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# LIFE REINSURANCE DATA FROM THE MUNICH AMERICAN SURVEY

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**M**unich American's annual survey, which is conducted on behalf of the Statistical Research Committee of the Reinsurance Section, covers Canadian and U.S. ordinary and group life reinsurance new business production and in force. The ordinary numbers are further subdivided into:

- (1) Recurring reinsurance: conventional reinsurance covering an insurance policy with an issue date in the year in which it was reinsured,
- (2) Portfolio reinsurance: reinsurance covering an insurance policy with an issue date in a year prior to the year in which it was reinsured, or financial reinsurance, and,
- (3) Retrocession reinsurance: reinsurance not directly written by the ceding company.

Complete survey results are available from the authors upon request. These results may also be obtained at Munich American's Web site: [www.marclife.com](http://www.marclife.com) (look under Research).

## Life Reinsurance Production

This past year, 2003, was an active year in the reinsurance industry. Companies were acquired, large blocks of reinsurance were acquired, large blocks of insurance were acquired, some companies put the brakes on writing new business and even more—Whew! Also noteworthy was that the Canadian/U.S. exchange rate changed significantly from 2002 to 2003. Since the exchange rate had such an impact on the Canadian numbers, we will look at Canadian business in terms of \$U.S. and \$Canadian. So let's first take a look at total life reinsurance production. Total U.S. life reinsurance experienced a 0.4 percent decrease in the United States, while total Canadian life reinsurance increased 127.8 percent (\$U.S.) or 86.4 percent (\$Can). Looking further at the Canadian numbers reveals that the majority of the increase can be attributed to group business.

Unfortunately, there was one company that participated in the 2002 survey, but elected not to participate in this year's survey. To maintain consistent totals for comparison purposes to prior year's results, we reviewed publicly available information for this com-

pany and estimated production and in force data to include in the total categories only—this data was not used when calculating a company's market share.

With the exception of retrocession, all categories in the United States showed a decrease. Total U.S. ordinary production, which includes recurring, portfolio and retrocession, was almost exactly the same in 2003 as it was in 2002. U.S. group production dropped 17.9 percent from 2002. Increases in group business and, to some extent, portfolio business were the forces behind the overall increase in Canadian reinsurance production.

Figures 1 and 2 on page 4 are the life reinsurance production results for 2002 and 2003. The Canadian business is showed in \$U.S. and in \$Canadian.

## Recurring Business

By having distinct recurring, portfolio and retrocession categories for individual life, we have tried to remove any double counting of retrocession and block reinsurance from the recurring figures. This allows recurring business to reflect the "true" new business reinsured from direct writers. It also provides us with the most revealing picture of production trends. In the United States, 2003 recurring production practically matched that of 2002 production. A slight decline in production of 0.3 percent was recorded in 2003 versus 2002. The decline in 2003 follows a 13.8 percent increase in recurring new business in 2002. Looking further back in time, a decrease of 3.9 percent was reported in 2001 and increases of 21.6 percent, 19.3 percent and 33.9 percent were experienced in 2000, 1999 and 1998 respectively. Over the last three years, U.S. recurring production has increased a modest 9.0 percent. This is clearly a departure from the double-digit annual growth experienced in the 1990s.

Moving to Canada, it would appear that recurring production just kept rolling along in 2003. A 15.3 percent increase in Canadian recurring production was reported in 2003. However, this figure is based on U.S. dollars and not Canadian dollars. This is especially noteworthy since the exchange rate changed significantly from 2002 to 2003. If we look at Canadian recurring production based on actual Canadian dollars, the 15.3 percent increase becomes a 5.7 percent decrease. Looking from this perspective, the Canadian



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result parallels closely to that of the U.S. result in 2003. It appears that some direct writers have begun to retain more risk via increased quota share percentage or reinsuring on an excess retention basis. This especially impacts the Canadian market where a handful of writers dominate the direct market. Thus, if a top Canadian writer decided to move from a first dollar quota share arrangement to an excess arrangement or decides to increase its quota share percentage, it could have a large impact on the entire Canadian reinsurance market. Prior Canadian results, in \$U.S., show a 21.5 percent increase in 2002 and an increase of 29.4 percent in 2001. In \$Canadian, the percentages would be 19.2 percent in 2002 and 37.9 percent in 2001.

A couple of observations can be gleaned by looking at the individual company results. First, the U.S. and Canadian reinsurance markets are becoming increasingly stratified. Second, the level of the increases and decreases in production has widened dramatically over the years (higher highs and lower lows).

