th of each month and ended 1 year later. Column 2 shows that 89 of those periods were Low Return Markets, representing 23% of the 385 1-year periods. Average Return Markets accounted for 17% of the periods, while Above Average Markets were 26% and High Return Markets were 34%.

It may be helpful to the policyowner to have some awareness of past performance and the distribution of market returns when considering the allocation decision.

The next step in creating the grid is to add a column for the first investment option available to policyowners, the Fixed Account.

	S&P 500 Index Returns (x Dividends)			Your Resulting Crediting Rate Based on Your Investment Allocation
	(1)	(2)		(3)
	Change in the S&P 500 Index (x Div's)	# of 1 Year Periods With This Return		Fixed Account
Low Return Market	-1%	89	23%	3.50%
	0.00%			3.50%
	1.00%			3.50%
	2.00%			3.50%
Average Return Market	3.00%	64	17%	3.50%
	4.00%			3.50%
	5.00%			3.50%
	6.00%			3.50%
	7.00%			3.50%
	8.00%			3.50%
Above Average Market	9.00%	102	26%	3.50%
	10.00%			3.50%
	11.00%			3.50%
	12.00%			3.50%
	13.00%			3.50%
	14.00%			3.50%
	15.00%			3.50%
	16.00%			3.50%
High Return Markets	17.00%	130	34%	3.50%
	18.00%			3.50%
	19.00%			3.50%
	20.00%			3.50%
	25.00%			3.50%
		385	100%	

The Fixed Account is an investment option that is not tied to a market index. It is a rate that is set by the insurance company. For Penn Mutual the Fixed Rate is guaranteed to be at least 2.00%. At the time of this writing, it is currently 3.5%.

Any cash value allocated to the Fixed Account would be credited 3.50%, regardless of what rate the S&P 500 Index achieved, so the entire column shows a 3.50% return.

Now let's add in Column 4. This is the first Index option, the High Floor S&P 500 Index option.

Accumulation Builder Flex - IUL

	High Floor S&P 500
Floor	2.00%
Cap	6.75%
Participation Rate	100.00%
Guar Enhancmnt	15.00%
Asset Charge	
Spread	

	S&P 500 Index Returns (x Dividends)			Your Resulting Crediting Rate Based on Your Investment Allocation	
	(1)	(2)		(3)	(4)
	Change in the S&P 500 Index (x Div's)	# of 1 Year Periods With This Return		Fixed Account	High Floor S&P 500
Low Return Market	-1%	89	23%	3.50%	2.30%
	0.00%			3.50%	2.30%
	1.00%			3.50%	2.30%
	2.00%			3.50%	2.30%
Average Return Market	3.00%	64	17%	3.50%	3.45%
	4.00%			3.50%	4.60%
	5.00%			3.50%	5.75%
	6.00%			3.50%	6.90%
	7.00%			3.50%	7.76%
	8.00%			3.50%	7.76%
Above Average Market	9.00%	102	26%	3.50%	7.76%
	10.00%			3.50%	7.76%
	11.00%			3.50%	7.76%
	12.00%			3.50%	7.76%
	13.00%			3.50%	7.76%
	14.00%			3.50%	7.76%
	15.00%			3.50%	7.76%
	16.00%			3.50%	7.76%
High Return Markets	17.00%	130	34%	3.50%	7.76%
	18.00%			3.50%	7.76%
	19.00%			3.50%	7.76%
	20.00%			3.50%	7.76%
	25.00%			3.50%	7.76%
		385	100%		

In the box above column 4 the specs for this option are detailed:

- Floor – 2.00%, which is the guaranteed minimum.
- Cap – 6.75%, the maximum rate at the time this being written.
- Participation Rate - 100%, meaning whatever the rate of change in the S&P 500, the crediting rate will include 100% of it, prior to the application of the floor and cap.
- Guaranteed Enhancement – 15%; once the crediting rate is calculated based on the Floor and Cap, that rate is then enhanced by an additional 15% (i.e., calculated rate x 1.15%)
- Asset Charge and Spread – these do not apply to this option.

Using these specs, the crediting rate can be calculated for any S&P 500 rate. For example, at any rate of 2.00% or less, the guaranteed Floor of 2.00% would result in that as the calculated crediting rate. This would then be enhanced by 15%, and the actual crediting rate would be 2.30% (2.00% x 1.15% = 2.30%). So, 2.30% is filled in for the first 4 rows of the column.

An S&P Index return of 3.00% would result in a calculated crediting rate of 3.00%, which would then be enhanced by 15%, generating a 3.45% crediting rate.

The same process can be used to calculate the crediting rates for each S&P Index return in column 1. At 6.75% (which is not on the grid, so refer to 7.00%) the calculated rate for this Index option would max out due the Cap, and all crediting rates above that market return would be 7.76% (6.75% x 1.15% = 7.76%).

