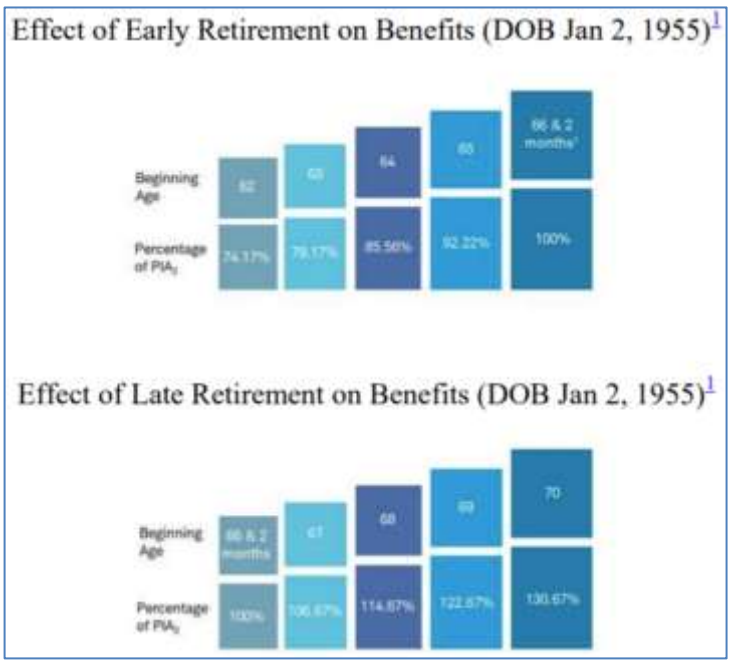
Gate 3: Estimating Your Social Security, Pension, and Annuity Income

When and how you choose to take your Social Security or pension may have a big impact on how much you receive in retirement. This section reviews some of the factors to consider in this decision. For a more in depth review and conversation on Social Security you may want to check out the Meeting What you should know about Social Security on the ArtCentrics website.

The Benefits of Social Security Some of the benefits of Social Security include:

- Cost of Living Adjustments (COLA) - Payments are increased to try to match inflation (it should be noted that these increases probably don't quite keep up with inflation in real-world situations).
- Tax Advantages – Between 0 to 85% of benefits is taxed based on your income.
- Employer Matching – Unless you are self employed, your employer matches your contributions to Social Security.
- Spousal Benefits – Non working spouses are entitled to collect benefits.
- Survivor Benefits - If both spouses contributed to Social Security when one spouse dies the surviving spouse is entitled to receive the greater of the two benefits.
- Independent of Market Conditions – Social Security is not tied to stock market performance.

Estimating Social Security Payments Estimates on how much Social Security you will receive are dependent on your age when you claim it. For most people Full Retirement Age (FRA) is when they are 67 and when you will receive the full retirement benefits. You can begin claiming benefits as early as 62 and as late as 70 years old. Claiming early will decrease your benefits by as much as 25% for the rest of your life; while claiming later will increase your benefits by as much as 31% for life. You can obtain an estimate of your benefits on the Social Security website here. At what age should you claim benefits? That's a complicated question one factor to consider is the break-even age analysis an analysis of what your age will be to have accumulated the same benefits between starting benefits earlier or later than full retirement age. This topic is of central focus in the previously mentioned What you should know about Social Security. The accompanying document can be downloaded here. If you are thinking about claiming Social Security early because you feel you will need the funds, you should consider delaying retirement instead.



Social Security Spousal Benefits If your spouse qualifies for Social Security on their own, you should add your spouse's estimated payments to your own when you are doing your analysis. Even if your spouse doesn't qualify for SSA on their own, they probably will qualify for spousal a benefit which is 50% of your Full Retirement Age benefits if they claim at full retirement age. If the spouse qualifies for Social Security on their own merit, but their benefits would be less then the 50% spousal benefit, they will be paid whichever benefit is greater. Spousal benefits can be claimed earlier, but will be reduced. Again, consult the Social Security website for an exact estimate for whatever scenario you are considering.

Early Social Security Payments For A Non Working Spouse Really Hurt! For the non-working spouse, claiming Social Security can reduce benefits to only 37.5% of the spouses full retirement age benefit.

If Both Spouses Take Early Social Security Payments Benefits to both will be reduced for life. If Social Security is going to be your primary source of income, you probably should not use this tactic.

Late Social Security Payments Of course both will have increased benefits for life. Remember, the percentage of Social Security that is taxable is tied to your income, If one spouse claims early while the other is working, much of the benefit of claiming early may be loss since this may be taxed.

Look Ahead Before Making a Social Security Commitment If you are still far from retirement you probably should assume you will claim at Full Retirement Age (67). If you are closer to retirement you would benefit from calculating different scenarios to understand the impact of when you decide to start benefits. Many people only consider the Break-Even age in determining when to start benefits, this can be a fatal mistake, you are betting on death at a certain age, and if you are wrong this can have serious impact in your later years in life. Break-Even considerations are probably most appropriate for those who have enough funds in their retirement plan that Social Security does not play a vital role.

Doubts About Social Security Viability? Many are concerned that Social Security benefits may be reduced or even eliminated in the future. The probability that it will be eliminate is very low, but a reduction is possible if you would like to take this into consideration when using the auto pilot method by reducing the expected benefit input, or splitting the benefit between the Social Security benefit and a fixed pension benefit.

Social Security Thoughts – I highly recommend viewing the video and associated material on the ArtCentrics website What you should know about Social Security. My recommendation is that if Social Security benefits look like they may be responsible for the lions share of your funding in retirement (ie you don't have many other sources to pull from if there are issues with Social Security) that you should consider delaying claiming benefits to maximize these benefits. Also, if you have a spouse, you may consider having the person that will have less benefits claim early and the person with the most benefits delay claiming until they are 70 years old. This will hedge your bests and ensure the surviving spouse will be able to get the greatest benefits from Social Security.

Pensions Most employers no longer provide pensions. If will have a pension in your retirement plans, remember the relative value of the pension will decline with time due to inflation if your pension doesn't have Cost of Living Adjustments (COLA) include in it; this detail is considered in the Autopilot method calculations.