**Stratification.** If we sort the U.S. reinsurers by recurring production, it becomes clear that the companies can be broken down into three distinct groups. The

first group is represented by companies who wrote over \$100 million in recurring new business (Swiss Re, RGA, ING Re, Transamerica and Munich American). These five companies each had market shares of 10 percent or more in 2003 and combined made up 75.3 percent of the total U.S. recurring market. The second group is made up of companies with business written between \$30 billion and \$65 billion. The companies in this tier are Scottish Re, Generali, SCOR, Employers/ERC and Canada Life. This second group accounted for 21.2 percent of the 2003 U.S. recurring market. Adding the first group's market share with the second group's market shares accounts for 96.5 percent of the U.S. recurring market. Finally, the third group is made up of companies with recurring production below \$20 billion. The five companies in this group combine to make up the remaining 3.5 percent in U.S. market share. The difference between these groups is surprisingly clear. There is almost a \$50 billion production gap between the smallest company in the first group and the largest company in the second group and an almost \$15 million gap between the smallest company in the second group and the largest company in the third group.

Stratification is also evident in Canada where just two reinsurers hold the majority of the market share. The top two reinsurers, Munich Re and Swiss Re, are responsible for almost 67 percent of the total Canadian recurring market in 2003. Further, the top four Canadian companies (Munich Re, Swiss Re, ERC-Canada and RGA Re) accounted for 95.5 percent of the 2003 market share.

**Higher Highs and Lower Lows.** The level of increases and decreases in production on an individual company basis continues to widen. While the U.S. recur-

Figure 1

U.S. Life Reinsurance New Business Production (\$U.S. Millions)			
	2002	2003	Change
Ordinary Life			
Recurring	1,078,262	1,074,677	-0.3%
Portfolio	204,242	200,708	-1.7%
Retrocession	24,318	31,550	29.7%
Total Ordinary	1,306,822	1,306,935	0.0%
Total Group	31,987	26,261	-17.9%
Total Life	1,388,809	1,333,196	-0.4%

Figure 2

Canadian Life Reinsurance New Business Production (\$U.S. Millions and \$Canadian Millions)						
	\$ U.S.			\$Canadian		
	2002	2003	Change	2002	2003	Change
Ordinary Life						
Recurring	81,478	93,909	15.3%	128,433	121,142	-5.7%
Portfolio	24,122	35,893	48.8%	38,023	46,302	21.8%
Retrocession	2,500	1,668	-33.3%	3,941	2,152	-45.4%
Total Ordinary	108,100	131,470	21.6%	170,397	169,595	-0.5%
Total Group	7,860	132,693	1,588.2%	12,390	171,173	1,281.6%
Total Life	115,960	264,163	127.8%	182,787	340,768	86.4%

ring market was only slightly down in 2003, many companies reported very sizable increases or decreases. Individual company results show four companies reporting increases in excess of \$20 billion. With the acquisition of the Allianz business, RGA reported an increase of \$60.1 billion in U.S. recurring business. Following RGA was Munich American (\$30.0 billion increase), Scottish Re (\$29.0 billion increase) and ING Re (\$24.9 billion increase). Also, Transamerica reported

a \$10.7 billion increase. While these companies enjoyed large increases, there were other companies who reported large decreases in recurring production. Four companies in the United States reported decreases in production in excess of \$15 billion. Annuity and Life Re's recurring production dropped \$53.1 billion while Swiss Re had a \$31.1 billion drop. Finally, Employers/ERC and Generali (BMA) reported decreases of \$24.3 billion and \$15.5 billion respectively.

Figure 3

U.S. Ordinary Recurring Reinsurance (\$U.S. Millions)						
Company	2002			2003		
	Assumed Business	Market Share	Increase in Production	Assumed Business	Market Share	Increase in Production
Allianz	54,749	5.1%	25.3%	ACQ*	ACQ	ACQ
Annuity & Life Re	56,662	5.3%	1.6%	3,530	0.3%	-93.8%
Canada Life	29,360	2.7%	54.4%	31,014	2.9%	5.6%
Employers/ERC	58,483	5.5%	15.9%	34,157	3.2%	-41.6%
ERC-Canada	0	0.0%	0.0%	154	0.0%	100.0%
General & Cologne	14,615	1.4%	-10.0%	13,892	1.3%	-4.9%
Generali (BMA)	74,255	6.9%	90.4%	58,778	5.6%	-20.8%
ING Re	129,340	12.1%	38.2%	154,199	14.6%	19.2%
Munich American Re	80,076	7.5%	-22.8%	110,069	10.4%	37.5%
Optimum Re (US)	1,694	0.2%	30.2%	1,857	0.2%	9.6%
Revios Re (Gerling Global)	24,790	2.3%	-3.5%	17,168	1.6%	-30.7%
RGA	116,491	10.9%	3.3%	176,547*	16.7%	51.6%
SCOR Life Re	21,888	2.0%	648.8%	37,510	3.5%	71.4%
Scottish Re	34,339	3.2%	31.8%	63,366	6.0%	84.5%
Swiss Re	265,491	24.8%	7.7%	234,308	22.2%	-11.7%
Transamerica Re	110,219	10.3%	28.7%	120,900	11.4%	9.7%
TOTALS	1,072,452	100.0%	16.3%	1,057,449	100.0%	-1.4%

