Is Retirement Obsolete?

I. Changing Definition of Retirement:

People view retirement with different expectations and circumstances depending on their financial, psychological, and social status. Because retirement means that one's primary source of income will no longer be their earned salary having enough money to retire, being ready to leave one's occupation, and the importance of that position to one's self image, all contribute to when and if someone retires.

Nationwide studies show that 50%, over the age of 65, look forward to retirement, 50% do not.

Retirement was institutionalized when Social Security legislation established the right to financial protection in old age. Because of increases in life expectancy, retirement has become an expected part of the life course.

Retirement age:

A. The age of 65 for retirement was adopted in 1935 (Do you remember where age 65 for retirement was first established?) and reflected the point in time when most people were experiencing some health or functional problems. However, because of longer life expectancies today, as you have seen in response to longevity the full retirement age is increasing gradually until it reaches age 67. Today people are healthier and live longer, so the age of 65 does not have the same meaning.

Most people are physically able to work longer. However some laborers, minorities or low income people may find that a shorter life expectancy and hard labor might create a hardship to work longer.

Today, for the average American, given longevity, the age of 70 or 75 is more equivalent to what age 65 was in 1930.

But as we saw before, many choose to leave the work force earlier than this. Especially if they are financially able to do so.
Did You Know: Life expectancy at the turn of the 20th century was approximately 49 years at birth and about 12 years for those age 60. Workers continued to work for as long as they were able.

In recent years, the U.S has seen a decline in the retirement age. The age of retirement has decreased by ten years during the last 30-50 years. For example,

1. 1950 the labor participation rate declined for men at ages 60-64.
2. In 1960 the decline started at ages 55-59.
3. 1980 decline started at age 50-54.

Because the Boomers are not saving for retirement this trend is changing and the age of retirement is again rising.

I. Sources of Income After Retirement

At the turn of the twentieth century, about 70% of older men remained in the labor force throughout their lives. However, their wages dropped sharply after age 55....if they lived that long.

Today in early and middle adulthood, income security is based mainly on earnings from employment, with income from assets playing a minor role for most people (assets such as savings, investments, pension plans, inheritances, etc).

Traditionally income in late life comes from 3 forms. Economists refer to it as the three-leg-stool.

- Social Security
- employer pensions
- savings (including home equity)

Retirement income is tied to one’s earnings and the time spent in the workplace. That means the longer you work and the more you make, the larger your employer sponsored pensions and Social Security benefits will be (and thus your three legged stool).

1. How to decide when to retire?

It would seem that the term work and retirement are clearly dichotomous and that it would be easy to determine who is retired and who is not. But that is not the case. It is sometimes very difficult to know when a person is retired and when he/she is not.

It is a misconception that retirement is a one-time event that permanently ends a person’s participation in the work force.

Many retirees take part-time or part-year jobs. Others develop another career after retiring from their primary occupation (i.e. military personnel, teachers who become consultants after retirement, or in my case I retired from public health to enter the field of teaching).
Do you know the Cost of Credit? If you are new at the credit game or just want more information you might want to check out these two sites.

- The Cost of Credit
  http://www.federalreserve.gov/creditcard/
- Credit Card Calculator
  http://www.bankrate.com/brm/calculators/credit-cards.asp

A. The under retired

A person may leave or be laid off expecting to retire but then need to return for income related reasons. In the 1970's, when interest rates were high, many retirees had adequate income based on the income received from their investments. When interest rates fell, so did their retirement income.

Others may have no income from previous jobs and can not find recreational activities or avocations (pleasurable activity, or hobby) that they can afford to participate in.

These are the under retired. Retired without adequate income.

II. Preparing For Retirement:

1. We often identify who we are by our jobs titles. When people are introduced they usually describe themselves by their occupations. This gives us some insight into their status, education, income, and position in society. When a person retires, they lose this role and many times the associated status. Many retirees go through a role transition when leaving work and entering retirement.

Recall the roles you play in life. Which ones will you give up when you retire?