Cost-Of-Living-Adjustment (COA) Pensions If you have a pension plan with a Cost Of Living Adjustment (COLA) you don't need to worry about making any inflation adjustments, the autopilot method will do this. If you are already getting a COLA pension, then use this year's annual amount as a COLA pension entry in the planning analysis. If you expect to get a COLA pension in the future when you retire, enter your employer's estimate in the planning analysis.

Fixed Pensions in Our Projections Fixed pensions are pensions where the amount you receive each year after retirement is fixed and does not have a COLA. It can be difficult to predict the actual future value of your pension when you retire, to do this we will need the estimated value at the date of retirement from your employer and utilize figure 2.6 to convert this to today's dollars.

Pension Values Depend on Length of Service Most pension plans factor length of service, employee pay in determining your benefits. If possible you should obtain this value directly from your employer for your targeted retirement date. If an estimated value is not available from your employer you can use this equation as a first approximation.

$$Estimated\ Benefits = (Employer\ Quoted\ Benefits) * \frac{(Your\ Assumed\ Years\ of\ Service)}{(Employer's assumed\ years\ of\ service)}$$

If You Are Already Getting Fixed Payments Before you Retire If you are already receiving a pension you will still need to calculate what the value of that pension in todays dollars will be when you retire. This can be done using figure 2.6.

Discounting Your Future Pension If you think there is a possibility that the source of your pension could get into serious financial trouble, then you should reduce its value in the analysis. If this is only a small probability, it is worth discounting your pension by some small amount, perhaps 1% above the inflation rate, to allow for it. You should make your estimates of your future pension based on the circumstances between now and your eventual retirement.

Annuities An annuity is a contract between you and a financial institution. Your employer may offer you a choice of a lump sum on retirement or an annuity. Often the returns on an annuity so low that you would be better off to take the lump sum, but the lifetime payments may have other attractive features in your particular case. If the annuity option is considered severance pay, you will have Social Security and Medicare deductions taken out until you die, so you should also consider this negative feature. If you are a number of years away from retirement, the best thing to do is to assume you will get the lump sum and include it with your investments in your preretirement planning analysis.

Which Survivor Options Should I Use for Planning? Many pension plans offer continued spousal benefits after you die at varying levels, typically 100%, 75% and 50% each of these options will reduces your benefit.

Gate 4: Planning with the Retirement Autopilot

This section is where we determine how much you need to save to meet your retirement goals. These goals should cover both the annual expenses in retirement, and any major purchases after you retire.

Using the Preretirement Worksheet Complete Figure 5.15 to determine the status of your retirement plans and to see if you are on track or need to make adjustments to your savings. This process should be reviewed and completed each year.

Figure 5.15

Preretirement Worksheet
(Figure 5.15)

- All entries should be before-tax values
- All entries should be in todays dollar values

Line	Item	Value	Comments
1	Annual Social Security and COLA pensions		Include values for you and your spouse
2	Fixed Pensions and Annuities		Annual fixed pensions in todays dollars

3	Age you will retire		The age of the younger spouse when you retire
4	Fixed Pension Factor		Factor from Figure 5.16 using Line 03 and your chosen inflation estimate.
5	Estimated Pension Value		Estimated pension value in todays dollars - Line 02 times Line 04
6	Real Estate Cash Flow		Current annual before-tax cash flow from investment real estate
7	Estimated Annual Retirement Expenses		Entry in todays dollars, Include income tax & debt payments
8	Annual Total Income		Income from sources in todays dollars. Line 01 Plus Line 05 Plus Line 06
9	Annual Shortfall		Line 07 minus Line 08
10	Preretirement Return		Real return before retirement. See Figure 4.4 or Figure 4.5
11	Postretirement Return		1/2 x real return after retire. See Figure 4.5
12	Postretirement Savings Factor		Factor from Fig 5.17 using values closest to Line 03 & Line 11
13	Accumulated Shortfall		Expected compounded value of savings.
14	Major Purchases		Major purchases during retirement, e.g. condo, etc.
15	Total Retirement Deficit		Line 13 plus Line 14
16	Current Assets		Current balance of all investment less equity used to produce cash flow in Line 06
17	Large Preretirement Expenses		e.g. kid's college, expenses, etc.
18			Line 16 minus Line 17
19	Number of Years Until You Retire		
20	Preretirement Savings Factor		Factor from Figure 5.18 for values closest to Line 10 and Line 19
21	Excess Growth		Line 18 times Line 20
22	**Savings shortfall**		Line 15 - Line 21
23	Preretirement Savings Factor		Factor from Figure 5.19 using values closest to Line 10 and Line 19
24	Increase Yearly Savings		Line 22 divided by Line 23 (Enter 0 if negative)
25	Real Estate Reinvestment		Amount of Line 06 that you are investing
26	**Required Savings Increase**		Line 24 minus Line 25
27	Current gross annual wages		Excluding employer matching contributions to savings
28	**Percent Savings Increase**		100 times (Line 26 divided by Line 27)

- Line 01: Annual Social Security and COLA pensions – Combined values for Social Security of you and your spouse. Also include any other COLA pensions. You can obtain an estimate of your benefits on the Social Security website here. If you plan on retiring before 62 reduce the estimated benefit of 62 by 3.6% for each year to ensure calculations work out correctly in this worksheet.
- Line 02: Fixed Pensions Annuities – Your employer's estimate of your future annual pension if (1) you can start fixed pension payments in the year you retire (2) if your employer did not assume any wage increases when calculating the expected value of your pension. If either of these things is not true, or you are uncertain, the simplest thing to do is to

multiply your employer's estimate times a factor from Figure 2.6 using the 3% column and the number of years until you will collect the payments.

