**Retirement Planning Project**

Name: Sydney Campama

***Analysis #1: Yourself***

***(1)***

Top 3 goals for retirement years. Try and ensure that your retirement goals build on what you have been doing during your working life. *Make sure your goals are SMART (specific, measurable, achievable, relevant, time-bound):*

|  |  |
| --- | --- |
| Example Goal | Work 15 hours per week mentoring young professionals in the financial planning industry. |
| Goal #1 | Travel once a year with my family. |
| Goal #2 | Volunteer for my church every Sunday as a greeter. |
| Goal #3 | Have my house paid off and be debt free before I retire and be financially stable to be able to leave money behind for my family when I am gone. |

***(2)***

Retirement Needs Analysis Assumptions. Assume you will begin your analysis five years from now when you are employed in your likely career.

|  |  |  |
| --- | --- | --- |
| **Assumption** | **Value** | **Analysis** |
| Age in 5 years | \_\_\_24\_\_ |  |
| Retirement Age | \_\_\_70\_\_ | *I would like to retire around the age of 70 because I would be able to boost my social security benefits and provide a good cushion for my family and I during retirement. When I retire, I don’t plan on stopping working right away, I would still like to volunteer or work to help people and provide assistance where I can.* |
| Expected last year of life | 92 | *My family history for the most part is overall healthy. On my mom’s side my great grandpa lived until he was 99 and my great grandma lived until she was 95. Both my grandma and my grandpa are alive on my mom’s side still and in good health. On my dad’s side, my great grandparents lived until they were in their late 80s. My grandpa had passed away this year due to Alzheimer’s Disease, but my grandma is still in good health.* |
| Expected wages in 5 years | $ 68,000 | *I want to become a Financial Planner. My goal is to be in this profession right out of college. I am graduating a semester early so I should be working by the time I am 21. I plan to work for at least a year and a half to two years before I take the CFP exam to get familiar with all the terms and calculations. I plan to stay in my hometown of Fresno, California because that is where most of my family lives. The average salary for a financial planner in Fresno makes around $68,000 annually. If Financial Planning doesn’t work out, I also got a minor in business analytics that could help me become a business analyst and deal more with trying to help the company improve their systems and make them more efficient. The average salary for that position is around $63,000.* |
| WRR (annuity model) | 70% | *I found out that I would live off of 70% of my salary.*  I used 68,000\* .70= 47,600. That number represents my year one replacement income. I used <https://www.thebalance.com/wage-replacement-ratio-2466500>  To help me calculate it. I would use this 70% and spend it on vacation, unexpected expenses, comfortable lifestyle, and savings. |
| Social Security benefit | $2400 | *Either estimate your benefit using* [*online calculator*](https://www.ssa.gov/OACT/quickcalc/)*. Use today’s dollars.* |
| Retirement current assets | $11,000 | *This is the money that I have currently in my savings account and my CD account.* |
| Inflation rate | 1.6% | *Research a long-term inflation rate (google the term, long-term inflation rate). Use a 2021 capital market assumptions document. Read articles online about the likely inflation rate going forward and cite your work*  <https://am.jpmorgan.com/content/dam/jpm-am-aem/global/en/insights/portfolio-insights/ltcma/ltcma-full-report.pdf> |
| Working life investment return | 9% | *Research an earnings rate. This will have to do with whether you will invest in aggressive, high-earning investments, or safe, low-earning, investments. The high range is 9-12%, the low range is 4-6%. Use a 2021 capital market assumptions document to justify your return. Please discuss how comfortable you would be seeing your retirement assets swing widely during market turbulence, and whether you could stomach that type of volatility (if so, then you should have a higher return assumption). Take more than one risk tolerance risk (see Retirement Portfolio lecture). Discuss the results of the two different risk tolerance quizzes and discuss how they inform you about how aggressive you should be invested in your retirement portfolio.*  They showed me that I should be more aggressive when I’m younger and the older I get the smarter I should be with my money. It also matters what you are putting your money into whether they are stable or volatile. |
| Retirement investment return | 9% | *Since most retirees invest primarily in bond funds during retirement, research the long-term return for bond mutual funds. Add 1-2% return to the return you find since some of the retirement assets will also be in the stock market earning a higher return. Use a 2021 capital market assumptions document. Cite your work.*  <https://www.bankrate.com/retirement/calculators/retirement-plan-calculator/> |
| Retirement wages | 12,000 | I plan to work at a coffee shop or a nursery when I retire to still make some income and keep me busy. |
| WORK BUDGET:  *PAYCHECK:*  *TAX %:*  *GIVING %:*  *SAVING %*  *HOUSING %:*  *LIVING %* | *100%*  *(25%)*  *(5%)*  *(10%)*  *(30%)*  *(30%)* | *Based on your deferral % above (not including employer match %), create a budget. Assume taxes are 25% of paycheck and housing is 30% of paycheck.* |
| Retirement plan contribution  IRA deferral % +  Employee deferral % +  Employer match %+  = Total saving % | 5%  5%  5%  15% | *For the 401kIRA model, use the saving % from above for the IRA/Employee deferral %, then add an employer match %. This total % will determine the amount that is contributed into your retirement plan during your working life.* |

