

Pencil & Paper Retirement Planning

for those not yet retired.

A free download from www.analyzenow.com

Copyright 2015 Henry K. Hebler

You will want to print a copy of this material before putting your own pencil to it.

Many people planning for retirement don't use a computer, particularly for something that can be as confusing as determining how much they should save to be comfortable in retirement without exhausting savings too early during those older ages. This pamphlet solves that problem. Further, many computer programs leave out some of the important factors that are included here.

There is a real plus to this Pencil & Paper method for non-computer users, both because of its simplicity and the written record it keeps. It can also be used as a check on the assumptions and results from your professional planner.

Planning: All you have to do is enter a row of your own calculations in the table below every few years. You only have to begin with an approximate estimate of your current savings balance. In just a few minutes you will see what it takes to improve your future. It may be increase new savings deposits, retire later, or be a more aggressive investor. Recognize though that being very aggressive with retirement only a few year away may be risky.

The projections are in today's dollar values so that you have real perspective of your future purchasing power. So if you were now 45, the projections would be in the dollar values for what you could purchase at age 45. Several years later when you make a new row, say at age 50, the projections will be in terms of what you can buy with the dollar values when you were 50.

There are some underlying assumptions that you should know.

New annual savings increase each year by last year's inflation rate.

Growth of your pre-retirement savings is determined by a return (percentage growth rate) that is constant each year. The returns of 5%, 3% and 1% correspond to what Aggressive, Moderate and Conservative portfolio allocations produced in the past after typical fees and mutual fund costs.

Pre-retirement allocations are shown in the table. There is no certainty that the future will yield the same returns for these allocations.

Allocations	Stock	Bonds	Cash
Aggressive	90%	0%	10%
Moderate	50%	40%	10%
Conservative	10%	80%	10%

Post-retirement withdrawals increase with inflation each year until savings are exhausted after your inputted retirement years.

The calculations for the retirement years assume that you will be able to invest with an after-tax return equal to or greater than inflation in the majority of future years. This assumption is described in some detail in an article from *The Wall Street Journal's Market Watch* section: Save Like a Squirrel <http://www.marketwatch.com/story/save-like-a-squirrel-2013-01-24>.

Assuming returns equal inflation is very practical for retirees because their portfolios are usually more conservative or get so as they age and retirees suffer from reverse-dollar-cost-averaging when regular withdrawals occur in poor market years. Optimistic planning is disastrous for retirees and does not give consideration to all of the uncertainties that come during retirement. Not only do retirees encounter difficult financial events during the many years of retirement but often incur very expensive repairs, uninsured health problems or relatives needing money.

Column L asks you to input a percentage of your retirement savings that will be used for normal, that is repetitive, retirement expenses. This infers that the other part of your savings will be used for emergencies or other one-time large expenses like long-term-care, replacing a roof, buying new car, or as an emergency reserve and not repetitive spending as with rent, utilities, food, etc. The 90% in the example implies that 10% is for non-repetitive items.

Users of this program agree to accept the Disclaimer that is at the end of this material.

Copyright 2015 Henry K. Hebeler

Project Your Future Annual Income from Savings

A	B	C	D	E	F	G	H	K	L	M
Age & Years till Retire	Savings Balance less reserves for emergencies	Factor from Fig. 1	Balance at Retirement = B x C	New Annual Savings Deposits	Factor from Fig. 2	Growth from Annual Deposits = E x F	Total Savings at Retirement = D + G	Number of Years in Retirement	% of Savings for Normal Spending *	Retirement Withdrawal = L x H / K
Example: 45 & 20	100,000	1.8	180,000	10,000	27	270,000	450,000	25	90%	16,200

* Percentage for repeating inflation-adjusted spending each year. The remainder is for emergencies and one-time large future expenses, perhaps long-term-care.

Figure 1. Growth of Current Balance

Real Return	Style	Years till Retire												
		2	4	6	8	10	15	20	25	30	35	40	45	50
5%	Aggressive	1.1	1.2	1.3	1.5	1.6	2.1	2.7	3.4	4.3	5.5	7.0	9.0	11.5
3%	Moderate	1.1	1.1	1.2	1.3	1.3	1.6	1.8	2.1	2.4	2.8	3.3	3.8	4.4
1%	Conservative	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.3	1.3	1.4	1.5	1.6	1.6

Figure 2. Growth from New Annual Savings

Real Return	Style	Years till Retire												
		2	4	6	8	10	15	20	25	30	35	40	45	50
5%	Aggressive	2.1	4.3	6.8	9.5	13	22	33	48	66	90	121	160	209
3%	Moderate	2.0	4.2	6.5	8.9	11	19	27	36	48	60	75	93	113
1%	Conservative	2.0	4.1	6.2	8.3	10	16	22	28	35	42	49	56	64

Total Retirement Income

The analysis above relates only to the income from savings. To that must be added social security and pensions.

