

Structuring Distribution Strategies for Retirees in a Bear Market

By Jack Gardner, CIMA®

The poor performance of U.S. equity markets since the beginning of the millennium makes me worry about retirees and the impact this economic environment has had on retirement portfolios. During the past nine years, which included two bear markets (2000–2002 and 2008), the S&P 500 Index produced an average annual return of –3.60 percent on a nominal basis and a –6.30 percent average annual return on a real (post-inflation) basis. Those who began retirement at the beginning of this period are challenged to find a balance between meeting current expenses and having a sustainable investment portfolio that will meet needs for another 20 to 30 years. The past nine years should serve as a real-life case study for all financial consultants who are working to develop sustainable retirement income portfolios for clients.

For this article, I used this nine-year period to test two retirement income planning strategies to see how they would impact a retirement portfolio's

withdrawal rates and sustainability. To better understand 2000–2008 and its effect on a retirement portfolio, I compared it to 1973–1981, one of the most challenging economic environments for retirees in the past 80 years.¹ I then tested the use of an endowment spending policy for effectiveness in conserving the portfolio.²

To really understand just how damaging these two periods were to retirees, see table 1, which shows a comparison of select market metrics.

Table 1 indicates that although the 1973 retiree experienced hyper-inflation

(more than 9 percent per year), the real return for the equity portion of the portfolio actually was better than for the 2000 retiree. Conversely, while the nominal returns for the Barclays Intermediate Term Government Bond Index for both 1973 and 2000 retirees were similar, the real return for the 1973 retiree was –2.22 percent.

Lifestyle Spending Policy

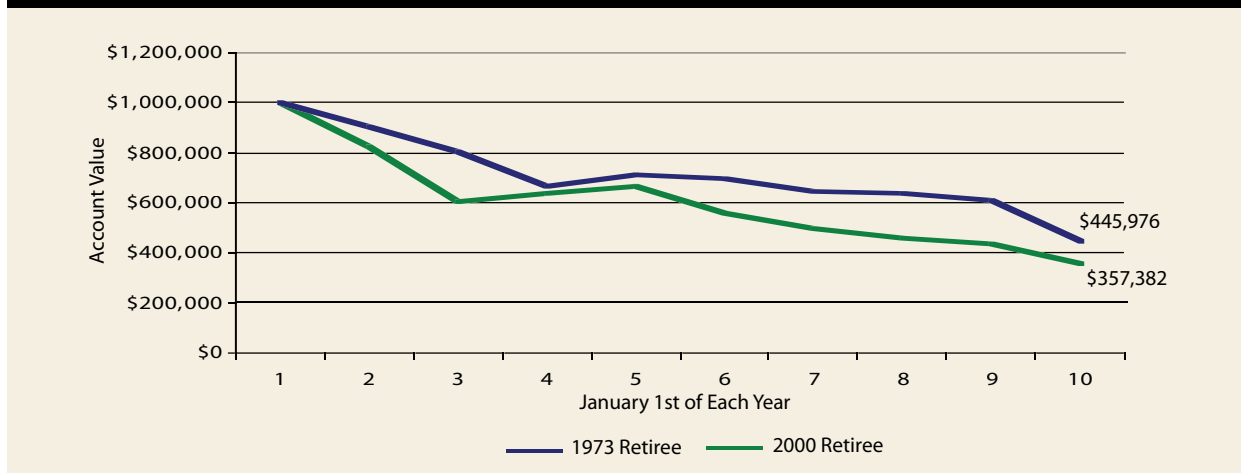
The consequence of experiencing negative real returns in a retirement portfolio undergoing the stress of withdrawals is especially dire. To illustrate this point, I

TABLE 1: MARKET METRICS

Market Metrics	1973–1981	2000–2008
1. Annual Inflation	9.07%	2.89%
2. S&P 500 Index Return		
Nominal	5.19%	–3.60%
Real (post-inflation)	–3.50%	–6.30%
3. Barclays Intermediate Term Government Bond Index		
Nominal	6.59%	6.34%
Real (post-inflation)	–2.22%	3.35%

An individual cannot invest directly into an index.