<u>Compare the Fixed Account to the High Floor Index Option</u>

Now let's compare the interest crediting rates for the 2 investment options presented so far in columns 3 and 4. If the S&P 500 return is about 3.00% or less, the Fixed Account would result in a better crediting rate than the High Floor Index option. About 75% of the 1-year markets since 1988 would have favored the High Floor Index over the Fixed Account. However, we do not know what the next year will bring, and so some policy owners who think the S&P might be in for a significant correction might like the thought of getting a 3.50% crediting rate more than the potential to get only a 2.30% credit.

<u>Add 4 More Columns for the other Index Options</u>

Now let's add 4 additional columns to the grid for the other Index options available to policy owners.

	High Floor S&P 500	Enhanced S&P 500	"Classic" 1 Yr S&P	High Cap S&P 500	Uncapped 1 Yr S&P
Floor	2.00%	1.00%	1.00%	1.00%	1.00%
Cap	6.75%	6.75%	8.00%	10.00%	999.00%
Participation Rate	100.00%	100.00%	100.00%	100.00%	100.00%
Guar Enhancmnt	15.00%	25.00%	15.00%	15.00%	15.00%
Asset Charge				0.75%	
Spread					9.00%

	S&P 500 Index Returns (x Dividends)			Your Resulting Crediting Rate Based on Your Investment Allocation					
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
	Change in the S&P 500 Index (x Div's)	# of 1 Year Periods With This Return		Fixed Account	High Floor S&P 500	Enhanced S&P 500	"Classic" 1 Yr S&P	High Cap S&P 500	Uncapped 1 Yr S&P
Low Return Market	-1%	89	23%	3.50%	2.30%	1.25%	1.15%	0.40%	1.15%
	0.00%			3.50%	2.30%	1.25%	1.15%	0.40%	1.15%
	1.00%			3.50%	2.30%	1.25%	1.15%	0.40%	1.15%
	2.00%			3.50%	2.30%	2.50%	2.30%	1.55%	1.15%
Average Return Market	3.00%	64	17%	3.50%	3.45%	3.75%	3.45%	2.70%	1.15%
	4.00%			3.50%	4.60%	5.00%	4.60%	3.85%	1.15%
	5.00%			3.50%	5.75%	6.25%	5.75%	5.00%	1.15%
	6.00%			3.50%	6.90%	7.50%	6.90%	6.15%	1.15%
	7.00%			3.50%	7.76%	8.44%	8.05%	7.30%	1.15%
	8.00%			3.50%	7.76%	8.44%	9.20%	8.45%	1.15%
Above Average Market	9.00%	102	26%	3.50%	7.76%	8.44%	9.20%	9.60%	1.15%
	10.00%			3.50%	7.76%	8.44%	9.20%	10.75%	1.15%
	11.00%			3.50%	7.76%	8.44%	9.20%	10.75%	2.30%
	12.00%			3.50%	7.76%	8.44%	9.20%	10.75%	3.45%
	13.00%			3.50%	7.76%	8.44%	9.20%	10.75%	4.60%
	14.00%			3.50%	7.76%	8.44%	9.20%	10.75%	5.75%
	15.00%			3.50%	7.76%	8.44%	9.20%	10.75%	6.90%
	16.00%			3.50%	7.76%	8.44%	9.20%	10.75%	8.05%
High Return Markets	17.00%	130	34%	3.50%	7.76%	8.44%	9.20%	10.75%	9.20%
	18.00%			3.50%	7.76%	8.44%	9.20%	10.75%	10.35%
	19.00%			3.50%	7.76%	8.44%	9.20%	10.75%	11.50%
	20.00%			3.50%	7.76%	8.44%	9.20%	10.75%	12.65%
	25.00%			3.50%	7.76%	8.44%	9.20%	10.75%	18.40%
		385	100%						

In column 5 is the Enhanced S&P 500 Index option. The Floor for this option is 1.00%, the Cap is currently 6.75%, and the Participation Rate is 100%. But this option has a 25% guaranteed enhancement to the calculated crediting rate. So, the tradeoff versus the High Floor option is a lower Floor (1.00% vs 2.00%) in exchange for a 25% enhancement. If we compare the crediting rates at the various S&P

returns, we see that the Enhanced option has a higher crediting rate than the High Floor option when the S&P return is 2.00% or higher.

In column 6 is the Classic 1-year Index option which has a 1.00% Floor, 8.00% current Cap and a 15% Enhancement. The crediting rates for this option show that it outperforms the options in columns 4 and 5 when the S&P Index return is 8.00% or greater.

