

SOCIETY OF ACTUARIES

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## Session 92, Hot Products in the U.S. and Canada – Would They Sell Well on the Other Side of the Border?

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#### UNITED STATES

## Guarantees continue to be an important selling feature in the VA market

Туре	Nature of Guarantee	"Standard" Feature	"Rich" Feature	Charge	Notes
GMDB	Lump sum on death	Annual ratchet or 5% roll-up, to age 80	Combination, or 7% roll-up	15 – 35 bp	Enhanced GMDE is standard feature
GMIB	Income at annuitization	5% roll-up	6% roll-up	50 — 80 bp	Relative purchase rates important
GMAB	Lump sum at end of specified period	Generally return of premium at end of 10 years	Available on equity funds	25 – 75 bp	Low end of range requires asset allocation
GMWB	Guaranteed amounts via partial withdrawals	Withdraw 7% of premium annually	Reset provision	50 – 80 bp	This feature has attracted considerable attention

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GI	MWB features have attracted significant market place attention
•	<ul><li>The first GMWB was introduced in August 2002</li><li>All but one of the top 15 US VA writers now offer some form of GMWB</li></ul>
•	The GMWB guarantees a minimum income stream equal to the return of the contract's principal, provided it is withdrawn over a period of time within specified limits
•	"Benefit payments" or withdrawals may generally not exceed 5% – 7% of premiur per year (non-cumulative)
	Withdrawals in excess of the maximum reduce subsequent benefit payments
•	Withdrawals less than the maximum increase the length of the income stream
•	<ul> <li>Many riders offer an optional Benefit step-up after a specified time (e.g., year 5)</li> <li>The Benefit amount is "stepped-up" to the then current account value</li> <li>Step-up election may increase the cost of the rider</li> </ul>
-	GMWB riders are optional at issue (or subsequent to issue), but generally may no be dropped once elected
•	Some riders require participation in an asset allocation program, but some allow 100% allocation to equity funds
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### UNITED STATES

GMWB features have continued to evolve, becoming richer and more  $\operatorname{complex}$ 

- GLWB Lifetime payout
  - Originally 5% starting at age 65
  - Now 5% at age 60 becoming more prevalent
  - Also, payment amounts that vary by age
- Bonus
  - Base grows if postpone taking withdrawals, typically 5% per annum
  - Deferral helps pay for expensive withdrawals
- Benefit value resets or step-ups
  - Annual step-up becoming required (few products offer more frequent step-ups)
  - Some offer optional reset, while others offer automatic step-ups at specified intervals
  - Automatic resets are becoming more standard
- Asset allocation
  - GMWB often requires a specified asset allocation (to limit equity exposure), but a few companies don't currently enforce
- Spousal continuation guarantees withdrawals for two lives

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G	iMWBs in Canada
	Original GMWB was introduced in 2006
	Provided guaranteed stream of annual payments of 5% of guaranteed amount for 20 years
	Guaranteed amount could increase
	<ul> <li>Bonuses of 5% per year were available for 10 years after the initial deposit ir years where no withdrawal has taken place</li> </ul>
	<ul> <li>Automatic resets every 3 years</li> </ul>
	Lifetime benefit introduced in 2007
	<ul> <li>Provides guaranteed stream of annual payments of 5% of guaranteed amount for life</li> </ul>
	Guaranteed amount can increase
	<ul> <li>Bonuses of 5% per year are available for 15 years after the initial deposit in years where no withdrawal has taken place</li> </ul>
	<ul> <li>Automatic resets every 3 years</li> </ul>
	Payouts begin at age 65
	These features have received considerable attention in the marketplace
	Other companies are/have followed suit

























## U.S. Annuities

### **Guarantees drive variable increases**

- Original recovery driven by GMWB
- Majority of VAs (70%) now sold with guarantees

- Consumers prefer longer guarantees most popular now
  - Guaranteed annual amount for life (GLWB)
  - Guaranteed minimum income benefit (GMIB)













































	NLG verses LCOI Min Prem MNS Std at 1,000,000								
	US Company	Can Company	% Difference						
Age 25	4,859	2,459	98%						
35	7,300	3,752	95%						
45	10,215	7,432	37%						
55	15,830	15,368	3%						
65	26,885	31,248	-14%						
75	51,330	59,484	-14%						
				Foresters					

	Difference?								
• Expe	<ul> <li>Expense/Commission/Interest Rates/Mortality/Lapse?</li> </ul>								
<u>Age</u> 25	<u>Base</u> 98%	<u>Exp/Comp</u> -5.0%	Interest 14.3%	Mortality 0.0%	<u>Result</u> 89%				
35	95%	-5.2%	11.5%	0.0%	89%				
45	37%	-5.6%	8.8%	0.0%	34%				
55	3%	-6.2%	6.0%	0.0%	3%				
65	-14%	-7.4%	4.2%	0.0%	-11%				
75	-14%	-9.4%	2.6%	0.0%	-7%				

LCOI Lapse Experience Milliman UL Pricing Survey (16 Respondents)									
Duration		Coverage	Lapse Rates if Secondary Guara						
1	8.3	5.2	Money						
2	7.1	5.4							
3	6.5	5.1		ber of Responses					
4	5.4	4.0	0%	6					
5	4.6	3.6	Lapse Rates the Same (1-3%)	3					
6	3.9	3.1	0.5% - 1% (varies by age) 1%	1 1					
7	3.1	2.4	1% if additional premiums	I					
8	2.6	2.1	are due. 0% otherwise	1					
9	2.6	2.2	No reduction from base						
10	2.3	2.0	assumption (1-3%), 0%						
11	2.4	1.9	otherwise	1					
12	2.1	1.7	Half of Normal Lapses	1					
13	2.2	1.8	Varies	1					
14	2.0	1.5							
15	1.7	1.4							
Source: Lapse Experience Under LCOI: Oct 2007, Milliman's Universal Life/Indexed Universal Life Issues: Dec 2007									

NLG – Min Premium By Duration								
Duration Can UL Prem								
<u>Age</u>	Premium	<u>10</u>	<u>20</u>	<u>10</u>	<u>20</u>			
25	4,859	32	53	5,650	4,100	130%	67%	
35	7,300	27	44	7,800	5,825	108%	55%	
45	10,215	20	33	12,750	10,100	72%	36%	
55	15,830	15	26	22,000	18,250	43%	19%	
65	26,855	12	23	38,000	34,750	22%	11%	
75	51,330	12	22	71,000	64,000	19%	8%	
Mec	hanics:Dia	al-a-(	Guara	antee?		Forest	ers	

To Carry verses Endow Can UL Life Pay										
	Min/Carry Premium Endow Premium % Difference									
<u>Age</u> 25	2,459	4,740	92.76%							
35	3,752	7,040	87.63%							
45	7,431	12,140	63.37%							
55	15,367	22,050	43.49%							
65	31,248	40,500	29.61%							
75	59,484	71,610	20.39%							
	Foresters									



Inde	Index UL – Sample Calculation							
Deposits:	1000/yr							
Year Return Cap	1 10% 12%	2 -18% 12%	3 25% 12%	4 -10% 12%	5 8% 12%			
Normal Indexed % Diff	1,100 1,100 0.00%	1,722 2,100 21.95%	3,403 3,472 2.04%	3,962 4,472 12.87%	5,360 5,910 10.27%			
					Foresters			