- Line 03: Age you will Retire – If you are single enter the age you will be when you retire. If you are married enter the age of whichever spouse is younger in the year you want to retire.
- Line 04: Fixed Pension Factor – Lookup; Using Figure 15.16 select a column corresponding to an inflation rate you think will apply to your retirement years. It is better to select a conservative (higher) inflation rate than a lower one.
- Line 05: Estimated Pension Value – Calculation; The estimated value in todays dollars for your pension plan(s) identified in line 02. Calculated by Multiplying Fixed Pensions Annuities (Line 02) times Fixed Pension Factor (Line 04).
- Line 06: Real Estate Cash Flow – Current annual before-tax cash flow from investment real estate. Only make an entry here (before-tax annual rent minus cost, interest, and property taxes, not depreciation) if you expect to own this investment through most of your retirement. If you make an entry here, don't include your equity in the real estate in Line 16.
- Line 07: Estimated Annual Retirement Expenses – Previous Work; This is an estimate of your expense in retirement in todays dollars. You should have this from earlier work in this chapter (ie Figure 5.12, or Figure 5.11). If you have not calculated these values you can use the 100% of your current income as a proxy. Expenses include normal annual retirement living expenses, income tax, and annual debt payments including home mortgage that you will be making for at least five years of retirement
- Line 08: Annual Total Income – Calculation; The sum of Annual Social Security and COLA pensions (Line 01) plus Estimated Pension Value (Line 05) plus Real Estate Cash Flow (Line 06).
- Line 09: Annual Shortfall - Calculation; This is the extra yearly amount of money you will need in retirement to be able to meet your estimated annual expenses in retirement. Estimated Annual retirement Expenses (Line07) minus Annual Total Income (Line 08).
- Line 10: Preretirement Return – Previous Work; An estimate of the Real Return (approximately the actual return minus inflation) for your investments before you retire. If you completed the worksheet in Figure 4.4 use this result otherwise use the appropriate value from Figure 4.5.
- Line 11: Postretirement Return – A conservative estimate of the Real Return for post retirement. You are instructed to use ½ of the calculated real return from Figure 4.5 with your estimated retirement allocation to account for reverse dollar cost averaging.
- Line 12: Postretirement Savings Factor – Lookup; Referencing Figure 5.17 use Postretirement Return (Line 11) and Age you will retire (Line 03) to obtain this value.
- Line 13: Accumulated Shortfall – Calculation; Estimated amount of accumulated shortfall in retirement until you expire with compound growth in todays dollars. Annual Shortfall (Line 09) times Postretirement Savings Factor (Line 12).
- Line 14: Major Purchase – Estimate of retirement expenses that are not included in the Estimated Annual Retirement Expenses (Line 07). Include large purchases like autos, or a vacation home in today's values. Then divide by (1.00 minus your income tax rate expressed as a decimal).
- Line 15: Total Retirement Deficit – Calculation; This is the sum total of all the accumulated shortfall over your retirement. Add Accumulated Shortfall (Line 13) and Major Purchases (Line 14).
- Line 16: Current Assets – Previous Work; Sum total of all investments including employer savings plans, stocks, CDs, Mutual Funds, Bank Accounts etc. Include any investment real estate equity (market price minus debt) that was not used as a source for cash in Real Estate Cash Floe (Line 06). It is better not to include your home equity for preretirement plans. This work was performed in Figure 3.11.
- Line 17: Large Preretirement Expenses – Large expenses that will come before retirement and that will be paid from your existing investments and NOT paid from your wages. You must make an adjustment of income tax using the same technique as used in calculating Major Purchase (Line 14). Take the estimated value then divide by (1.00 minus your income tax rate expressed as a decimal).
- Line 18: Preretirement Excess – Calculation; This shows any funds you will have remaining for funding your retirement after making large purchases with your current assets. A negative value indicates a shortfall. This is calculated by subtracting Large Preretirement Expenses (Line 17) from Current Assets (Line 16).

- Line 19: Number of Years Until You Retire – The number of years from today until you retire.
- Line 20: Preretirement Savings Factor – Lookup; Utilizing Figure 5.18 and Preretirement Return (Line 10) and Number of Years Until You Retire (Line19) to locate this value.
- Line 21: Excess Growth – Projected growth of Preretirement Excess (Line18) from current day until your retirement. Multiply Preretirement Excess (Line 18) by Preretirement Savings Factor (Line 20).
- Line 22: Savings Shortfall – This represents the amount of money that you have to make up to fund your retirement. Hopefully this is a negative number if so, it shows you are on track! Don't forget to re-evaluate every year since marks do change and can impact the outcome of this exercise.
- Line 23: Preretirement Savings Factor – Lookup; This factor is used to scale the savings shortfall to an annual amount. Use Figure 5.19 and Preretirement Return (Line 10) and Number of Years Until You Retire (Line 19) to obtain this value.
- Line 24: Increase Yearly Savings – This indicated the increase in your yearly savings you will need to make to fund your retirement.
- Line 25: Real Estate Reinvestment – This is the amount of money from Real Estate Cash Flow (Line 06) that you plan on investing.
- Line 26: Required Savings Increase – Calculation; This represents how much you will need to increase your savings this year to fund your retirement. Subtract Increase yearly Savings (Line 24) from Real Estate Reinvestment (Line 25)
- Line 27: Current Gross Annual Wages – Enter your gross annual wages excluding any employer matching funds. Gross wages are wages before any deductions for taxes, savings plans and the like.
- Line 28: Percent Savings Increase – Calculation; This is the percent of your gross wages you will need to increase to savings for retirement to meet your retirement goals.

Lookup Tables: Figures 5.16 – 5.19

Fixed Pension Factors

Age of Younger Spouse	Life Expectancy Years	Fixed Pension Factors for Different Inflation Rates		
		3%	5%	7%
55	34.4	0.63	0.48	0.37
56	33.4	0.63	0.48	0.38
57	32.5	0.64	0.49	0.39
58	31.5	0.65	0.50	0.39
59	30.6	0.66	0.51	0.40
60	29.7	0.66	0.52	0.41
61	28.7	0.67	0.53	0.42
62	27.8	0.68	0.54	0.43
63	26.9	0.69	0.55	0.44
64	25.9	0.69	0.56	0.45
65	25.0	0.70	0.57	0.46
66	24.1	0.71	0.58	0.47
67	23.2	0.72	0.59	0.48
68	22.3	0.73	0.60	0.50
69	21.5	0.73	0.61	0.51
70	20.6	0.74	0.62	0.52
71	19.8	0.75	0.63	0.53
72	18.8	0.76	0.64	0.54
73	18.1	0.77	0.65	0.55
74	17.3	0.77	0.66	0.57
75	16.5	0.78	0.67	0.58
76	15.7	0.79	0.68	0.59
77	15.0	0.80	0.69	0.61
78	14.2	0.81	0.70	0.62
79	13.5	0.81	0.72	0.63

FIGURE 5.16 Select a future inflation value. Then find the fixed pension factor in the row corresponding to your retirement age (if single) or the age of the younger spouse (if married).

