

## Variable Annuities – Part 4 of 5

*Variable annuities with Guaranteed Minimum Withdrawal Benefits (GMWB) are making inroads to Canadian retirement planning. Here is a synopsis of facts about them based on market history.*

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The withdrawal guarantee of the Variable Annuity with Guaranteed Minimum Withdrawal Benefits (which I called VAG for short) can help the retiree continue receiving income even when his portfolio depletes. In my previous article, I looked at the cost versus benefits of the 20-year withdrawal guarantee. I concluded that the 20-year guarantee came with a large cost and a relatively small benefit. The 20-year income guarantee does little to reduce longevity and market risks.

This time, I will focus on the inflation risk. VAG do not protect income against inflation. Ignore all the sales mantra you might hear at conferences, such as “step-up resets might provide inflation protection”. This is just another myth. Resets do not occur often enough for inflation protection. Looking at market history, even if one were to retire in 1973 or 1974, just prior to the longest bull market of last century, there would be **no** step-up resets until death.

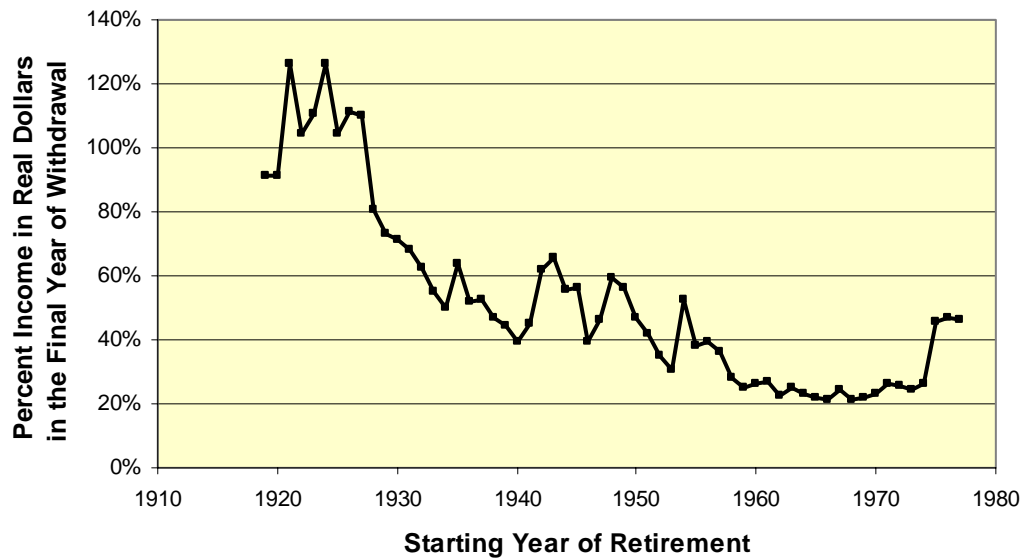
Let’s continue with Bob’s example from Part 3. We know that Bob’s income at age 65 was \$15,000. I calculated Bob’s income from his VAG in the final year of income for each year of retirement since 1919. The final year may be when Bob is 95 or the age when he received his last withdrawal. Next, using the historic inflation rates, I calculated the future value of the \$15,000 at that final year. This is the required income to maintain the purchasing power of the initial \$15,000.

The following table indicates the results, as well as the shortfall in real purchasing power. The chart depicts the real purchasing power for all retirement years since 1919 in graphically. It is interesting to note that once the deflationary period that followed the market crash of 1929 disappeared, the step-up resets **never** kept up with inflation. The average shortfall of real income since 1938 was 63%. In other words, if Bob were to retire in any one of the years between 1938 and 1977, in the final year of receiving a full income, his withdrawals would have provided on the average only 37% of the purchasing power that he started with at age 65. That is why I said earlier “ignore all the sales mantra you might hear at conferences or sales brochures that implies “step-up resets might provide inflation protection”. Market history tells us that this is not true.

In my earlier article (Part 3), I suggested that you write on a piece of paper in 96-point font size “I understand that withdrawals are guaranteed for 20 years only.” and let your client sign it and someone witness it. Now, I suggest rewording this document as following: “I understand that withdrawals are guaranteed for 20 years only and they will not keep up with inflation” You, or your firm, will be glad that you did so in the not so distant future.

Retire in Year	Final Year of Full Income at Age	Income in the Final Year	Required Income in the Final Year	Shortfall
1919	94	\$19,395	\$21,235	9%
1920	92	\$15,579	\$17,046	9%
1921	92	\$22,853	\$18,076	-
1922	92	\$21,787	\$20,872	-
1923	89	\$21,097	\$19,064	-
1924	89	\$25,627	\$20,255	-
1925	89	\$21,803	\$20,863	-
1926	86	\$20,038	\$17,987	-
1927	86	\$21,785	\$19,788	-
1928	84	\$15,000	\$18,615	19%
1929	84	\$15,000	\$20,500	27%
1930	84	\$15,000	\$20,989	29%
1931	84	\$15,000	\$21,953	32%
1932	89	\$17,136	\$27,495	38%
1933	91	\$18,253	\$33,072	45%
1934	87	\$15,266	\$30,409	50%
1935	86	\$19,013	\$29,960	37%
1936	85	\$15,000	\$29,087	48%
1937	84	\$15,000	\$28,686	48%
1938	91	\$15,000	\$32,147	53%
1939	92	\$15,000	\$34,038	56%
1940	94	\$15,000	\$37,992	61%
1941	94	\$18,043	\$40,067	55%
1942	94	\$23,735	\$38,500	38%
1943	94	\$24,000	\$36,486	34%
1944	94	\$20,475	\$36,628	44%
1945	94	\$21,922	\$38,919	44%
1946	94	\$16,937	\$42,766	60%
1947	94	\$18,012	\$38,710	53%
1948	94	\$22,157	\$37,322	41%
1949	94	\$21,729	\$38,663	44%
1950	94	\$20,263	\$43,047	53%
1951	93	\$16,948	\$40,648	58%
1952	93	\$15,187	\$43,448	65%
1953	94	\$16,071	\$52,807	70%
1954	90	\$19,925	\$37,779	47%
1955	90	\$16,324	\$43,105	62%
1956	88	\$15,000	\$37,894	60%
1957	88	\$15,000	\$41,683	64%
1958	94	\$16,328	\$58,302	72%
1959	94	\$15,000	\$59,791	75%
1960	94	\$15,956	\$61,378	74%
1961	93	\$16,408	\$60,531	73%
1962	94	\$15,000	\$66,710	78%
1963	94	\$17,052	\$67,896	75%
1964	94	\$16,017	\$68,765	77%
1965	93	\$15,000	\$68,084	78%

1966	94	\$15,000	\$70,471	79%
1967	94	\$17,080	\$69,790	76%
1968	94	\$15,000	\$69,993	79%
1969	94	\$15,000	\$67,988	78%
1970	94	\$15,000	\$65,043	77%
1971	94	\$16,423	\$63,257	74%
1972	94	\$15,785	\$62,277	75%
1973	94	\$15,000	\$61,193	75%
1974	94	\$15,000	\$57,815	74%
1975	94	\$24,055	\$52,461	54%
1976	94	\$23,802	\$50,694	53%
1977	94	\$23,154	\$49,969	54%
Average shortfall, retirement years 1919 - 1977				56%
Average shortfall, retirement years 1938 - 1977				63%



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