A. When making the decision to leave a job it is important to bear in mind some personal and family considerations. Such as:

- your health (some retire earlier than anticipated because of poor health)
- anticipated finances (is your three-legged stool in place)
- work values (is your self worth tied to your job title?)
- job satisfaction/work history (perhaps your work is physically demanding, or boring)
- family preferences and support for retirement (a spouse who wants to travel, or perhaps is not looking forward to having a retiree under foot).
• long range plans (such as a major move or career change).

B. Additionally, you need to consider factors associated with your present employment. Such as:

• Financial incentives, including the size of your pension now-- versus waiting a few more years,
  vesting, bonus years, gap insurance and portability (can you take your benefits with you).
• Current job stress and flexibility
• The company's retirement policy (age or years worked requirements)

C. Retirement decisions are also impacted by governmental considerations. One must consider:

• public retirement benefits (age requirements, eligibility for benefits, benefit levels, penalties for employment, COLA’s (cost of living allowances) taxes on benefits and survivor’s benefits
• IRA (or individual retirement) accounts and possible tax savings (at what age can you withdraw funds without penalties)
• your perception of government programs vs. the reality (many people think Medicare will pay all of their medical costs)
• mandatory retirement rules (for example public servants can serve only a specified number of terms)

D. In addition to these considerations, it is difficult to calculate exactly when a person has sufficient income to retire.

The needed amount depends on several factors.

• life expectancy (how many years must you plan for)
• level of living (the standard you desire)
• rate of inflation (what will your money be worth when you retire)
• extent of savings or investments
• percentage income investments earned (I'll explain this later)
• changes that occur in expenditures in retirement

Studies show that only 16 % of employed people feel well prepared for retirement.

U. S News and World Reports, (Hey Big Spender, May 24,1999) reports that Boomers are spending like they were millionaires.

Accustomed to growing up with credit, they have created the history’s first mass market for luxury goods. Big screen TV’s and whirlpool baths have moved from the exotic to the commonplace. New custom homes are constructed on a mass-market scale and the concept of the master bedroom has evolved into the master suite. Next time you watch an old movie, look at the furnishings, cars and luxuries of families of the 30’s, 40’s and 50’s. Its really an eye opener.

Are the Boomers saving enough for retirement?
The three legged stool

1. Social Security

Most people don’t have a good idea of how their social security benefits will be figured upon retirement. You should have an earning’s statement and your estimates of benefits. If you don’t, you can request a copy from the Social Security web site.

For this week’s web assignment you will need to estimate your benefits. Recall the minimum and maximum payments for Social Security and estimate your benefits (remember you will be college educated and earning more money after graduation).

2. Company Pensions- pensions funded by your employer or jointly by employee and employer come in two varieties. (for a more detailed discussion of this refer to "Pensions" under the Basic Concepts II section of the text).

   1. defined benefit
   2. defined contribution

And recently a new type called cash balance plans.

   1. Defined benefit plans were devised in a bygone age when workers joined a company out of school and stayed with it until they were ready to retire.

      • These plans provide tiny benefits for short-term employees but rapidly accelerated benefits after an employee has been with the company for 20, 30 or more years.

      • The plans promise a specified level of pension income in return for a certain number of years of service.

      • Long term employees get an annual pension, not a lump sum as with other plans. The pension amount is usually 1% of their average pay multiplied by the number of years they worked for the company.

But 30 year employees have become rare in this era of corporate downsizing. Experts say that nowadays only one worker out of nine stays with a single company that long.

Most workers jump from job to job and are likely to work (on the average) for half-a-dozen employers in the course of their careers.

According to Newsweek (Why It Pays to Quit, Nov1, 1999) employees can gain larger raises by leaving companies every 18 months to negotiate a larger salary somewhere else. It seems that employers are cheap on the raises and bonuses but because they are eager to attract new employees will offer salaries 10% higher or more than the last employer paid.

   2. Defined Contribution- These plans do not guarantee a level of income or benefits.
Employers and or employees, or both, contribute to the plan and funds are invested. Income varies according to how successful the investments are. Examples are 401K's or 403B's.