FIGURE 1: REAL ACCOUNT VALUES FOR 1973 AND 2000 RETIREES (POST INFLATION)





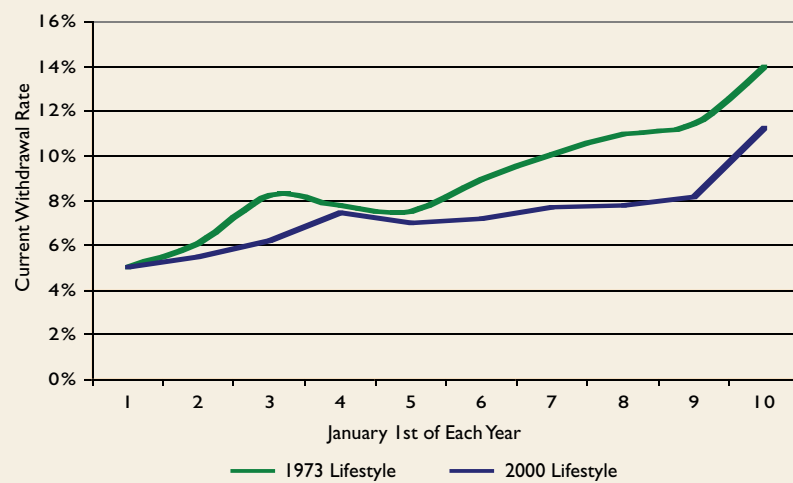
calculated the real account value (post-inflation) that the 1973 and 2000 retirees had after nine years in retirement by using actual returns and including inflation for each period. I assumed a \$1-million portfolio based on 60 percent S&P 500 Index and 40 percent Barclays Intermediate Term Government Bond Index. Spending was set at \$50,000 for the first year (5-percent initial withdrawal rate) and increased annually at a rate of inflation per the Consumer Price Index (CPI). The results are depicted in figure 1.

For both retirees, the real account values began a precipitous decline immediately following the retirement start date, resulting in the ending values that fell to well below 50 percent of the initial \$1 million after just nine years. Given that we have the data for the 1973 retiree well after the nine-year study period, we know that this portfolio was completely depleted in 21.5 years. Unfortunately, it also appears that the 2000 retiree is headed toward a similarly unacceptable fate. I use these real, post-inflation account values as a benchmark throughout this paper to illustrate how adopting an endowment spending policy and using an equity allocation strategy to high-and-growing dividends affected the sustainability of the retirement portfolios.

In the example above, the annual withdrawal was set at \$50,000 at the beginning of the retirement period and increased annually based upon the change in the CPI. This is commonly referred to as a “lifestyle spending” policy. Although this policy is attractive in its simplicity, its primary downfall is that withdrawal rates are totally delinked from the performance of the investment portfolio. This delinking, especially in times of hyper-inflation or severe bear markets, can lead to unsustainable withdrawal levels and can result in a premature depletion of the portfolio.

The second benchmark that measures the health of a retirement spending policy is the current withdrawal

FIGURE 2: CURRENT WITHDRAWAL RATES FOR 1973 VS. 2000 RETIREE



rate, which is defined as the current year’s spending amount divided by the current portfolio value. In comparing the current withdrawal rates for 1973 and 2000 retirees, figure 2 shows just how unrealistic both these rates became over the nine-year period using a lifestyle policy.

The withdrawal rates for both periods are excessive, but the 2000 retiree’s withdrawal rate was driven up primarily due to a decline in the portfolio value during two bear markets, while the 1973 retiree’s withdrawal rate was driven up by inflation, which typically is more constant than short-term market volatility. This is a great illustration of the major flaw of the lifestyle spending policy and how inflation can drive spending to unsustainable levels for an extended period.

Endowment Spending Policy

The endowment spending policy is an alternative to the lifestyle spending policy and is an adaptation of the policy used by some well-known college endowments. It is interesting to note that retirees and endowments both face the same challenge of balancing current income needs while preserving purchasing power for the future. The endowment policy employs a simple formula to determine the most

appropriate withdrawal rate for the subsequent year’s income needs. This calculation takes into account the prior year’s withdrawal amount and the portfolio’s value, thus linking the withdrawal rate to the portfolio’s health.

Deciding what percentage will be based on the prior year’s withdrawal amount versus the percentage of the value of the portfolio is called determining the “smoothing rule.” A typical smoothing rule used by endowments is 80/20, which indicates that 80 percent will be based upon the prior year’s withdrawal amount and 20 percent will be based on the current value of the portfolio. After running various scenarios, I prefer to use a 90/10 smoothing rule because it moderates the spending volatility a bit more in bear markets. Remember, if more is based upon the prior year’s withdrawal, the withdrawal amounts will vacillate less with the performance of the portfolio over the short term.

To illustrate the calculation of the endowment policy, I’ll use a four-year hypothetical example of a retiree who has a \$1-million retirement portfolio and has chosen a 5-percent initial withdrawal rate with a 90/10 smoothing rule (table 2).