Postretirement Savings Factors

Age of Younger Spouse	Savings Factors for Various Real Returns								
	4.0%	3.0%	2.5%	2.0%	1.5%	1.0%	0.5%	0.0%	-1.0%
55	18.9	21.6	23.2	24.9	26.9	29.1	31.6	34.4	41.1
56	18.6	21.2	22.7	24.4	26.3	28.4	30.8	33.4	39.7
57	18.4	20.9	22.3	24.0	25.8	27.8	30.0	32.5	38.4
58	18.1	20.5	21.9	23.4	25.1	27.0	29.2	31.5	37.1
59	17.8	20.1	21.5	22.9	24.6	26.4	28.4	30.6	35.8
60	17.5	19.8	21.0	22.5	24.0	25.7	27.6	29.7	34.6
61	17.2	19.3	20.6	21.9	23.4	25.0	26.7	28.7	33.3
62	16.9	19.0	20.1	21.4	22.8	24.3	26.0	27.8	32.1
63	16.6	18.6	19.7	20.9	22.2	23.6	25.2	26.9	30.9
64	16.3	18.1	19.1	20.3	21.5	22.8	24.3	25.9	29.6
65	15.9	17.7	18.7	19.7	20.9	22.1	23.5	25.0	28.4
66	15.6	17.2	18.2	19.2	20.3	21.4	22.7	24.1	27.3
67	15.2	16.8	17.7	18.6	19.6	20.7	21.9	23.2	26.1
68	14.9	16.3	17.1	18.0	19.0	20.0	21.1	22.3	25.0
69	14.5	15.9	16.7	17.5	18.4	19.4	20.4	21.5	24.0
70	14.1	15.4	16.1	16.9	17.7	18.6	19.6	20.6	22.9
71	13.8	15.0	15.7	16.4	17.1	18.0	18.9	19.8	21.9
72	13.3	14.4	15.0	15.7	16.4	17.1	17.9	18.8	20.7
73	13.0	14.0	14.6	15.2	15.9	16.6	17.3	18.1	19.9
74	12.6	13.5	14.1	14.6	15.3	15.9	16.6	17.3	18.9
75	12.1	13.1	13.6	14.1	14.6	15.2	15.8	16.5	17.9
76	11.7	12.6	13.0	13.5	14.0	14.5	15.1	15.7	17.0
77	11.3	12.1	12.5	13.0	13.4	13.9	14.5	15.0	16.2
78	10.9	11.6	12.0	12.4	12.8	13.2	13.7	14.2	15.3
79	10.5	11.1	11.5	11.8	12.2	12.6	13.1	13.5	14.5

FIGURE 5.17 Select a real return for postretirement investments. Then find the savings factor in the row corresponding to your retirement age (if single) or the age of the younger spouse (if married).

Preretirement Current Savings Factors

Years till Retire	Savings Factors for Various Real Returns								
	8.0%	7.0%	6.0%	5.0%	4.0%	3.0%	2.0%	1.0%	0.0%
0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	1.17	1.14	1.12	1.10	1.08	1.06	1.04	1.02	1.00
4	1.36	1.31	1.26	1.22	1.17	1.13	1.08	1.04	1.00
6	1.59	1.50	1.42	1.34	1.27	1.19	1.13	1.06	1.00
8	1.85	1.72	1.59	1.48	1.37	1.27	1.17	1.08	1.00
10	2.16	1.97	1.79	1.63	1.48	1.34	1.22	1.10	1.00
12	2.52	2.25	2.01	1.80	1.60	1.43	1.27	1.13	1.00
14	2.94	2.58	2.26	1.98	1.73	1.51	1.32	1.15	1.00
16	3.43	2.95	2.54	2.18	1.87	1.60	1.37	1.17	1.00
18	4.00	3.38	2.85	2.41	2.03	1.70	1.43	1.20	1.00
20	4.66	3.87	3.21	2.65	2.19	1.81	1.49	1.22	1.00
22	5.44	4.43	3.60	2.93	2.37	1.92	1.55	1.24	1.00
24	6.34	5.07	4.05	3.23	2.56	2.03	1.61	1.27	1.00
26	7.40	5.81	4.55	3.56	2.77	2.16	1.67	1.30	1.00
28	8.63	6.65	5.11	3.92	3.00	2.29	1.74	1.32	1.00
30	10.1	7.61	5.74	4.32	3.24	2.43	1.81	1.35	1.00
32	11.7	8.72	6.45	4.76	3.51	2.58	1.88	1.37	1.00
34	13.7	9.98	7.25	5.25	3.79	2.73	1.96	1.40	1.00
36	16.0	11.4	8.15	5.79	4.10	2.90	2.04	1.43	1.00
38	18.6	13.1	9.15	6.39	4.44	3.07	2.12	1.46	1.00
40	21.7	15.0	10.3	7.04	4.80	3.26	2.21	1.49	1.00
42	25.3	17.1	11.6	7.76	5.19	3.46	2.30	1.52	1.00
44	29.6	19.6	13.0	8.56	5.62	3.67	2.39	1.55	1.00
46	34.5	22.5	14.6	9.43	6.07	3.90	2.49	1.58	1.00
48	40.2	25.7	16.4	10.4	6.57	4.13	2.59	1.61	1.00
50	46.9	29.5	18.4	11.5	7.11	4.38	2.69	1.64	1.00

FIGURE 5.18 Select a real return for preretirement investments. Then find the investment savings factor for the number of years until you retire.