Social security quotes from www.ssa.gov are in today's dollar values as are the values in the analysis on the previous page. Those not yet drawing social security should get familiar with spousal benefits and the ways to improve that income especially by delaying the start of Social Security payments. You can find out more about these from www.ssa.gov and articles on www.analyzenow.com. Note that as of 2015 law changes, "File & Suspend" and "Restricted Applications" are no longer allowable.

You should be aware that social security receipts can affect other retirement benefits and income taxes. Further, social security payments for both spouses are subject to Medicare's Part B and Part D deductions. These in turn are dependent on your gross income. The net may be much less than the gross amounts.

Pensions are almost always quoted as future values and often based on the formula (Wages just before retiring) x (Years of service) x (A percentage, e.g., 1.5%). Retirement programs usually want today's values not future values) as are social security quotes and the savings analysis in the chart above. Hence, divide the pension quote by a factor from Figure 1 where the 5%, 3%, 1% then each represent future inflation instead of returns.

Fixed pensions are quite different than COLA (cost of living adjusted) pensions and are less valuable. A good approximation for the value of a fixed pension quote is to multiply the inflation adjusted value described in the paragraph above by (Retirement Age/100). Those very far from retirement might discount a fixed pension by even more because the pension quotes assume continued employment throughout the period and wage growth.

Taxes are always an important consideration. The savings analysis above as well as social security quotes and pension quotes are all before income taxes. Hence, it's important to remember that these are all gross income values, so taxes must be subtracted to find what is available for other expenses.

Conversely, when assigning values for emergency funds or one-time expenses, if such funds must come from a 401(k), 403(b), IRA, etc., then those values must include the taxes due on such withdrawals.

Professional Advice. It's wise, especially as approaching retirement, to obtain the view of a financial professional who is not a financial sales person. Those who are fee-only certified financial advisors (CFPs) are well suited for this and will usually be willing to meet in a consulting role. They may comment on your financial decisions, investments, insurance, taxes, the economic environment and estate issues.

Disclaimer

THIS PROGRAM IS PRESENTED "AS IS". THE AUTHOR AND PUBLISHER MAKE NO GUARANTEES OR WARRANTIES OF ANY KIND REGARDING THIS PROGRAM OR THE LEGALITY OR CORRECTNESS OF ANY DOCUMENT OR PLAN CREATED HEREWITH. THEY DO NOT GUARANTEE OR WARRANT THAT THIS PROGRAM WILL MEET YOUR REQUIREMENTS, ACHIEVE YOUR INTENDED RESULTS, OR BE WITHOUT DEFECT OR ERROR. YOU ASSUME ALL RISKS REGARDING THE LEGALITY AND USE OR MISUSE OF THE PROGRAM OR PLAN CREATED FROM IT. THE AUTHOR AND PUBLISHER EXPRESSLY DISCLAIM ANY AND ALL IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE. UNDER NO CIRCUMSTANCE SHALL THEY BE LIABLE FOR FINANCIAL OUTCOMES OR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THIS PROGRAM, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THEIR TOTAL LIABILITY SHALL BE LIMITED TO THE PURCHASE PRICE. SOME STATES DO NOT ALLOW THE LIMITATION AND/OR EXCLUSION OF IMPLIED WARRANTIES OR DAMAGES. YOU MAY HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE. THE AUTHOR AND PUBLISHER ARE NOT PROVIDING LEGAL, INVESTMENT, TAX, OR ACCOUNTING ADVICE. THIS PROGRAM IS NOT A SUBSTITUTE FOR QUALIFIED PROFESSIONALS. YOU SHOULD SEEK THE ADVICE OF QUALIFIED PROFESSIONALS FOR ALL OF YOUR LEGAL, INVESTMENT, TAX, ACCOUNTING AND FINANCIAL PLANNING NEEDS. THE USER OF THIS PROGRAM AGREES THAT ANY LEGAL ISSUE SHALL BE GOVERNED BY AND UNDER THE LAWS OF THE STATE OF WASHINGTON