***(3)***

Put all of the assumptions above in your retirement needs analysis model:

|  |  |  |  |
| --- | --- | --- | --- |
| **Base Case** | **Annuity Method** | **Capital Preservation** | **PPP Method** |
| Total Retirement Fund Needed (FV of Step 4) | $814,137.86 | $1,321,136.77 | $1,590,829.17 |
| Monthly savings (if number is positive, it is an excess that is available) | $68.92 | $60.35 | $55.79 |
| Savings rate required (if number is negative, it is an excess rate that is available) | 1% | 1% | 1% |

***(4)***

Put all of the assumptions above in the 401kIRA NPV model.

|  |  |
| --- | --- |
| **Base Case** | **Amount** |
| Total $ Deferral Amount for the first month | $850 |
| Retirement value on the last month before retirement begins | $8,911,480 |
| NPV | $44,924.74 |

***(5)***

Scenario Analysis:

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| **No Social Security** | **Annuity Method** | **Capital Pres** | **PPP** |
| Total Retirement Fund Needed (FV of Step 4) | $872,991.20 | $1,416,640.63 | $1,490,355.75 |

|  |  |
| --- | --- |
| **No Social Security** | **Amount** |
| NPV | $-201,844.55 |

*Bad Scenario: change a few of the assumptions to assume certain things happen to your career and the investment markets that are not ideal. It is up to you to determine what to change and by how much.*

***Bad Scenario:***

|  |  |  |
| --- | --- | --- |
| **Changed item** | **Original number** | **New number** |
| Salary Decrease | 68,000 | 50,000 |
| Inflation rate | 1.6% | 6.5% |

|  |  |  |  |
| --- | --- | --- | --- |
| **Bad Scenario** | **Annuity Method** | **Capital Pres** | **PPP** |
| Total Retirement Fund Needed (FV of Step 4) | 6,523,999.45 | 34,922,880.42 | 53,857,987.16 |
| Monthly savings (if number is positive, it is an excess that is available) | -27.62 | -507.77 | -827.91 |
| Savings rate required (if number is negative, it is an excess rate that is available) | -1% | -12% | -20% |

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| **Bad Scenario** | **Amount** |
| NPV | -1,363,470.86 |

*Great Scenario: change a few of the assumptions to assume certain things happen to your career and the investment markets that are ideal. It is up to you to determine what to change and by how much.*

***Great Scenario:***

|  |  |  |
| --- | --- | --- |
| **Changed item** | **Original number** | **New number** |
| Income Increase | 68,000 | 85,000 |
| Working life investment return | 9% | 11% |

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| --- | --- | --- | --- |
| **Great Scenario** | **Annuity Method** | **Capital Pres** | **PPP** |
| Monthly savings (if number is positive, it is an excess that is available) | 1,105,952.33 | 1,890,180.62 | 105,807,620.45 |
| Savings rate required (if number is negative, it is an excess rate that is available) | $94.97 | $90.77 | -465.68 |
| Savings rate required | 1% | 1% | -7% |

|  |  |
| --- | --- |
| **Good Scenario** | **Amount** |
| NPV | -2,172,594.42 |

**(5)**

What are you concluding thoughts about your overall analysis? Does saving for retirement seem possible for you? How will they ensure that this retirement planning process is honoring to the Lord, and not a grab at "building bigger barns" in order to not depend on the Lord's promise of provision?