In Year 1, the 5-percent withdrawal rate times the \$1-million portfolio

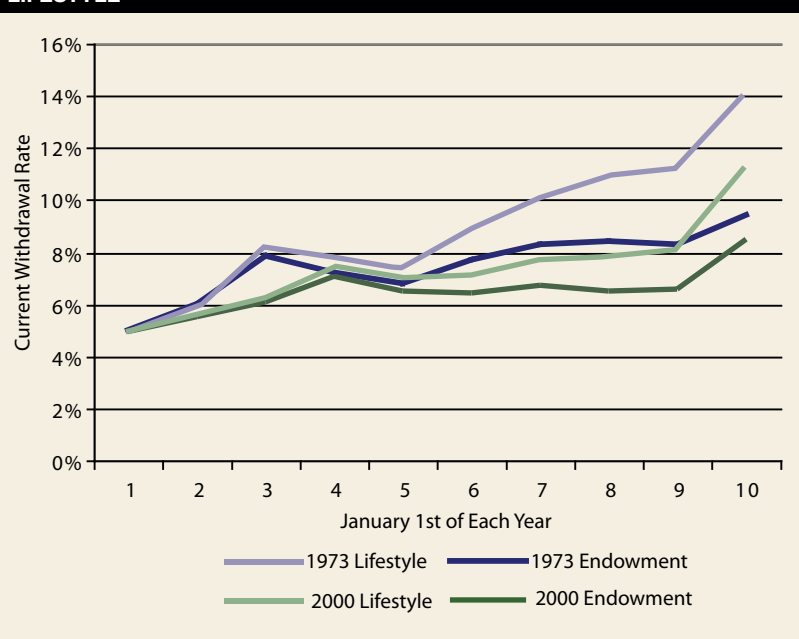
TABLE 2: AN EXAMPLE OF THE SMOOTHING RULE

	Year 1	Year 2	Year 3	Year 4
Beginning Portfolio Value ("PV")	\$1,000,000	\$800,000	\$700,000	\$800,000
Withdrawal Amount	\$50,000	\$51,940	\$55,773	\$55,822
Current Withdrawal Rate (Amount/PV)		6.5%	8.0%	7.0%
Withdrawal Amount Calculation:		\$51,940	\$55,773	\$55,822
90% of Prior Year's Withdrawal		\$45,000	\$46,746	\$50,196
10% of PV x 5% Withdrawal Rate		\$4,000	\$3,500	\$4,000
Subtotal Before COLA		\$49,000	\$50,246	\$54,196
Prior Year CPI Increase		6.0%	11.0%	3.0%
Annual Cost of Living Adj. ("COLA")		\$2,940	\$5,527	\$1,626
Withdrawal Amount		\$51,940	\$55,773	\$55,822
Increase/Decrease % from Prior Year		3.9%	7.4%	0.1%

value equals the first year withdrawal of \$50,000. In Year 2, due to a bear market and the withdrawal of Year 1's spending amount, the portfolio value has declined to \$800,000. Applying the 90/10 smoothing rule, 90 percent of the prior year's withdrawal (\$50,000) equals \$45,000 and 10 percent applied to the current portfolio value of \$800,000 times the withdrawal rate of 5 percent equals \$4,000 (\$800,000 x 10% x 5% = \$4,000). The \$45,000 and \$4,000 are added and grown by a cost of living adjustment (COLA) based upon the increase in the CPI, which in this example is 6 percent, which, when added, equals the withdrawal amount for the Year 2 of \$51,940. This calculation is repeated each year that follows. Note the current withdrawal rate in row three equals an unnerving 8 percent in Year 3 due to the second year in a bear market, but is pulled back to 7 percent in Year 4 of the example. Also note in the last row the withdrawal increase (decrease) from the prior year differs from the change in the CPI because the investment portfolio was performing poorly and could not support any additional increase.

So let's return to the 1973 and 2000 retirees and replace the lifestyle spending policy with an endowment spending policy, while leaving the asset allocation unchanged. Figure 3 compares current withdrawal rates under the lifestyle and

FIGURE 3: CURRENT WITHDRAWAL RATES USING ENDOWMENT VS. LIFESTYLE



endowment spending policies for the two retirees.

The current withdrawal rates resulting from the use of an endowment policy with a 90/10 smoothing rule are more sustainable than the ever-rising rate that results from a lifestyle policy. Although the withdrawal rates have risen during the last three years, a positive change in the investment portfolio may return this rate to a lower level. Advancing the model for the 1973

retiree shows that with an endowment spending policy, the investment portfolio sustained a retirement for more than 30 years, versus the 21.5 years using the lifestyle policy.

Changing to an endowment policy also had a positive effect on preserving the real account values (post-inflation) after nine years for both retirement periods. Retaining this additional purchasing power adds some critical sustainability to the portfolios (table 3).



