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Case

## You Can't Take It with You

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### Part I: Marsha

Marsha is very excited about her upcoming retirement. Lately, she has had difficulty concentrating on anything except her next vacation. She has worked long and hard for this day, sacrificing immediate gratifications for long-term satisfaction. She is finally a millionaire and plans to live like one when she retires! She is not going to go crazy spending money on extravagant things but plans to be the level-headed person she has always been and only spend what she needs to maintain her current lifestyle. Maggie, her best friend, suggests she develop a plan to look more closely at what she can withdraw on an annual basis before signing papers that will finalize her decision. Marsha agrees that it is a good idea and told Maggie she will begin working on it that night. Marsha reminds Maggie that her ultimate goal is to have a zero balance in her account when she dies. After all, you can't take it with you.

### Financial Plan

Marsha sits in front of her laptop with all her financial statements in front of her. The task at hand seems to be fairly straightforward. All she needs to do is add her cash inflows and subtract the outflows. Marsha's life is not very complicated. She never married or had children and enjoys life as a single woman traveling with friends. Her biggest responsibility is her little pug-terrier mix, Charlie, whom she absolutely adores. She owns her home and plans to live in it as long as she is able. Her plan is to spend most, if not all, of her nest egg before she dies. She believes she is in good health; therefore, she would like to ensure that she has funds to last her to the age of 90, which is three years beyond the projected age of 87 for a woman just turning 65 (Social Security Administration 2017a).

### Income

In retirement, Marsha will have three sources of income: Social Security, a modest pension, and interest from her investments. Social Security is the easiest of the three to predict. The annual report Marsha recently received from Social Security Administration stated she will receive approximately \$1,450 in monthly benefits, which is slightly above the expected average of \$1,368 (Social Security Administration 2017c). Marsha immediately translates this to mean that she will be able to live an above-average lifestyle—her dreams are looking good so far. The average cost-of-living adjustment granted by the Social Security office over the last 10 years is approximately 1.7% (Social Security Administration 2017b)—another good sign that she will keep up with inflation.

Marsha does not want to be the proverbial Pollyanna; therefore, she plans to construct a retirement scenario with a reduced form of Social Security—just in case. In the event this misfortune does not come to fruition, she will use the extra money to take another vacation.

Marsha's second source of income is her pension. In the middle of her career, her company eliminated pension plans and compensated with more generous contributions to 401(k) plans. Marsha's pension accumulations at the time of the transition were frozen and thus qualified her for a modest pension of \$980 per month. Her company's pension plan is fully funded, giving Marsha a sense of security that she will at least receive it as promised. The fine print in the employee handbook stated that pension allotments would increase annually with the prevailing rate of inflation—more reassurance that this cash flow's spending power would not be eroded.

Marsha's final source of income is her investment portfolio (her pride and joy). This portfolio includes her company's 401(k) contributions, along with her additional investments. Yes, she could call herself a millionaire. She remembers hearing that there are a record number of millionaires in the United States (Frank 2017), and she is thrilled to be one of them. Marsha made her million using a two-tiered investment strategy and plans to continue this practice, although she will reverse the allocation. She accumulated her nest egg by investing 90% of her savings in stocks and 10% in stable accounts. Her historical returns for risky and stable investments are 8% (standard deviation, 12%) and 3% (standard deviation, 5%), respectively. She notices that over the past 30 years there have been periods of loss but also large gains in her stock portfolio.

She plans to mitigate the possibility of incurring a big loss during retirement by investing 90% of her portfolio in stable accounts and 10% in selected stocks.

### Expenses

First and foremost, Marsha wants to maintain her current lifestyle. After a review of her checking account, she estimates approximately \$8,300 of expenditures per month, which she rounds to \$100,000 per year. Her largest expenses are for pleasure, such as one big vacation per year and monthly excursions with friends. She also hosts an annual Super Bowl party and a luau in the summer. The average rate of inflation for the previous year was approximately 2.2% (Bureau of Labor and Statistics 2017b), which is more than the cost-of-living adjustment for Social Security but not an alarming difference.

Marsha knows as an aging senior her health will begin to deteriorate. Because healthcare costs are increasing at a higher rate than inflation (an average of 4.5% from 1965 to 2010), she plans to incorporate it as a separate cash flow in her spreadsheet. She uses a cost of \$4,450 for the first year of retirement, which is the average cost of annual out-of-pocket healthcare for a healthy 65-year-old on Medicare (Holsopple 2014). Marsha considers factoring in additional healthcare costs for her beloved Charlie but decides she will give up a monthly excursion with her friends if necessary.