Figure 4

\*Allianz Individual Reinsurance Business acquired by RGA

Canada Ordinary Recurring Reinsurance (\$U.S. Millions)						
Company	2002			2003		
	Assumed Business	Market Share	Increase in Production	Assumed Business	Market Share	Increase in Production
Canada Life	521	0.6%	13.0%	618	0.7%	18.6%
ERC-Canada	12,793	15.7%	73.2%	15,284	16.3%	19.5%
General Re Life	18	0.0%	-56.1%	43	0.0%	138.9%
Munich Re (Canada)	25,661	31.5%	22.5%	32,524	34.6%	26.7%
Optimum Re (Canada)	1,750	2.1%	35.7%	2,364	2.5%	35.1%
Revios Re (Gerling Global)	2,347	2.9%	12.1%	1,233	1.3%	-47.5%
RGA Re	10,686	13.1%	34.9%	11,613	12.4%	8.7%
Swiss Re	27,702	34.0%	2.8%	30,230	32.2%	9.1%
TOTALS	81,478	100.0%	21.5%	93,909	100.0%	15.3%

Figure 5

Canada Ordinary Recurring Reinsurance (\$Can. Millions)						
	2002			2003		
Company	Assumed Business	Market Share	Increase in Production	Assumed Business	Market Share	Increase in Production
Canada Life	821	0.6%	10.8%	797	0.7%	-2.9%
ERC-Canada	20,166	15.7%	69.8%	19,716	16.3%	-2.2%
General Re Life	28	0.0%	-56.9%	55	0.0%	95.5%
Munich Re (Canada)	40,449	31.5%	20.1%	41,956	34.6%	3.7%
Optimum Re (Canada)	2,759	2.1%	33.0%	3,050	2.5%	10.6%
Revios Re (Gerling Global)	3,700	2.9%	9.9%	1,591	1.3%	-57.0%
RGA Re	16,844	13.1%	32.3%	14,981	12.4%	-11.1%
Swiss Re	43,666	34.0%	0.9%	38,996	32.2%	-10.7%
TOTALS	128,433	100.0%	19.2%	121,142	100.0%	-5.7%

Totals for Canadian and U.S. recurring ordinary reinsurance assumed in 2002 and 2003, as well as percentage changes are shown in Figures 3 and 4 on page 5 and in Figure 5 above.

### Portfolio and Retrocession Business

Total U.S. portfolio business decreased 1.7 percent in 2003. However, the U.S. number may be a little misleading as the Employers\ERC acquisition of AUL in 2002 had a large impact on the 2002 portfolio total. The fact that the portfolio represented over 15 percent of the total U.S. ordinary production indicates that in-force block deals and financial reinsurance remain popular. Portfolio business experienced an increase in Canada either way you choose to look at it: 48.8 percent (\$U.S.) or 21.8 percent (\$Can).

U.S. retrocession production rose 29.7 percent in 2003. This is welcome news for the retrocession market as it halts the recent skid that occurred over the last few years whereby U.S. retrocession production fell over 67 percent. Reinsurers may have been more motivated to retrocede in 2003 because of a desire to: (1) reduce capital strain and/or (2) share the risk where conditions may have pushed their comfort level—such as higher automatic limits, certain risk selection programs and other treaty conditions outside the norm. Compared to the United States, retrocession business in Canada is a smaller part of the total production and yearly results can be more volatile. In 2003, Canadian retrocession business decreased 33.3 percent (\$U.S.) or 45.4 percent (\$Can).

### Comparison with Direct Market

Estimates from the American Council of Life Insurance (ACLI) show 2003 U.S. ordinary individual life insurance purchases decreased 0.3 percent from 2002 purchases—remarkably the same as the percentage decrease for U.S. recurring business. Since the two markets experienced similar results in 2003, it is not too surprising to see that the percentage-reinsured level remained constant in 2003. The percentage-reinsured level is estimated by comparing the life purchases data from the ACLI to the reinsurance survey recurring production numbers. The 2003 level of 61.4 percent is on par with the 61.5 percent recorded in 2002. In fact, the percentage-reinsured level has remained very stable over the last five years (1999-2003) with percentages ranging from 59 percent to 61 percent. Sustaining such a high reinsured percentage for a five-year period could suggest that the market has reached its percentage-reinsured limit.

Figure 6 on page 7 compares ordinary life new business totals with the recurring life reinsurance totals for the United States.

### Life Insurance In Force

As a result of the 2003 new business production, total life reinsurance in force increased 14.1 percent in 2003. This compares to increases of 16.5 percent in 2002 and 3.6 percent in 2001. The U.S. total life in force increased 9.4 percent and the Canadian market in force grew by 75.9 percent in 2003.