TABLE 3: ENDING BALANCE OF ENDOWMENT VERSUS LIFESTYLE RETIREMENT PORTFOLIOS

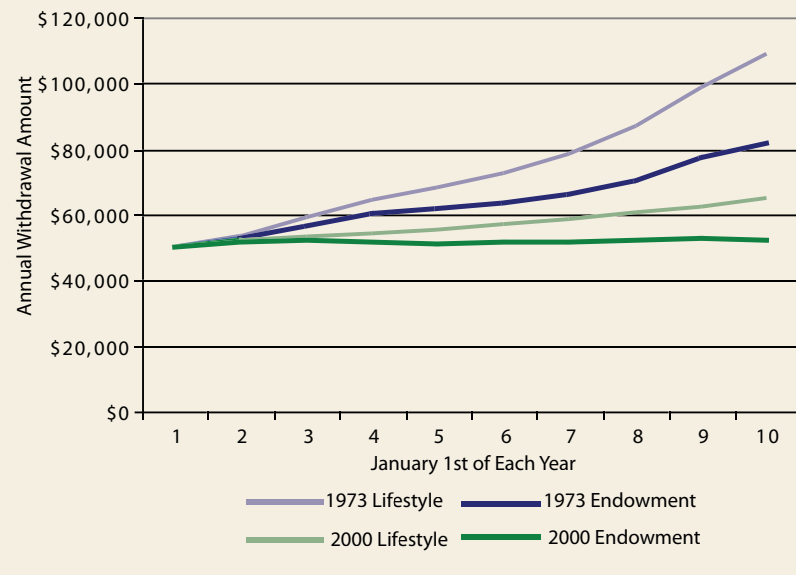
Period	Endowment	Lifestyle	Dollar Increase	Percentage Increase
1973–1981	\$ 401,563	\$ 357,382	\$ 44,181	12%
2000–2008	\$ 475,347	\$ 445,976	\$ 29,371	7%

Finally, comparing the annual withdrawal rates for the two retirement periods indicates that actual withdrawal amounts have been reined in to a more reasonable, sustainable level because the portfolio performance just couldn't support higher withdrawal levels (figure 4).

For the 1973 retiree, hyper-inflation and a lifestyle policy resulted in annual withdrawal amounts increasing from \$50,000 to well over \$100,000 during the nine-year period. Using the endowment policy, the 1973 retiree's spending was slowed to a much more sustainable \$83,000 in year nine. For the 2000 retiree facing a less inflationary environment, under the lifestyle policy spending would have increased from \$50,000 to \$64,500 in year nine. The endowment policy would have allowed withdrawal rates to increase to only \$52,000 in year nine given mild inflation levels and the poor market conditions.

For any retiree trying to develop a retirement portfolio capable of sustaining a 30–40 year retirement, using an endowment policy can add a level of discipline and structure. The mechanics of the calculation rein in spending, albeit on a gradual basis due to the 90/10 smoothing rule, during both severe bear markets and periods of hyper-inflation. This modest slowing down of spending or "belt-tightening" during challenging markets is a discipline that can add to the longevity of the investment portfolio. In studying the endowment spending policy, the one limitation I have noted is that it needs to be monitored over longer periods of time. Given that endowments typically are looking to preserve portfolios for perpetuity versus the 30–40-year retirement timeline, withdrawal rates need to be revisited

FIGURE 4: COMPARISON OF WITHDRAWAL AMOUNTS USING ENDOWMENT AND LIFESTYLE



frequently and adjusted to reflect the shortening of a retiree's timeframe.

Conclusion

Clients with retirement portfolios who are loath to accept the loss of control and expense of "retirement income products" will need your expertise and guidance in developing a thoughtful and prudent retirement income strategy. There is no easy remedy for balancing the near-term spending needs with the retention of purchasing power.



Disclaimer: Following this strategy does not assure or guarantee better performance or protect against investment losses. The views expressed by Mr. Gardner reflect his professional opinion and are subject to change.

1 See William Bengen (2006), *Conserving Client Portfolios in Retirement*, Denver, CO: FPA Press.

Notes:

Investments carry risks, including possible loss of principal. Investments in equity securities are subject to additional risks, such as greater market fluctuations. Bonds are subject to certain risks, including interest-rate risk, credit risk, and inflation risk. The principal value of bonds will fluctuate relative to changes in interest rates, decreasing when interest rates rise. Investments in stocks and bonds are not FDIC insured, nor are they deposits of or guaranteed by a bank or any other entity.

The S&P 500 Index is an unmanaged broad measure of the U.S. stock market.

The Barclays Capital Intermediate Term Government Bond Index is an unmanaged index based on all publicly issued intermediate government debt securities. Average maturity is four years.

The performance of any index is not indicative of the performance of any particular investment. Unless otherwise noted, index returns reflect the reinvestment of income dividends and capital gains, if any, but do not reflect fees, brokerage commissions or other expenses of investing. Investors may not make direct investments into any index.

Thornburg Investment Management®
 2300 North Ridgetop Road
 Santa Fe, New Mexico 87506
 800-847-0200 www.thornburg.com