In column 7 is the High Cap Index option. High Cap refers to the current 10.0% Cap that this option offers. Note though there is a new parameter with this option, the .75% (75 basis point) asset charge. In exchange for a potentially higher crediting rate, the cash value account will be charged .75% per year. The effect is that while the Floor is 1.00%, or 1.15% after the enhancement, that return would be reduced by the .75% asset charge, resulting a minimum effective crediting rate of .40%. However, in markets where the S&P return is greater than the 8.00% Cap for the Classic option, the High Cap option would yield a higher crediting rate.

The final investment option in column 8 is the Uncapped option. This option introduces another parameter, the Spread. While the potential crediting rate for this option is indeed unlimited, the S&P 500 return is reduced by the Spread in calculating the crediting rate. So, if the S&P returned 20% in a great year, that return is reduced by the 9.00% spread to an 11% calculated rate, which would then be enhanced by 15%, generated a 12.65% crediting rate. The Uncapped Index option offers the best crediting rate in 19% or higher markets.

<u>Comparing the Crediting Rates at Each S&P 500 Index Return</u>

Now that the entire grid has been filled in, what does it tell us? Let's start by comparing the crediting rate we would get when the S&P return is negative (the first row). The Fixed Account would provide a 3.50% credit, the highest rate. The High Floor would provide the next best crediting rate at 2.30%.

If we move down to a 3.00% S&P return, the Enhanced Index option would have the highest rate at 3.75%, with the Fixed Rate at 3.50% being the second best.

If we jump down to an 8.0% S&P return, the Classic S&P Index option would provide the highest crediting rate at 9.20% and the High Cap Index would provide the second highest at 8.45%.

<u>Color Coding the Results</u>

To provide additional insight, the investment option with the highest crediting rate for each S&P 500 return is shaded in light green. The option with the second-best crediting rate is shaded in light yellow.

Notice that as the S&P return increases, the investment option with the highest return shifts to the right.

If you think the market's going to be down next year, perhaps the Fixed Account makes sense. If you think the market will boom next year, perhaps the Uncapped Index option would be best.

	High Floor S&P 500	Enhanced S&P 500	"Classic" 1 Yr S&P	High Cap S&P 500	Uncapped 1 Yr S&P
Floor	2.00%	1.00%	1.00%	1.00%	1.00%
Cap	6.75%	6.75%	8.00%	10.00%	999.00%
Participation Rate	100.00%	100.00%	100.00%	100.00%	100.00%
Guar Enhancmnt	15.00%	25.00%	15.00%	15.00%	15.00%
Asset Charge				0.75%	
Spread					9.00%

	S&P 500 Index Returns (x Dividends)			Your Resulting Crediting Rate Based on Your Investment Allocation					
	(1)	(2)		(3)	(4)	(5)	(6)	(7)	(8)
	Change in the S&P 500 Index (x Div's)	# of 1 Year Periods With This Return		Fixed Account	High Floor S&P 500	Enhanced S&P 500	"Classic" 1 Yr S&P	High Cap S&P 500	Uncapped 1 Yr S&P
Low Return Market	-1%	89	23%	3.50%	2.30%	1.25%	1.15%	0.40%	1.15%
	0.00%			3.50%	2.30%	1.25%	1.15%	0.40%	1.15%
	1.00%			3.50%	2.30%	1.25%	1.15%	0.40%	1.15%
	2.00%			3.50%	2.30%	2.50%	2.30%	1.55%	1.15%
Average Return Market	3.00%	64	17%	3.50%	3.45%	3.75%	3.45%	2.70%	1.15%
	4.00%			3.50%	4.60%	5.00%	4.60%	3.85%	1.15%
	5.00%			3.50%	5.75%	6.25%	5.75%	5.00%	1.15%
	6.00%			3.50%	6.90%	7.50%	6.90%	6.15%	1.15%
	7.00%			3.50%	7.76%	8.44%	8.05%	7.30%	1.15%
	8.00%			3.50%	7.76%	8.44%	9.20%	8.45%	1.15%
Above Average Market	9.00%	102	26%	3.50%	7.76%	8.44%	9.20%	9.60%	1.15%
	10.00%			3.50%	7.76%	8.44%	9.20%	10.75%	1.15%
	11.00%			3.50%	7.76%	8.44%	9.20%	10.75%	2.30%
	12.00%			3.50%	7.76%	8.44%	9.20%	10.75%	3.45%
	13.00%			3.50%	7.76%	8.44%	9.20%	10.75%	4.60%
	14.00%			3.50%	7.76%	8.44%	9.20%	10.75%	5.75%
	15.00%			3.50%	7.76%	8.44%	9.20%	10.75%	6.90%
	16.00%			3.50%	7.76%	8.44%	9.20%	10.75%	8.05%
High Return Markets	17.00%	130	34%	3.50%	7.76%	8.44%	9.20%	10.75%	9.20%
	18.00%			3.50%	7.76%	8.44%	9.20%	10.75%	10.35%
	19.00%			3.50%	7.76%	8.44%	9.20%	10.75%	11.50%
	20.00%			3.50%	7.76%	8.44%	9.20%	10.75%	12.65%
	25.00%			3.50%	7.76%	8.44%	9.20%	10.75%	18.40%
		385	100%						
	Expected 20 Year Return - 157 Historical Periods=>			3.50%	5.92%	6.81%	7.03%	8.05%	6.36%

