IPS for Michele Cambra

Dr. Forjan

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Statement done by: Justin Cambra

Client Description

Michele Cambra, 50 years old, is the Director of Operations at a small, sole proprietor owned business called Hearing Aid Specialists of CT after being fired from the marketing team of Twix, made by Mars Inc. Michele isn't allowed to invest in Mars Inc. since she couldn't choose the right Twix. Carol Maksimow is the owner of Hearing Aid Specialist of CT and makes Michele work very hard for her salary of $85,000 a year. Since Hearing Aid Specialist of CT is a small business, her employee benefits aren't that great which great news wasn't for Michele since is very clumsy. Michele has been to the hospital 3 times for different injuries and the insurance company might drop her as a client if she makes more visits. Michele needed very experimental procedure to walk again that the insurance didn't cover. The procedure will cost $150,000. Most of these accidents could have been avoided if they lived in a different state.

Michele lives happily in Southbury, CT with her husband Mark Cambra. The house they live in is worth $500,000 and they don't have a mortgage because of Mark. He is the Senior Engineer at a company called Energy Solutions. Since Mark has been working as an engineer right out of college for 23 years, he makes a very good salary at $130,000. Even though Mark makes a very good salary, he is very conservative with the money by flipping random pieces of equipment like chainsaws, lawnmowers, and older vehicles for cash. By flipping so many different items, Mark makes $15,000 aside from being an engineer. On the other hand, Michele likes to spend or invest money in stock market whenever she can. Since Michele likes to give back to the community and Christmas, she was planning to donate $25,000 to Toys for Tots when it comes that time of season.

Michele believes that she will need an after-tax annual income of $200,000 for the family's living expenses since they pay taxes at the 35% marginal tax rate.

Michele started to invest in many different portfolios when she had her two children named Justin and Alexandra. Since Michele is generous, she wanted her children to be able to be debt free when they got out of college. Alexandra, 22, is in graduate school at the School of Pharmacy at UConn to get her PhD in Pharmacy. The cost to go to UConn for Alexandra is about $22,000 a year. Justin,20, is going to York College of Pennsylvania to major in Finance and minor in Economics. The cost to go to York College for Justin is about $26,000 a year. Michele started out her portfolios for her kids which had a 9% overall return which is 6% over the expected inflation rate. Sadly, she had to drain those portfolios to get the kids into college without debt so far.

| | |
|---|---|
| Liquidity | $25,000.00 Toys for Tots Donation |

| | |
|---|---|
| | $451.49 NPV Justin College<br>$44,382.03 NPV Alexandra's College<br>$8,596.03 NPV Justin's Trust Fund<br>$8,596.03 NPV Alexandra's Trust Fund<br>$26,923.08 Tax<br>$113,948.65 **Total Liquidity** |
| Time Horizon | 50-65 Working<br>65-75 Passive Retirement<br>75-Death Estate Planning |
| Tax Constraint | $76,923.08 Before Tax Income<br>50,000 After Tax Income |
| Legal and Regulatory | Not allowed to invest in Mars Inc. |
| Behavioral | Familiarity- $50,000 of stocks are issued in Apple |
| Unique | Very clumsy, goes to hospital a lot<br>Lives with Mark (husband)<br>Very generous- didn't want Justin or Alexandra to be in debt out of college |

Michele's father, a very successful lawyer, passed away and left a very large amount of money in her name; 2 million to be exact. It was so much money, she didn't know what to do with it. Before her father's death, Michele still has $600,000 invested in short term securities and $100,000 invested in investment grade bonds. $50,000 of those short-term securities are invested in Apple since everyone in the family likes the products Apple makes. Michele also wants her children to have at least $100,000 in each trust fund in 2025 which yields at 5%. Michele will first put $10,000 each for the initial investment and then give 5,000 for the next 8 years

| Risk objective | | | | |
|---|---|---|---|---|
| Ability | Age | 50 | Med | 5 |
| | Wealth | $2,396,051.35 | High | 5 |
| | | | | |
| Willingness | Likes to Invest | | High | 5 |
| | Simple Life | | Low | 1 |
| | 600K in Short term Security | | Med | 3 |
| | | | | 3.8 |
| Overall | Moderate to High | | | |

| | | |
|---|---|---|
| Income Needs | | |
| | Income | $76,923.08 |
| | | |
| | Children College | $96,000.00 |
| **Total Income Need** | | **$172,923.08** |
| Investable Assets | | |
| | Investment Grade Bonds | $100,000.00 |
| | Short Term Securities | $600,000.00 |
| | Total Liquidity | -$113,948.65 |
| | Inheritance | $2,000,000.00 |
| | Michele's Salary | -75,000 |
| | Mark's Salary | -100,000 |
| | Mark's Hobby | -15,000 |
| **Total Investable Assets** | | **$2,396,051.35** |
| Inflation | | 3% |
| ***Return objective*** | | ***10.22%*** |

Macro-Economic Analysis

The Republican Party has swept into the U.S. Congress and the White House with Donald Trump's election win, in yet another blow to pollsters and pundits, following failures to predict the Brexit outcome and the peace agreement in Colombia. Both the House of Representatives and the Senate, as well as the Oval Office, will be controlled by the Grand Old Party (GOP) for the first time since 2005–2007 under the administration of President George W. Bush. Analysts and market participants are still digesting the aftermath of the election and while the U.S. economy continues to expand at a moderate pace, supported mainly by solid private consumption, economic policy developments from the new administration will be of chief importance in the near term and through the first 100 days in office.