### Advice

Marsha enters all her numbers and the appropriate formulas into a spreadsheet and is horrified when she copies the row down to the age of 90. According to her calculations, she will be broke by the age of 79, and that assumes full Social Security. If Social Security goes belly-up, then she will run out of money by the age of 77. She will have to give up her current lifestyle; will it be no vacations or no monthly excursions? If she compromises her living standard to an annual

expenditure of \$75,000, she will run out of money at the age of 88, which means if she is lucky and dies at the expected age of 87 she will have enough money. She is hoping there is an error in her calculations and/or assumptions and has decided to seek professional advice.

After calling her best friend Maggie and thanking her for insisting she write things down, she makes a list of questions to take with her to her first meeting with an advisor. Marsha is very concerned that she may not be able to retire as planned.

## Part II: Matt

Matt is very excited about starting his new job after graduation as a market research analyst in Chicago. This is why he went to college: to be independent and make more money than he ever dreamed of making. Maybe he could even do a little something for Mom and Dad; after everything they did to give him this opportunity, he could at least buy them plane tickets to Hawaii! Matt knows he is fortunate and plans to give back as well. Yes, he will look for a worthy charity and share the wealth. His college debt will be worth it all, in the end. In fact, he is already thinking about the day when he can just hang back—yes, retire. He will not make the same mistake his Aunt Marsha made; she did not save enough soon enough to retire as she had planned. Like his Aunt Marsha though, Matt too believes in enjoying life. Yes, you have to make sacrifices today for future gains, but it is not the end that matters—you also have to enjoy the journey. Matt plans to begin his journey with a road map—a financial road map that he will revisit as his life changes.

### Financial Plan

Matt estimates selected cash flows allowing for the things in life that are most important to him. His parents will no longer be footing the bill, and he has no idea what his living expenses will be in a big city like Chicago. He wants to keep things simple: most of his figures will be estimates anyway, but he wants to include enough detail that his plan is realistic. Matt is 23 years old and, like most millennials, plans to retire early. According to a recent survey, millennials would like to retire on average by the age of 59 (Wells Fargo 2016). Matt considers himself to be a hard worker and believes he should be able to retire by 55–60 at the very latest. Although Matt is currently single, he wants to be married with a family before he turns 30. Matt opens his laptop and enters column headings for income and expense categories.

### Income

Matt is ecstatic about the very generous offer of \$67,000 from a large marketing firm in downtown

Chicago. This salary and subsequent raises will be his primary source of income. The median pay for an entry-level position in marketing research is \$62,560 (Bureau of Labor and Statistics 2017a), so Matt believes he is off to a good start; but what about going forward? After a quick search on the internet, Matt finds that the expected salary increase for the upcoming year is in the 3% range (Willis Towers Watson 2016, WorldatWork 2016).

Throughout his academic career, Matt's teachers praised him for his work ethic and strong analytical skills. His grade point average is 3.89. Matt believes, therefore, that he will be able to earn an above-average raise in the 5% range; he is encouraged by a statistic for the highest-performing employees, which shows an average raise of 4.6% (Willis Towers Watson 2016).

Matt plans to set up a 401(k) retirement savings plan based on a percentage of his salary, which will also produce earnings. He believes that if he invests wisely, the returns will be substantial one day. As a young man, he can assume more risk and expect a higher than average return in exchange. He plans to balance his portfolio so he has 90% invested in stocks and 10% in bonds. Browsing the internet again, he finds more information on average rates of returns than he can digest. Matt follows *Forbes* online and finds an article that shows the annualized returns for a 10-year period; they are 7.4% for the S&P 500 and 4.6% for bonds (Hanlon 2014). However, he also finds an article that is a little more appealing because it talks about a good versus an average return on investment. Matt plans to be an active participant with his investment choices. According to the article, 15% is achievable if you are willing to put in the time (Trendshare 2017). Matt is certainly willing to put in the time—especially when he can double his returns—and decides to use a 15% return to reflect this effort. Matt is above average in all respects, so he expects the same from his investing strategies.

## Expenses

Matt plans to live according to his means. In other words, he does not want to spend more than he makes. If he has to live in a smaller apartment to make ends meet, then that is what he will do. If he has to bicycle to work because he does not have money in his budget for public transportation, then that is what he will do. He begins identifying major and discretionary expenses and lists them as separate columns in a spreadsheet. He starts with the easy items; those that are the easiest to predict anyway. Matt has not received a statement yet regarding his student loan payments but he knows that Excel has a function (PMT) that calculates loan payments according to a constant interest rate, which he knows to be 5%.