3. Today, companies that are eager to attract talented young workers have adopted the cash balance plan. In a typical cash-balance plan a company will contribute an amount (equal to perhaps 6% of an employee's salary) to a pension account each year. The employer will invest the money (unlike defined contribution plans, cash balance plans do not permit employees to make investment decisions).

Regardless of the performance the company will guarantee that the money in the employees account will appreciate, by a certain minimum percentage, typically 5%.

Upon leaving employees walk away with whatever cash has built up in the account. There is no need to wait until age 50 or older to begin collecting benefits.

RETIREMENT: You're On Your Own

About two-thirds of workers are employed by a company sponsoring a pension plan. But only 55% of those workers participate in a plan. There are 100 million Americans enrolled in private pension plans: 42 million in defined benefit programs and 58 million in defined contribution plans (1998 figures). Those in defined benefit programs have remained level, while growth has come mainly in defined contribution plans. For websites on the questions "Is Retirement Obsolete?" visit:

http://www.pineforge.com/moody6study/study/index.htm  (Moody, Teaching Gerontology Newsletter, 6/03)

IV. Calculating Retirement:

1. As you have seen, one can be presented with many unknowns in the financial aspects of retirement:

   - how much money you will need to retire:
   - you don't know exactly how long you will live
   - you don't know what your salary will be and for how long
   - you don't know how expensive retirement will be
   - you don't know your exact age of retirement
   - you can't predict inflation
   - you don't know how rapidly your assets will grow
Yet, like 77 million people born between 1946 and 1964 who will reach full retirement age in 2011 these questions have to be addressed.

An important question for many is "will I have enough money to pay the bills once I retire"? And not many, don't know how much they should be saving.

Calculating your target figure for retirement is not the daunting job it used to be. There are computer programs that will figure in variables such as inflation and taxes, or you can hire an accountant or financial planner to run the numbers for you.

With just a few numbers You can also approach the task yourself and recalculate as the years past. We are going to calculate your retirement needs in this week's web assignment.

The old school of planning says you will need 70-80% of your pre retirement income when you retire. It was believed that because work related expenses will decrease (along with housing, child rearing, and clothing expenses) one did not require as much income after retirement.  Because of longevity, however, many experts are suggesting 100% of pre retirement income as a goal. This is because medical related expenses and housing repairs can be costly given that many people are living into the 8th, 9th, and even 10th decades of life while aging in place.

**NOTE: we are going to actually calculate an example. This process will be easier for you if have a printed version of the next 4 pages so tables are easily available.**

V. The Major Steps To Calculate Retirement Are:

1. Project your expense
2. Add up your anticipated income
3. Figure out how much savings you will need

**STEP 1. Project your expenses:**

You can start by reviewing your current expenses. One way is to get together your checking account and credit card statements for the past 12 months and list your expenses. Organize those outlays by category and list them.

There are work sheets (budgeting sheets) to help you organize this. If you use a search engine and key terms like budget sheets you will find lots of them.

Typical categories include auto, clothing, food, home maintenance, insurance, medical, recreations, taxes, travel, utilities, and other.

I find this job daunting and have found an alternative. Add up the amount of money it takes for you to live comfortably. If are spending your current income subtract what you have saved or used to support children or parents from what
you earn. That amount is what you are spending to support your current lifestyle.

Remember some costs will rise while some go down. Work related cost will go down while medical care and travel might go up.

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**STEP 2 Inflation factor:**

A dollar today won't be worth a dollar when you retire because of inflation. How much inflation?

You can estimate how inflation will affect your retirement needs by calculating your projected annual retirement expenses in today's dollar by an inflation factor.

The following table takes into account how many years you have until you retire and assumes an annual inflation rate of 3%. Historically, 3-5% inflation per year has been normal.