Preretirement Annual Savings Factors

Years till Retire	Savings Factors for Various Real Returns								
	8.0%	7.0%	6.0%	5.0%	4.0%	3.0%	2.0%	1.0%	0.0%
1	1.04	1.04	1.03	1.03	1.02	1.02	1.01	1.01	1.00
2	2.16	2.14	2.12	2.10	2.08	2.06	2.04	2.02	2.00
4	4.69	4.60	4.51	4.42	4.33	4.25	4.16	4.08	4.00
6	7.63	7.40	7.18	6.97	6.77	6.57	6.37	6.18	6.00
8	11.1	10.6	10.2	9.79	9.40	9.03	8.67	8.33	8.00
10	15.1	14.3	13.6	12.9	12.2	11.6	11.1	10.5	10.0
12	19.7	18.5	17.4	16.3	15.3	14.4	13.5	12.7	12.0
14	25.2	23.3	21.6	20.1	18.7	17.3	16.1	15.0	14.0
16	31.5	28.9	26.4	24.2	22.3	20.5	18.8	17.3	16.0
18	38.9	35.2	31.8	28.8	26.2	23.8	21.6	19.7	18.0
20	47.6	42.4	37.9	33.9	30.4	27.3	24.5	22.1	20.0
22	57.7	50.7	44.7	39.5	34.9	31.0	27.6	24.6	22.0
24	69.4	60.2	52.3	45.6	39.9	34.9	30.7	27.1	24.0
26	83.2	71.1	60.9	52.4	45.2	39.1	34.0	29.7	26.0
28	99.2	83.5	70.6	59.9	51.0	43.6	37.4	32.3	28.0
30	118	97.8	81.4	68.1	57.2	48.3	41.0	35.0	30.0
32	140	114	93.6	77.2	64.0	53.3	44.7	37.7	32.0
34	165	133	107	87.2	71.3	58.6	48.5	40.5	34.0
36	195	154	123	98.2	79.2	64.2	52.5	43.3	36.0
38	229	179	140	110	87.7	70.2	56.7	46.2	38.0
40	269	207	159	124	96.9	76.5	61.0	49.1	40.0
42	316	239	181	139	107	83.3	65.5	52.1	42.0
44	371	275	206	155	118	90.4	70.2	55.2	44.0
46	435	317	233	173	129	97.9	75.1	58.3	46.0
48	510	366	264	193	142	106	80.1	61.5	48.0
50	597	421	299	215	156	114	85.4	64.8	50.0

FIGURE 5.19 Select a real return for preretirement investments. Then find the annual savings factor for the number of years until you retire.

Engaging the Autopilot After the first year, you need to review complete figure 5.20 every year.

Figure 5.20

Autopilot Adjustments (Figure 5.20)

- All entries should be before-tax values
- All entries should be in todays dollar values

Line	Item	Value	Comments
29	This Years Percent Increase	12.8%	Results from 28 of this Years Analysis
30	Last Years Percent Increase	16.8%	Results from Step 28 of Last Years Analysis
31	Last Years Damper	12.6%	If Step 29 is less than Step 30, Enter 75% of Step 30; Otherwise Enter 0
32	This Years Damper	3.2%	If Step 29 is less than Step 30, Enter 25% of Step 29; Otherwise Enter 0
33	Average Damper	15.8%	Add Step 32 to Step 31
34	**This Years Change in Savings**	**15.8%**	If Step 29 is Less Than Step 30, Enter Step 33 here; Otherwise Enter Step 29

- Line 29: This Years Percent Increase – Figure 5.15 Percent Savings Increase (Line 28) for this years calculation.
- Line 30: Last Years Percent Increase – Figure 5.15 Percent Savings Increase (Line 28) from last years calculation.
- Line 31: Last Years Damper – Calculation; If This Years Percent Increase (Line 29) is less than Last Years Percent Increase (Line 30), Enter 75% of Last Years Percent Increase (Line 30); otherwise enter 0.
- Line 32: This Years Damper – Calculation; If This Years Percent Increase (Line 29) is less than Last Years Percent Increase (Line 30), Enter 25% of This Years Percent Increase (Line 29); otherwise enter 0.
- Line 33: Average Damper – Calculation; Add Last Years Damper (Line 31) to This Years Damper (Line 32).
- Line 34: This Years Change in Savings – Calculation; If This years Percent Increase (Line 29) is less than Last Years Percent Increase (Line 30) enter Average Damper (Line 33); Otherwise enter This Years Percent Increase (Line 29). Remember this is the sum of the percentage that your employer contributes to your savings plan plus your own contributions.

There may be some times you might not want to utilize Figure 5.20 in determining how much to save but use Figure 5.15 instead. Examples of when this may be the case is you had made large changes in items other than investment balances.

If you find if you discover the Percent Savings Increase (Line 28) or This Years Change in Savings (Line 34) is beyond your capability, you may want to consider changing your retirement date, or seeing what expenses in retirement you might be able to eliminate.

The Preretirement Autopilot Benefits Figure 5.20 is where the autopilot is executed the various calculations involved are used to take feedback from last year and use it in coordination with this years results to provide a smother glide path to meeting your retirement goals.

Gate 5: Just before Retirement

When you are three to five years from retirement, the best thing you can do is to complete chapter 6 to determine your budget in retirement and see if you can live within this budget. While you may not have all of the same expenses that you have while working, in retirement you will likely have new expenses (such as travel and medical) that will offset these.

How Can I Improve My retirement Benefits? There are three ways to improve your retirement benefits:

- Work Longer – This will increase your Social Security benefits, savings, pension (if you have one) and decrease the number of years you will need to fund your retirement.
- Save more each year – If you can afford to this option, it may be the most attractive since you may still be able to retire at the age you had hoped.
- Invest more aggressively and wisely – This is the least desirable option since the more aggressive your investments, the more at-risk they will be, and a sudden downturn of the market can actually exasperate the situation, this is why wisely is a key term here and also why this approach is best to be considered if you are ten to fifteen years away from retirement.

Example scenarios of these approaches with the following details:
50 year old couple with $100,000 in investments, saving $10,000/year (adjusted for inflation) who want to take out $20,000/year (adjusted for inflation) in retirement starting at age 65. We also assume they are in a 20% tax bracket, pay 1% fee for stocks, 0.5% for bonds, and 0.3% for money markets.

The following scenarios had they made these changes 15 years prior to retirement (note, your mileage may vary):

- Figure 5.22: Saving more money – Adding an extra $5,000/year prior to retirement allowed there retirement funds to last an extra 8 years.
- Figure 5.23: Investing more aggressively – It is important to remember in this scenario, the results are quite dependent on how the market behaves, in this example retirement funs lasted an extra 5 years for a Moderate investment approach, and an extra 10 years for an aggressive approach.
- Figure 5.24: Retiring Later – Here we see the impact of delaying retirement and extra 3 years funds last an extra 5 years, and working an extra 6 years the funs last an extra 10 years.
- Figure 5.25: Combination of all three – By combining all three funds can last much longer.