Expected Returns

Let's add one final piece of information to the grid, the expected 20 Year Return. We calculate this return by applying the specifications for each Index to historical market returns since 1988. You can see these returns at the bottom of each investment option column. The Fixed Rate has a 3.50% expected return because we are assuming the current rate would continue to apply. The High Floor Index option, given the current 2.00% Floor, 6.75% Cap and 15% enhancement has an expected return of 5.92% based on historical results since June 1988. Each of the next 3 Index options has an increasingly higher expected return.

Note though that while choosing one of the index options further to the right in columns 2 thru 7 is coupled with a higher expected return, it also generally comes with a lower crediting rate in lower S&P return markets.

The Investment Allocation Decision

How, then, can the grid be used to help policy owners with the allocation decision? In our experience, the most common index option selected is the Classic 1 Year S&P 500 Index option. While it is only shaded green for one S&P return (8.00%) in the table above, it offers the second-best crediting rate at

13 other return levels, making it an attractive choice across a broad range of market returns. Hence, the Classic 1 Year Index is often the default choice for many policy owners.

But if a policy owner is concerned that the stock market may be due for a correction, they might be interested in using one of the investment options that does better in low return or negative markets – or options to the left of the Classic Index in the table above. For example, the High Floor S&P 500 index provides a minimum crediting rate of 2.00% (plus the 15% enhancement) with a cap of 6.75%. So, in markets of 2.00% or less – including negative return markets – the crediting rate would be double the crediting rate earned using the Classic Index. And the crediting rate would match the Classic crediting rate in markets all the way up to 6.00%. So, the High Floor Index would be a superior choice in lower return markets.

It is good to keep in mind that deciding what index to use does not have to be a long-term decision. It is typically a decision about what investment option to use for the next 12 months, and a different index can be used when the 12-month period is complete, and the index segment has matured. In addition, more than one Index can be used to create diversification of risk.

Finally, we should note that the benefits offered by Index investing are not limited to just Indexed Universal Life policies. Many Variable Universal Life policies now provide Index options in addition to the traditional range of fixed income and equity options offered through their separate account selections. Having access to Index options and a whole range of traditional investment objectives is attractive, as long of the options are competitively structured and priced.

ABOUT EBS

EBS is an independent executive benefits consulting firm which provides total plan management services with respect to programs specifically designed for key employees and professionals. Those services include:

- Consulting with respect to plan design,
- The structuring of related financing and benefit security arrangements,
- The design and management of participant communication, education, and enrollment processes,
- Management of any informal funding assets and,
- On-going plan administration and technical support.

More information about the firm can be found at: www.executivebenefitsolutions.com.

For more information about the IUL Asset Allocation process please contact Chris Wyrtzen at the contact information listed below:

CONTACT INFORMATION:

EBS-Boston
75 Arlington Street, Suite 500
Boston, MA 02116
Phone: 617.904.9444
Fax: 866.903.9927

Christopher Rich
Managing Director
crich@ebs-boston.com

Chris Wyrtzen
Managing Director
cwyrtzen@ebs-boston.com

Robert Flood
Managing Director
rflood@ebs-boston.com

National Administration Ceneter
801 East Plano Parkway, Suite 216
Plano, TX 75704
Phone: 972.422.8298

Bonnie Barnes
Vice President of Plan Administration
bbarnes@ebs-boston.com

EBS-West
1902 Wright Place, Suite 200
Carlsbad, CA 92008
Phone: 760.788.1321

William L. MacDonald
Managing Director
Phone: 760.340.4277
wmacdonald@ebs-west.com

Don Curristan
Managing Director
Phone: 760.788.1321
dcurristan@ebs-west.com

Trevor Lattin
Managing Director
Phone: 949.306.5617
tlattin@ebs-west.com

EBS-Milwaukee
601 Genesee Street
Delafield, WI 53018
Phone: 262.853.7755

Robert Birdsell
Managing Director
bob.birdsell@ebs-milwaukee.com

EBS-Richmond
3801-A Westerre Parkway
Richmond, VA 23233
Phone: 804.317.9670

Hugh Carter
Managing Director
hcarter@ebs-richmond.com

EBS-Southeast
101 Plaza Real S, Suite 808
Boca Raton, FL 33432
Phone: 828.654.8400

Glen E. Horecky, RFC, CSA
Managing Director
ghorecky@ebs-southeast.com