The in force survey results for 2002 and 2003 are summarized in Figure 7 on page 7. Please note that some companies were not able to separate out their portfolio in force business and have included it in

Figure 6

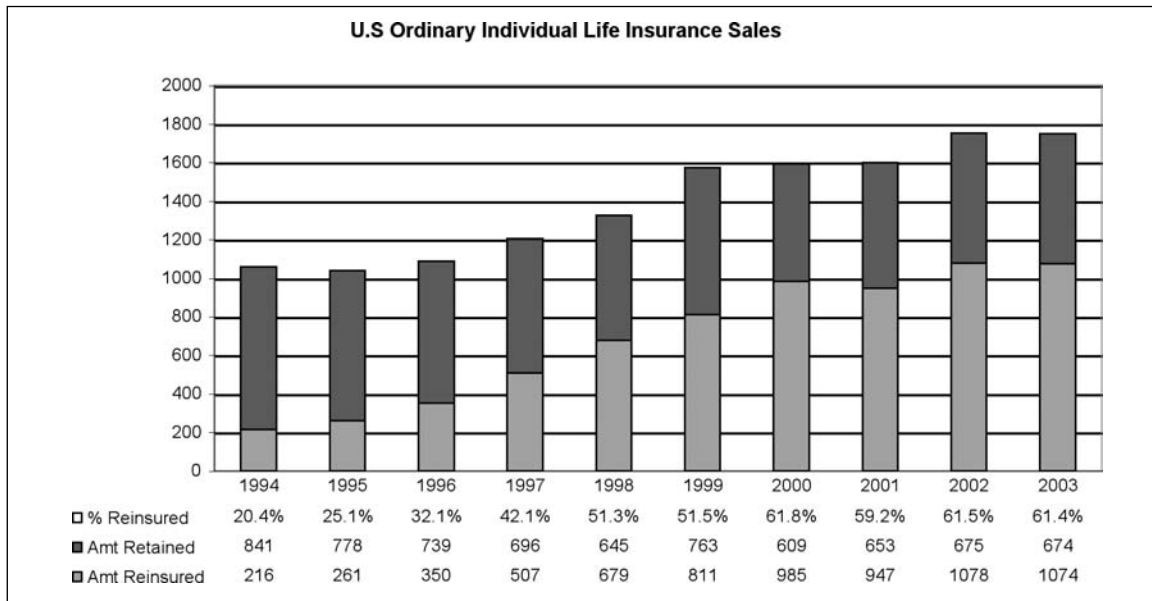


Figure 7

Life Reinsurance In Force (\$U.S.) Millions									
	U.S.			Canadian			Total		
	2002	2003	Change	2002	2003	Change	2002	2003	Change
Ordinary Life									
Recurring	4,356,737	5,059,454	16.1%	344,623	544,488	58.0%	4,701,360	5,603,942	19.2%
Portfolio	591,027	405,950	-31.3%	24,177	433	-98.2%	615,204	406,383	-33.9%
Retrocession	244,374	238,211	-2.5%	14,362	17,989	25.3%	258,736	256,200	-1.0%
Total Ordinary	5,192,138	5,703,615	9.9%	383,162	562,910	46.9%	5,575,300	6,266,525	12.4%
Total Group	165,215	159,557	-3.4%	22,110	149,880	577.9%	187,325	309,437	65.2%
Total Life	5,357,353	5,863,172	9.4%	405,272	712,790	75.9%	5,762,625	6,575,962	14.1%

the recurring category. Thus, the apparent drop in portfolio from 2002 to 2003 may not present an accurate picture of portfolio in force.

## Conclusion

Overall, 2003 was an active and eventful year for the life reinsurance industry. Some reinsurers experienced record increases in new business production, while others experienced large declines. Looking ahead, many of the same issues that dogged the market in 2003 will continue to be present in 2004—only now they may intensify. The new U.S. valuation table did not have much impact in 2003 since it was not adopted in a majority of states, but it is expected to be adopted in 2004. This means that many direct companies will be updating their term portfolios and reinsurance opportunities should be abundant in 2004. Even with the reduction in the level of required reserves

that is expected to come from the use of the new valuation table, term products are still going to require significant capital. This brings up many questions: Will the capital be available? If so, at what cost? If the cost of capital has gone up, how will it be reflected in the reinsurance price? How will direct companies react if the reinsurance price has, in fact, increased because of increasing capital costs? We may find out in 2004 if direct companies are truly “hooked” on reinsurance.

### Disclaimer

*Munich American Reassurance Company prepared the survey on behalf of the Society of Actuaries Reinsurance Section as a service to section members. The contributing companies provide the numbers in response to the survey. These numbers are not audited and Munich American, the Society of Actuaries and the Reinsurance Section take no responsibility for the accuracy of the figures. \**