Figures 5.22 – 5.25

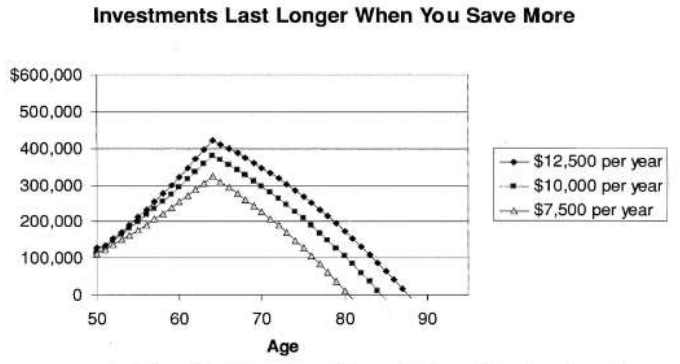


FIGURE 5.22 Inflation-adjusted investment balances for three different savings rates.

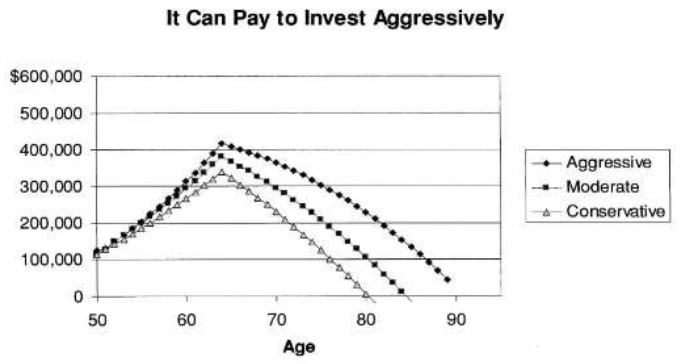


FIGURE 5.23 Inflation-adjusted investment balances for different investment portfolios.

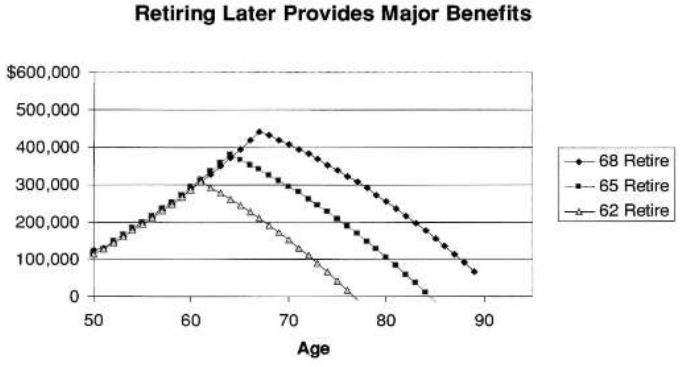


FIGURE 5.24 Inflation-adjusted investment balances for retirement at different ages.

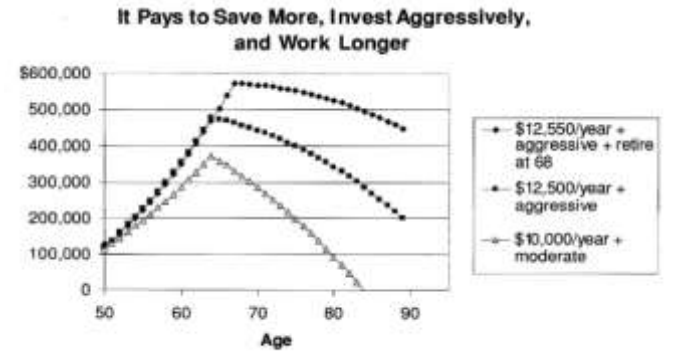


FIGURE 5.25 Investments last much longer by combining extra savings, being more aggressive, and retiring later.

Other adjustments that should be considered include:

- Avoid High Fees – Try to stay away from high cost investments and minimalize management fees.
- Allocation – Make sure you have the proper investments in the proper vehicles.
- Roth IRA – Hebeler suggest these for younger people, but the benefits of a Roth account increase the longer the account is un-tapped, so if you don't plan on accessing funds from a Roth for at least ten years these may be a great option to consider. Additionally, Roth accounts have much less restrictions than other vehicles, and can play a key role in litigating taxes in retirement.

- High Tax Brackets – If you expect you may be in a high tax bracket when you retire, consider converting some of your retirement accounts to a Roth and placing investments with significant long-term gain potential in accounts outside of deferred tax accounts.

Fine-Tuning your Retirement Date

Use Figure 2.26 to calculate scenarios for retiring at different ages. The final value from these calculations Total Retirement Income (Line 20) represents pre-tax amount of your annual retirement budge.

Figure 5.26

Retirement Income If Retire at Different Ages (Figure 5.26)

Line	Item	Age	Age	Age	Comments
1	**Retirement Age**				
2	Years Until You Retire				
3	Social Security* and COLA Pension				
4	Spouse Social Security* and COLA Pension				
5	Fixed Pensions				See Line 5 instructions
6	Fixed Pension Factor				Use Figure 5.16 step 1
7	Adjusted Pension				Line 5 times Line 6
8	**Preretirement Stock Percent**				% stock in investments before retirement
8a	Preretirement Stock Return				Expected real return (Fig 4.5 less 1%)
9	Preretirement Savings Factor				Factor from Figure 5.18 using values closest to Step 2 and real return in Step 8a
10	Projected Investment Value				Current retirement investment balance times Step 9
11	Preretirement Savings Factor				Factor from Figure 5.19 using values closest to Steps 2 and 8
12	**Annual New Savings From Wages**				
13	Additional Accumulated Savings				Step 11 times Step 12
14	Retirement Beginning Balance				Step 10 Plus Step 13
15	Retirement Major Expenses				See instructions for tax adjustment
16	Remaining Retirement Balance				Step 14 minus Step 15
17	Postretirement Stock Percentage				Percent stock in investments after retirement and 1/2 real return. 0.5*(Figure 4.5 less 1%)
17a	Postretirement Stock Return				Factor from Figure 4.5
18	Postretirement Savings Factor				Factor from Figure 5.17 using values closest to Step 1 and Real Return in Step 17a
19	Retirement Income from Investments				Step 16 divided by Step 18
20	**Total Retirement Income**				Sum of Steps 3,4,7 and 19 (Results are in todays dollars)