He also knows that the term for his loan is 15 years. Excel quickly calculates annual payments of less than \$6,000. He is somewhat annoyed that nearly 10% of his salary will go to pay off his student loan for the next 15 years, but he rationalizes that he would not have the job he has without it.

The next two columns Matt tackles fall into the category of discretionary spending: philanthropy and vacations. Both items are important to Matt, but he can choose how much or how little to allocate to each. Because he can easily change the expenditures in these accounts, he starts with \$5,000 for each. As a reality check, he quickly searches the internet to see whether \$5,000 will cover travel expenses for a vacation in Napa valley and is reassured that this amount is reasonable. Matt is proud of the generosity displayed by his generation. Millennials want to make the world a better place (Neilson 2013), and Matt's contribution to this effort will be twofold. First, he plans to purchase wisely, choosing products that support causes he cares about. Second, he plans to make charitable contributions to match what he spends on vacations.

Matt rightfully views his savings plan as an expense; the amount is discretionary, but it is crucial to his future lifestyle. Some people live paycheck to paycheck, but Matt wants to retire early and live long. If he saves 5%, he does not believe he will have enough money for expenses such as food, medical, clothing, taxes, utilities, and hobbies. In addition, he really cannot allocate 5% of his earnings while he is paying off his student loan. So he intends to use a two-phase savings plan. Initially, he will save 1% of his income. Once his student loan is paid off, he will increase this amount to 8% until he retires.

Matt expects his largest living expense to be housing. He wants to own a house one day but knows he will need a down payment, which he currently does not have. As of June 2017, average rent within the city is \$1,878 (Rent Jungle 2017); this is one area in which he does not want to be above average. As soon as he accumulates \$20,000 for a down payment, he plans to buy a house. According to his projections, he will not have enough for a down payment until he is 35. He would like to keep his house payment close to the amount he pays in rent; a \$400,000 home will put him in this range. If he retires at 55 he will need a 20-year loan, but in 20 years he will not have accumulated \$1 million dollars. Matt decides he will have to retire at age 60; he rationalizes that this scenario is still better than 65, the age for which most boomers planned their retirement. One last consideration to incorporate is inflation. The average rate of inflation for the last 10 years is approximately 1.9%.

Matt finally has a workable plan. He will have more than \$2 million accumulated in savings. Yes, Matt



would be able to call himself a multimillionaire when he retires.

### Advice

Matt is pleased with his plan. His spreadsheet is set up to run various scenarios, but the current version satisfies most of his goals. He plans to rerun the numbers periodically or when major changes occur in his life, such as marriage. Matt cannot afford to pay for professional advice, so he calls his Aunt Marsha and invites her over for dinner. He can't wait to see the smile on her face when he shows her that he will be a multimillionaire when he retires at the age of 60.

Marsha cannot believe her nephew, Matt, will be working for a major marketing firm in downtown Chicago soon. She is happy to hear that he is already planning for retirement. If only she had had the foresight to make a financial plan when she was in her twenties. She could still hear the excitement in Matt's voice when he told her he was going to retire as a multimillionaire at the age of 60. She is proud of her nephew's accomplishments but is concerned about the viability of his retirement plan. After her recent experience, she is skeptical about the assumptions that may be in his model. She is also concerned about the spending power of his accumulated wealth in the future. She did not want to spoil his celebration, but she believes it is her responsibility to warn him of any misconceptions. She offers to review his work and share her experience with him for free. After all, that is what family is for.

After a delightful dinner, Marsha and Matt open their laptops and take a moment to absorb all the numbers. Marsha explains to Matt that a dollar today is not worth a dollar tomorrow. Matt agrees, but the idea sinks in only after Marsha shows Matt her postretirement financial plan.

Matt will have more than twice the wealth accumulated when he retires than his aunt had. He knows inflation eats up spending power, but it is less than 2% per year. Matt respects his aunt's expertise; after all, that is why he asked her to review his work. Matt copies Marsha's plan and appends it to his. He makes a few adjustments, then carries his numbers forward through the age of 90. He sits with his mouth open, staring at the negative numbers by the age of 70. How could this be?

Marsha pauses before she announces more bad news. She points out that some of his assumptions need to be examined. She suggests that he view this

scenario as a best case, but she wants to make it clear that it is very unlikely.

Marsha and Matt make a promise to have dinner every year around the same time with their laptops in tow to review Matt's plan. Marsha wishes Matt the best of luck with his investing, and Matt asks his aunt to be sure to send him a postcard from her next vacation. After Marsha leaves, Matt opens his laptop and begins running more scenarios.

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