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| --- |
| Overall my analysis about retirement is positive. Saving for retirement does seem possible for me and with the help of my husband and his income we will be able to save more quickly. One way that I can make sure that my retirement planning process is honoring to the Lord is by not being greedy and making sure that I am giving to my church. God will provide for me and make sure that I am taken care of. |

***Analysis #2: Another household who has children***

***(1)***

Top 3 goals for retirement years. *Make sure goals are SMART (specific, measurable, achievable, relevant, time-bound):*

|  |  |
| --- | --- |
| Example Goal | Work 20 hours per week as a volunteer hospital chaplain. |
| Goal #1 | Have college funds for her children and make sure they are financially taken care of when they are gone. |
| Goal #2 | Travel with her husband and kids annually. |
| Goal #3 | Be debt free and have rental properties that provide extra income. |

***(2)***

Retirement Needs Analysis Assumptions. Assume you will begin your analysis five years from now when you are employed in your likely career.

|  |  |  |
| --- | --- | --- |
| **Assumption** | **Value** | **Analysis** |
| Age in 5 years | \_\_30\_\_\_ |  |
| Retirement Age | \_\_57\_\_ | *She wants to retire at age 57 so she can have time to herself and be able to travel with her husband and kids. She also wants to be able to be in good health and have the time to do fun things and enjoy her life without having to work as much. Her and her husband have very busy schedules that don’t line up so it would be a nice break from them to spend more time together.* |
| Expected last year of life | \_\_92\_\_ | *Our family history for the most part is overall healthy. On our mom’s side my great grandpa lived until he was 99 and my great grandma lived until she was 95. Both of grandma and my grandpa are alive on our mom’s side still and in good health. On our dad’s side, our great grandparents lived until they were in their late 80s. Our grandpa had passed away this year due to Alzheimer’s Disease, but our grandma is still in good health.* |
| Expected wages in 5 years | $80,000 | *Currently she is a 1st grade teacher at a private Catholic school in San Jose. Her husband is in the CHP and was stationed in San Jose but they hope to end up in Fresno whenever he will be able to transfer. Until then, they are looking into Pismo Beach for the meantime to be close to family and live somewhere where it is cheaper. In 5 years she will be at the school over a couple of years with a lot of credits which would put her higher on the pay scale.* |
| WRR (annuity model) | 60% | Her reasoning behind it is her and her husband like to save more than they spend. She also has her husband’s salary that they can use. They would the 60% to help with housing, groceries, essentials, investing and other day to day expenses that they have to pay for. |
| Social Security benefit | $1200 | *Either estimate your benefit using* [*online calculator*](https://www.ssa.gov/OACT/quickcalc/)*. Use today’s dollars.* |
| Retirement current assets | $32,000 | *Any current savings you have for retirement. Where is it invested?*  They have their money invested in Fidelity. |
| Inflation rate | 1.6% | *Research a long-term inflation rate (google the term, long-term inflation rate). Use a 2021 capital market assumptions document. Read articles online about the likely inflation rate going forward and cite your work.*  <https://am.jpmorgan.com/content/dam/jpm-am-aem/global/en/insights/portfolio-insights/ltcma/ltcma-full-report.pdf> |
| Working life investment return | 10% | *Research an earnings rate. This will have to do with whether you will invest in aggressive, high-earning investments, or safe, low-earning, investments. The high range is 9-12%, the low range is 4-6%. Use a 2021 capital market assumptions document to justify your return. Please discuss how comfortable you would be seeing your retirement assets swing widely during market turbulence, and whether you could stomach that type of volatility (if so, then you should have a higher return assumption). Take more than one risk tolerance risk (see Retirement Portfolio lecture). Discuss the results of the two different risk tolerance quizzes and discuss how they inform you about how aggressive you should be invested in your retirement portfolio.*  Her and her husband are investing in the stock market and in fidelity at a pretty aggressive rate. |
| Retirement investment return | 9% | *Since most retirees invest primarily in bond funds during retirement, research the long-term return for bond mutual funds. Add 1-2% return to the return you find since some of the retirement assets will also be in the stock market earning a higher return. Use a 2021 capital market assumptions document. Cite your work.*  <https://www.bankrate.com/retirement/calculators/retirement-plan-calculator/> |
| Retirement wages | 3,500 | *Annual income that you may make during retirement if you are working part-time*.  She plans on subbing or getting small jobs here and there during retirement. |
| WORK BUDGET:  *PAYCHECK:*  *TAX %:*  *GIVING %:*  *SAVING %*  *HOUSING %:*  *LIVING %* | *100%*  *(25%)*  *(5%)*  *(20%)*  *(30%)*  *(20%)* | *Based on your deferral % above (not including employer match %), create a budget. Assume taxes are 25% of paycheck and housing is 30% of paycheck.* |
| Retirement plan contribution  IRA deferral % +  Employee deferral % +  Employer match %+  = Total saving % | \_\_\_5\_\_%  \_\_\_5\_\_%  \_\_\_5\_\_%  \_\_\_15\_\_% | *For the 401kIRA model, use the saving % from above for the IRA/Employee deferral %, then add an employer match %. This total % will determine the amount that is contributed into your retirement plan during your working life.* |