- Line 01: Retirement Age – Age you will retire.
- Line 02: Years Until You Retire – Number of years between now and when you will retire.
- Line 03: Social Security* and COLA Pension – If retiring before 62, reduce age 62 Social Security by 3.6% for each year retirement will be under 62.
- Line 04: Spouse Social Security* and COLA Pension – If retiring before 62, reduce age 62 Social Security by 3.6% for each year retirement will be under 62.
- Line 05: Fixed Pension – It is best to get an estimate from your employer for these values, but if you are unable to get that you can use this formula as an estimate:

$$Pension = \frac{(Annual\ pension\ at\ X\ years\ of\ service) * (Y\ years\ of\ service)}{(X\ years\ of\ Service)}$$

  Remember to include the difference in pension offers for early retirement between the alternatives in the Fixed Pension (Line 05).
- Line 06: Fixed Pension Factor – Check if (1) you can start fixed pension payments in the year you retire (2) if your employer did not assume any wage increases when calculating the expected value of your pension. If either of these things is not true, or you are uncertain, the simplest thing to do is to multiply your employer's estimate times a factor from Figure 2.6 using the 3% column and the number of years until you will collect the payments.
- Line 07: Adjusted Pension – Calculation; Line 5 times Line 6.
- Line 08: Preretirement Stock Percent – Percentage of your preretirement portfolio in Stocks or stock like investments.
- Line 08a: Preretirement Stock Return – Using Preretirement Stock Percent (Line 08), obtain an estimate of real return on your pre-retirement investments based on allocation of stocks in your portfolio using Figure 4.5 and subtracting one from it(for fees).
- Line 09: Preretirement Savings Factor – Lookup; Utilize Figure 5.18 with values closet to Years Until You Retire (Line 02) and Preretirement Stock Return (Line 08a) to obtain this value.
- Line 10: Projected Investment Value – The current value of your investments for retirement multiplied by the Preretirement Savings Factor (Line 09). This is the amount of money targeted for retirement funds, so if you plan on spending some of this for a large preretirement expenses you should not include that in the estimate. *Remember to include any Lump Sum early retirement offers on this line.*
- Line 11: Preretirement Savings Factor – Lookup; Use Figure 5.19 and values closest to Years Until You Retire (Line 02) and Preretirement Stock Return (Line 08a) to obtain this value.
- Line 12: Annual New Savings From Wages – Any additional savings from your wages you would like to increase to fund retirement.
- Line 13: Additional Accumulated Savings – Calculation; Preretirement Savings Factor (Line 11) times Annual New Savings From Wages (Line 12).
- Line 14: Retirement Beginning Balance – Calculation; Projected Investment Value (Line 10) plus Additional Accumulated Savings (Line 13).
- Line 15: Retirement Major Expenses – Retirement expenses that are not included in your normal annual expenses such as a vacation home, cars, etc. in todays value. Total the estimated value at todays prices, then divide by (1.00 minus your income tax rate expressed as a decimal).

$$(Retirement\ Major\ Expenses) = \frac{(Sum\ of\ all\ Major\ Expenses)}{(1.00 - (TaxRate\ as\ Decimal))}$$

- Line 16: Remaining Retirement Balance – Calculation; Retirement Beginning Balance (Line 14) minus Retirement Major Expenses (Line 15).
- Line 17: Postretirement Stock Percentage – The amount of your portfolio that will be in Stocks in your retirement.
- Line 17a: Postretirement Stock Return – Lookup; – Using Postretirement Stock Percent (Line 17), obtain an estimate of real return on your pre-retirement investments based on allocation of stocks in your portfolio using Figure 4.5 and subtracting one from it(for fees) then multiply by 0.5.

- Line 18: Postretirement Savings Factor - Lookup; Utilize Figure 5.17 with values closet to Retirement Age (Line 01) and Postretirement Stock Return (Line 17a) to obtain this value.
- Line 19: Retirement Income from Investments – Calculation; Remaining Retirement Balance (Line 16) divided by Postretirement Savings Factor (Line 18).
- Line 20: Total Retirement Income – Calculation; Estimated annual retirement income. Social Security and COLA Pension (Line 03) plus Spouse Social Security and COLA Pension (Line 04) plus Adjusted Pension (Line 07) plus Retirement income from Investments (Line 19).

Are You Faced with an Early Retirement Decision?

Periodically companies may offer early retirement packages if they are trying to downsize. Besides the financial aspect that we will be calculating here, there are many other factors to consider in making this decision. Some of which include:

- If you don't take the offer might the company end up laying you off anyway?
- If you get a job at another company, the benefits may not be as good as the pay and benefits where you are currently employed.
- Once you start getting Social Security additional work may reduce the Social Security benefit or even wiped out entirely until you stop working.
- If you decide to retire, do you have hobbies or other things lined up to occupy your time?

The process and instructions of completing Figure 5.27 is the almost identical with Figure 5.26 with the two exceptions; First you must reflect the difference in the pension offers between the three alternatives in Line 05. Second if a Lump Sum is offered, that will be identified in Line 10.

Figure 5.27

Evaluating an Early Retirement Offer (Figure 5.27)