Follow the years until you expect to retire to obtain the inflation factor needed then multiply the inflation factor by the projected expenses you calculated in step 1

Inflation Factor Table

<table>
<thead>
<tr>
<th>Years Until Retire</th>
<th>Inflation Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1.16</td>
</tr>
<tr>
<td>10</td>
<td><strong>1.34</strong></td>
</tr>
<tr>
<td>15</td>
<td>1.56</td>
</tr>
<tr>
<td>20</td>
<td>1.81</td>
</tr>
<tr>
<td>25</td>
<td>2.09</td>
</tr>
<tr>
<td>30</td>
<td>2.43</td>
</tr>
<tr>
<td>35</td>
<td>2.81</td>
</tr>
</tbody>
</table>

Example: if you needed $56,250 and were going to retire in 10 years you would use an inflation factor of 1.34. Your needs adjusted for inflation are:
STEP 3  Add up all the income you anticipate upon retirement.

- How much will you receive from Social Security?
- Estimate pension benefits (your employer can help you with an estimate.)
- You might also consider if you will be working part-time after retirement. Many adults do.

STEP 4  How much savings will you need?

The next step is to determine the total number of dollars you will need to invest to generate enough retirement income.

This will depend on:

- the rate of return you can earn, (how much interest your savings will earn)
- how inflation will reduce the purchasing power of your investment income
- how long you will be retired.

This chart will show you how much money you’ll have to invest for each $10,000 of annual income your savings will have to produce until you die. So for example, if you retire at age 60 and are a woman you will need $106,445 in savings to create $10,00 per year until you die. Did you notice that the amount women need to save is larger than what men need to save? Do you know why? You can post your answer in the discussion area.

Annual Investment needed to produce $10,000 in savings income

<table>
<thead>
<tr>
<th>Age you Retire</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>$104,225</td>
<td>$112,699</td>
</tr>
<tr>
<td>60</td>
<td>96,279</td>
<td><strong>106,445</strong></td>
</tr>
<tr>
<td>65</td>
<td>86,468</td>
<td>98,424</td>
</tr>
<tr>
<td>70</td>
<td>75,570</td>
<td>88,355</td>
</tr>
</tbody>
</table>
This chart is based on the average life expectancies for men and women, assumes an 8% return on investments and assumes that all savings will be spent down by death. They are pre tax figures.

Although this might be a big number, there is some good news. Any money you save will grown between now and retirement because of **compound interest**. Compounding means that not only does the money you save earn interest, but the interest will earn interest. For example if you put $1.00 in an account that earns 10% interest, at the end of the year you will have earned $.10 for a total in your account of $1.10. The second year the 10% interest is calculated on $1.10 not $1.00. So the second year you earn $.11 instead of $.10. Each year interest is calculated on your investment plus any interest earned. You can estimate that growth factor with the following chart.

**How Much will you need to put aside each month**

Line up the number of years until retirement with the investment return you anticipate. Here is where you have to decide if your investments expect to earn a conservative, moderate or aggressive rate. This will depend on your comfort level with risk. Usually the higher the interest rate, the higher the risk. Safe, insured investments usually earn lower rates. The results is now much you will need to save each month to accumulate $10,000 in income by retirement.

<table>
<thead>
<tr>
<th>Number of years to retirement</th>
<th>Conservative annual return (5%)</th>
<th>Moderate annual return (8%)</th>
<th>Aggressive return (11%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>$146.44</td>
<td>135.20</td>
<td>124.62</td>
</tr>
<tr>
<td>10</td>
<td>64.14</td>
<td>54.30</td>
<td>45.67</td>
</tr>
<tr>
<td>15</td>
<td>37.26</td>
<td>28.71</td>
<td>21.80</td>
</tr>
<tr>
<td>20</td>
<td>24.23</td>
<td>16.86</td>
<td>11.45</td>
</tr>
<tr>
<td>25</td>
<td>16.73</td>
<td>10.45</td>
<td>6.29</td>
</tr>
<tr>
<td>30</td>
<td>11.97</td>
<td>6.67</td>
<td>3.54</td>
</tr>
<tr>
<td>35</td>
<td>8.77</td>
<td>4.33</td>
<td>2.02</td>
</tr>
</tbody>
</table>

**Example Using Chart**: If I plan on retiring in 20 years, at a conservative growth rate, I need to save $24.23 per month for each $10,000 in income I need when I retire.

Now Let's put it all together:
Retirement Calculation Example:

**STEP 1**

Lets suppose before retirement your income is $75,000 (for you and your spouse) and you have managed to save $50,000 in your 401K retirement account. Lets assume that you want to retire in 10 years.