***(3)***

Put all of the assumptions above in your retirement needs analysis model:

|  |  |  |  |
| --- | --- | --- | --- |
| **Base Case** | **Annuity Method** | **Capital Preservation** | **PPP Method** |
| Total Retirement Fund Needed (FV of Step 4) | $1,953,904.98 | $1,999,661.51 | $2,131,742.86 |
| Monthly savings (if number is positive, it is an excess that is available) | $233.25 | $233.23 | $230.16 |
| Savings rate required (if number is negative, it is an excess rate that is available) | 3% | $3 | 3% |

***(4)***

Put all of the assumptions above in the 401kIRA NPV model.

|  |  |
| --- | --- |
| **Base Case** | **Amount** |
| Total $ Deferral Amount for the first month | $1,000 |
| Retirement value on the last month before retirement begins | $5,778,934 |
| NPV | $178,135.73 |

***(5)***

Scenario Analysis:

|  |  |  |  |
| --- | --- | --- | --- |
| **No Social Security** | **Annuity Method** | **Capital Pres** | **PPP** |
| Total Retirement Fund Needed (FV of Step 4) | $1,999,610.36 | $1,954,976.34 | 42,038,551.92 |

|  |  |
| --- | --- |
| **No Social Security** | **Amount** |
| NPV | -$68,633.56 |

*Bad Scenario: change a few of the assumptions to assume certain things happen to your career and the investment markets that are not ideal. It is up to you to determine what to change and by how much.*

***Bad Scenario:***

|  |  |  |
| --- | --- | --- |
| **Changed item** | **Original number** | **New number** |
| Salary decrease | 80,000 | 70,000 |
| Inflation rate | 1.6% | 6.5% |

|  |  |  |  |
| --- | --- | --- | --- |
| **Bad Scenario** | **Annuity Method** | **Capital Pres** | **PPP** |
| Total Retirement Fund Needed (FV of Step 4) | 72,030,127.92 | 54,485,432.02 | 77,876,560.53 |
| Monthly savings (if number is positive, it is an excess that is available) | -985.25 | -680.18 | -1,086.91 |
| Savings rate required (if number is negative, it is an excess rate that is available) | -17% | -12% | -19% |

|  |  |
| --- | --- |
| **Bad Scenario** | **Amount** |
| NPV | -1,745,224.94 |

*Great Scenario: change a few of the assumptions to assume certain things happen to your career and the investment markets that are ideal. It is up to you to determine what to change and by how much.*

***Great Scenario:***

|  |  |  |
| --- | --- | --- |
| **Changed item** | **Original number** | **New number** |
| Salary Increase | 80,000 | 95,000 |
| Working life investment return | 10% | 12% |

|  |  |  |  |
| --- | --- | --- | --- |
| **Great Scenario** | **Annuity Method** | **Capital Pres** | **PPP** |
| Monthly savings (if number is positive, it is an excess that is available) | 2,399,532.43 | 2,390,656.78 | 2,539,453.25 |
| Savings rate required (if number is negative, it is an excess rate that is available) | 305.56 | 305.62 | 304.71 |
| Savings rate required | 4% | 4% | 4% |

|  |  |
| --- | --- |
| **Good Scenario** | **Amount** |
| NPV | 115,255.42 |

**(5)**

What are you concluding thoughts about your overall analysis for your friend? Does saving for retirement seem possible for them? How will they ensure that this retirement planning process is honoring to the Lord, and not a grab at "building bigger barns" in order to not depend on the Lord's promise of provision?

|  |
| --- |
| They are in a good place preparing for retirement. They have a good chunk of savings and are investing into the stock market. They spend wisely and prefer to save overspending on unnecessary things. They will ensure that their retirement planning process is honoring to the Lord by continually giving to the church and making sure that they are not being too greedy with their possessions. They can plan for retirement while also relying on God to help them get through retirement. |