FAPP 9e Writing Projects – Chapter 21

1. Plan your retirement. Decide on a retirement age and desired income (in today's dollars). Estimate yield on investments, inflation rate, and Social Security benefits. (*A few notes:* By the time of your retirement, a woman retiring in her mid-60s will likely live an average of 20 years more, a man 18 years more. Social Security income goes up with inflation. Annuities are available whose income grows to keep up with inflation. Various other financial products, such as a life annuity, can make sure that you don't outlive your retirement income. We discuss life annuities in Chapter 22. Also, do not neglect consideration of taxes and tax deferral of income, as considered in Exercises 41 – 44.) Write up your assumptions, justifications for them, calculations, and conclusions in three to four pages. Be sure to note any additional factors that you think should be taken into account but which your analysis does not include; don't be afraid to consider possibilities whose financial impact you can't calculate exactly.

2. Exercises 41 – 44 (p. 798) ask you to look at various forms of tax-deferred and ordinary savings and compare them on the basis of amount of tax-free income accumulation at age 65.

Ordinary savings have the important advantage that, at any time, you can do anything you want with the money accumulated so far (buy a car, put down money on a house, and so on). A second advantage is that the money is free and clear, in that taxes have already been paid on it.

A tax-deferred (e.g., IRA or 401(k)) retirement fund has the advantage of postponing taxation of the funds, but the disadvantage that if you withdraw funds before age 59½, you must pay income tax in the year of withdrawal and in addition a 10% penalty for "early withdrawal." (These plans were given the advantage of tax deferral to encourage individuals to save for retirement—hence the penalty for withdrawing the money earlier.)

A third option, the Roth IRA, has some of the advantages and disadvantages of each of the other plans.

Look into the details of the rules for 401(k) plans and Roth IRAs, compare your answers in Exercises 41 – 44, and devise and describe your own plan for how you will save for retirement. Your report should run two to three pages.

3. Should you stock up on "forever" stamps? In 2007 the U.S. Postal Service began selling such stamps, which will suffice for first-class postage at any time in the future, even when rates rise. These stamps cost $0.44 in early 2011. Would it be a good investment to buy a "lifetime supply" of them? To render your judgment, compare the historic increases postal rates (see http://www.vaughns-1-pagers.com/economics/postal-rates.htm) with the CPI (page 788). For example, you could convert postal rates at each of the dates of change to the cost in today's dollars, and then see if there appears to be a recent trend that you can project into the future.

4. Based on ticket sales and current dollars, the top-grossing domestic film of all time was *Avatar*, which earned $760,507,625 since release in 2009. But adjusted for inflation of ticket prices, *Gone with the Wind* (1939, plus re-releases) comes out on top at $1,606,254,800 in 2011 dollars (see boxofficemojo.com/alltime/adjusted.htm; the comparison, since it considers proceeds rather than audience share, does not take into account the larger population today compared to 1939). Use a spreadsheet to analyze how movie ticket prices have risen since 1913 compared to the CPI. The CPI data from Table 21.5 can be downloaded from data.bls.gov/cgi-bin/surveymost?cu. (Check the first box, click "Retrieve data," then in the next screen adjust the year "From" to 1913.) Find the data on movie ticket prices at boxofficemojo.com/about/adjuster.htm. Prepare a short report, with a graph. (Thanks to Martin Campbell for the idea.)

5. The federal minimum wage was set at $7.25 per hour starting July 24, 2009. Has the federal minimum wage kept pace with inflation? Use a spreadsheet to analyze how it has risen since 1938 compared to the CPI. The CPI data from Table 21.5 can be downloaded from http://data.bls.gov/cgi-bin/surveymost?cu. (Check the first box, click "Retrieve data," then in the next screen adjust the year "From" to 1938.) Find the data on federal minimum wage rates at www.dol.gov/esa/minwage/chart.htm. Prepare a short report, with a graph.

6. The assumptions in many of the exercises of this chapter of a constant interest rate, rate of return on an investment, or tax rates (as in Exercises 41 – 44) holding over a long period of time are simplifications that simply won't be true. Interest rates fluctuate (though you can lock in a long-term constant rate by buying a long term bond or certificate of deposit), and the tax rate may change (with your income, your state of residence, and changes in tax laws). If your marginal tax rate (the rate you pay on one additional dollar of income) is lower in one year than the tax rate you expect to pay in retirement, what kind of retirement investment is better for you that year? If you have a windfall one year and your marginal tax rate is higher that year than the tax rate that you expect to pay in retirement, what kind of retirement investment is better for you that year? How should you take the various factors into account as you make investment and savings decisions early in life versus later in life near retirement?