Using the 70-80% rule you'll need $56,250 or 75% of your pre-retirement income when you retire. ($56,250 is 75% of $75,000)

\[
\begin{align*}
\text{75,000} \\
\times 0.75 \\
\hline
\text{56,250}
\end{align*}
\]

Or you can personalize your estimate by calculating your actual expenses.

**STEP 2**

We already calculate your needed income into tomorrow’s dollars using the Inflation Factor Table -- 1.34 (ten years) That gives you a projected annual retirement income need of $75,375.

\[
\begin{align*}
\text{56,250} \\
\times 1.34 \\
\hline
\text{75,375}
\end{align*}
\]

**STEP 3**

Lets say that you will receive around $27,600 a year from Social Security (hubby and wife) and another $17,000 from company pensions. That gives you a total of $44,600 in anticipated income.

\[
\begin{align*}
\text{27,600} \\
\text{17,000} \\
\text{44,600}
\end{align*}
\]

**STEP 4**

subtract your outside sources of income from your projected expenses.

\[
\begin{align*}
\text{75,375} \\
\text{44,600} \\
\hline
\text{30,775}
\end{align*}
\]

This is how much annual income your savings must generate to meet your remaining
expenses.

Since you need to generate $30,000 the Savings Chart must be multiplied by three (remember the chart calculates for each $10,000 of income you want to generate). So let's say in ten years you will be 65. Since you are a couple we must figure using the woman's factor since she statically will live longer.

Here's the chart again—Total amount needed to produce $10,000 in income

<table>
<thead>
<tr>
<th>Age you Retire</th>
<th>Amount needed to produce $10,000 in savings income</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>$104,225</td>
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<td>70</td>
<td>75,570</td>
</tr>
</tbody>
</table>

Age 65, woman = $98,424 x 3 (you need 30,000) = $295,272.00

Now that is a big number but compounding will cause this number to grow. So how much will you actually need to generate?

The $50,000 you have invested will grow in 10 years to around $108,000 (check the growth factor table in your chart) assuming 8% return.

So, your needed amount $295,272 minus your savings of $108,000, leaves a actual savings need of $187,272

Using the How Much to Put Aside Table will help you determine how much you must save each month to accumulate each $10,000 in savings you need.

Here's the monthly savings chart again.

<table>
<thead>
<tr>
<th>Number of years to retirement</th>
<th>Conservative annual return (5%)</th>
<th>Moderate annual return (8%)</th>
<th>Aggressive return (11%)</th>
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<td>124.62</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Because you need $187,272, you'll need 18.7 (I'm using 18 for ease of calculations) times $10,000 (actually 18.7 times)

\[
\begin{align*}
\text{\$10,000} \\
\times 18 \\
\text{\$180,000}
\end{align*}
\]

(actually you need $187,272 but we rounded off for the sake of discussion)

For a monthly figure:

$54.30 \times 18 \text{ or } \$977.40 \text{ per month. (refer to the above chart- do you see the } \$54.30 \text{ you need to save each month to earn } \$10,000 \text{ in ten years? Well you need 18 times this amount to generate } \$187,000$

If you have 20 years till retirement the factor is $16.86 \times 18 \text{ or } \$303.00 \text{ per month. So the sooner you start savings the more powerful compounding is and the less per month you must save.}$

Don't forget home equity. Many people may be able to raise considerable sums by trading down to a smaller home or reverse mortgages ( refer to week 9 if you have forgotten reverse mortgages. Here is the site to explain them. You can use their search engine or just the link below this one to go directly to a PDF file.

http://www.bc.edu/bc_org/avp/csom/executive/crr/

http://www.bc.edu/centers/crr/facts/jtf_3.pdf
If you were unable to follow this lecture, please post in the discussion area where you stopped tracking the demonstration. We will help each other understand this process. You will also be exposed to calculators that do this process for you in this week’s web assignment.

That’s it for this week. Be sure to check the assignment link for this weeks assignments.

Back to Assignment Link