Line	Item	Cases			Comments
		Accept & Retire	**Reject & Stay**	**Accept & New Job**	
1	**Retirement Age**	58	62	62	
2	Years Until You Retire	0	4	4	
3	Social Security* and COLA Pension	$9,300	$11,000	$11,000	
4	Spouse Social Security* and COLA Pension	$3,500	$4,100	$4,100	
5	***Fixed Pensions**	$14,000	$16,000	$14,000	See Line 5 instructions to adjust for Offer
6	Fixed Pension Factor	0.50	0.54	0.54	Use Figure 5.16 step 1
7	Adjusted Pension	$7,000	$8,640	$7,560	Line 5 times Line 6
8	**Preretirement Stock Percent**	50%	50%	50.0%	% stock in investments before retirement
8a	Preretirement Stock Return	3.4%	3.4%	3.4%	Expected real return (Fig 4.5 less 1%)
9	Preretirement Savings Factor	1.00	1.13	1.13	Factor from Figure 5.18 using values closest to Step 2 and real return in Step 8a
10	***Projected Investment Value**	$230,000	$226,000	$259,900	Current retirement investment balance times Step 9. Include Lump Sum Offer
11	Preretirement Savings Factor	1.00	4.25	4.25	Factor from Figure 5.19 using values closest to Steps 2 and 8
12	**Annual New Savings From Wages**	$0	$7,500	$0	
13	Additional Accumulated Savings	$0	$31,875	$0	Step 11 times Step 12
14	Retirement Beginning Balance	$230,000	$257,875	$259,900	Step 10 Plus Step 13
15	Retirement Major Expenses	$40,000	$40,000	$40,000	See instructions for tax adjustment
16	Remaining Retirement Balance	$190,000	$217,875	$219,900	Step 14 minus Step 15
17	Postretirement Stock Percentage	50%	50%	50.0%	Percent stock in investments after retirement and 1/2 real return. 0.5*(Figure 4.5 less 1%)
17a	Postretirement Stock Return	1.70%	1.70%	1.70%	Factor from Figure 4.5
18	Postretirement Savings Factor	25.10	22.80	22.80	Factor from Figure 5.17 using values closest to Step 1 and Real Return in Step 17a
19	Retirement Income from Investments	$7,570	$9,556	$9,645	Step 16 divided by Step 18
20	**Total Retirement Income**	**$27,370**	**$33,296**	**$32,305**	Sum of Steps 3,4,7 and 19 (Results are in todays dollars)

- Line 01: Retirement Age – Age you will retire.
- Line 02: Years Until You Retire – Number of years between now and when you will retire.
- Line 03: Social Security* and COLA Pension – If retiring before 62, reduce age 62 Social Security by 3.6% for each year retirement will be under 62.
- Line 04: Spouse Social Security* and COLA Pension – If retiring before 62, reduce age 62 Social Security by 3.6% for each year retirement will be under 62.
- Line 05: Fixed Pension – It is best to get an estimate from your employer for these values, but if you are unable to get that you can use this formula as an estimate:

$$Pension = \frac{(Annual\ pension\ at\ X\ years\ of\ service) * (Y\ years\ of\ service)}{(X\ years\ of\ Service)}$$

  Line 06: Fixed Pension Factor – Check if (1) you can start fixed pension payments in the year you retire (2) if your employer did not assume any wage increases when calculating the expected value of your pension. If either of these things is not true, or you are uncertain, the simplest thing to do is to multiply your employer's estimate times a factor from Figure 2.6 using the 3% column and the number of years until you will collect the payments.
- Line 07: Adjusted Pension – Calculation; Line 5 times Line 6.
- Line 08: Preretirement Stock Percent – Percentage of your preretirement portfolio in Stocks or stock like investments.
- Line 08a: Preretirement Stock Return – Using Preretirement Stock Percent (Line 08), obtain an estimate of real return on your pre-retirement investments based on allocation of stocks in your portfolio using Figure 4.5 and subtracting one from it(for fees).
- Line 09: Preretirement Savings Factor – Lookup; Utilize Figure 5.18 with values closet to Years Until You Retire (Line 02) and Preretirement Stock Return (Line 08a) to obtain this value.
- Line 10: Projected Investment Value – The current value of your investments for retirement multiplied by the Preretirement Savings Factor (Line 09). This is the amount of money targeted for retirement funds, so if you plan on spending some of this for a large preretirement expenses you should not include that in the estimate.
- Line 11: Preretirement Savings Factor – Lookup; Use Figure 5.19 and values closest to Years Until You Retire (Line 02) and Preretirement Stock Return (Line 08a) to obtain this value.
- Line 12: Annual New Savings From Wages – Any additional savings from your wages you would like to increase to fund retirement.
- Line 13: Additional Accumulated Savings – Calculation; Preretirement Savings Factor (Line 11) times Annual New Savings From Wages (Line 12).
- Line 14: Retirement Beginning Balance – Calculation; Projected Investment Value (Line 10) plus Additional Accumulated Savings (Line 13).
- Line 15: Retirement Major Expenses – Retirement expenses that are not included in your normal annual expenses such as a vacation home, cars, etc. in todays value. Total the estimated value at todays prices, then divide by (1.00 minus your income tax rate expressed as a decimal).

$$(Retirement\ Major\ Expenses) = \frac{(Sum\ of\ all\ Major\ Expenses)}{(1.00 - (TaxRate\ as\ Decimal))}$$

- Line 16: Remaining Retirement Balance – Calculation; Retirement Beginning Balance (Line 14) minus Retirement Major Expenses (Line 15).
- Line 17: Postretirement Stock Percentage – The amount of your portfolio that will be in Stocks in your retirement.
- Line 17a: Postretirement Stock Return – Lookup; – Using Postretirement Stock Percent (Line 17), obtain an estimate of real return on your pre-retirement investments based on allocation of stocks in your portfolio using Figure 4.5 and subtracting one from it(for fees) then multiply by 0.5.
- Line 18: Postretirement Savings Factor - Lookup; Utilize Figure 5.17 with values closet to Retirement Age (Line 01) and Postretirement Stock Return (Line 17a) to obtain this value.

- Line 19: Retirement Income from Investments – Calculation; Remaining Retirement Balance (Line 16) divided by Postretirement Savings Factor (Line 18).
- Line 20: Total Retirement Income – Calculation; Estimated annual retirement income. Social Security and COLA Pension (Line 03) plus Spouse Social Security and COLA Pension (Line 04) plus Adjusted Pension (Line 07) plus Retirement income from Investments (Line 19).

Mum's the Word! Don't be too hasty about telling people (including your employer) that you are considering retiring soon. You should go over your plan with an accountant or professional planner to get another view. Also give serious consideration to nonfinancial matters such as the use of your time in retirement.

Chapter Closing Thoughts

If you are yet to retire and you have completed the appropriate worksheets in this chapter you should have a real good idea of what kind of lifestyle you can expect in retirement. Remember as you get closer to retirement required savings may fluxgate to reflect market conditions, this is why it is critical to update these every year. Luckily the Autopilot method helps damper the magnitude of these swings in required savings as you approach retirement.