Despite facing challenges at the domestic level along with a rapidly transforming global landscape, the U.S. economy is still the largest and most important in the world. The U.S. economy represents about 20% of total global output, and is still larger than that of China. Moreover, according to the IMF, the U.S. has the sixth highest per capita GDP (PPP). The U.S. economy features a highly-developed and technologically-advanced services sector, which accounts for about 80% of its output. The U.S. economy is dominated by services-oriented companies in areas such as technology, financial services, healthcare and retail. Large U.S. corporations also play a major role on the global stage, with more than a fifth of companies on the Fortune Global 500 coming from the United States.

Even though the services sector is the main engine of the economy, the U.S. also has an important manufacturing base, which represents roughly 15% of output. The U.S. is the second largest manufacturer in the world and a leader in higher-value industries such as automobiles, aerospace, machinery, telecommunications and chemicals. Meanwhile, agriculture represents less than 2% of output. However, large amounts of arable land, advanced farming technology and generous government subsidies make the U.S. a net exporter of food and the largest agricultural exporting country in the world.

The U.S. economy maintains its powerhouse status through a combination of characteristics. The country has access to abundant natural resources and a sophisticated physical infrastructure. It also has a large, well-educated and productive workforce. Moreover, the physical and human capital is fully leveraged in a free-market and business-oriented environment. The government and the people of the United States both contribute to this unique economic environment. The government provides political stability, a functional legal system, and a regulatory structure that allow the economy to flourish. The general population, including a diversity of immigrants, brings a solid work ethic, as well as a sense of entrepreneurship and risk taking to the mix. Economic growth in the United States is constantly being driven forward by ongoing innovation, research and development as well as capital investment.

The U.S. economy is currently emerging from a period of considerable turmoil. A mix of factors, including low interest rates, widespread mortgage lending, excessive risk taking in the financial sector, high consumer indebtedness and lax government regulation, led to a major recession that began in 2008. The housing market and several major banks collapsed and the U.S. economy proceeded to contract until the third quarter of 2009 in what was the deepest and longest downturn since the Great Depression. The U.S. government intervened by using USD 700 billion to purchase troubled mortgage-related assets and propping up large floundering corporations in order to stabilize the financial system. It also introduced a stimulus package worth USD 831 billion to be spent across the following 10 years to boost the economy.

The economy has been recovering slowly yet unevenly since the depths of the recession in 2009. The economy has received further support through expansionary monetary policies. This includes not only holding interest rates at the lower bound, but also the unconventional practice of the government buying large amounts of financial assets to increase the money supply and hold down long term interest rates—a practice known as “quantitative easing”.

While the labor market has recovered significantly and employment has returned to pre-crisis levels, there is still widespread debate regarding the health of the U.S. economy. In addition, even though the worst effects of the recession are now fading, the economy still faces a variety of significant challenges going forward. Deteriorating infrastructure, wage stagnation, rising income inequality, elevated pension and medical costs, as well as large current account and government budget deficits, are all issues facing the US economy.

Reference:

FocusEconomics. "United States Economy - GDP, Inflation, CPI and Interest Rate." *FocusEconomics | Economic Forecasts from the World's Leading Economists*. N.p., 22 Nov. 2016. Web. 05 Dec. 2016.

## Industrial Analysis

The retail apparel industry generated more than $304 billion in revenue in 2009, according to Franchise Help. The most profitable segment is women's clothing, accounting for 53 percent of total revenue, says Franchise Help. Selling apparel is a very seasonal business, with a majority of sales coming during the holidays and when kids are headed back to school.

A number of large, well-branded retailers make up a chunk of the apparel market, but many smaller businesses, such as boutique and niche apparel stores, are part of the market, too. The larger apparel retailers have an advantage over smaller shops since they get better pricing from suppliers because they buy such large quantities of apparel. That means their profit margin is greater and they can offer better retail pricing to their customers. Smaller apparel retailers make up for the high pricing they pay for wholesale retail apparel by selling certain types and styles of clothing rather than offering everything for everyone like many larger apparel stores.

One of the major trends affecting the retail apparel industry is the increase in people who like shopping for apparel on the Internet from the comfort of their home rather than shopping at a traditional brick-and-mortar store. Emerging technology such as mobile applications are changing the way retailers do business. For instance, NRF Stores reports that customers who use mobile devices to buy spend eight times more than people who only shop in a store. Other mobile trends include creating mobile point-of-sale applications to make it easier to buy and offer services such as virtual fitting rooms. Another trend is the use of customer data to figure out what your customers want. A way for small retailers to get this information is to use social media to learn what their customers want.

Staying on top of the latest styles of clothing, footwear and accessories is key to attracting apparel-hungry shoppers. Otherwise you end up with too much inventory, or worse yet, your branding suffers. Another challenge is the abundance of retail apparel shops on the Internet since these may lure local shoppers, causing you to lose revenue. On top of the Internet threat, building and operating a physical location is a costly endeavor. If money is a big concern, counteract these costs by solely selling apparel via the Internet and eliminate the need for a costly storefront and staff.

Reference:

"Analysis of the Retail Apparel Industry." Analysis of the Retail Apparel Industry | Chron.com. N.p., n.d. Web. 05 Dec. 2016.

Security Analysis

One of the stocks that I picked for Michele, since she liked it before, was Apple to be a very good driving stock. Apple is an American multinational technology company that has their headquarters in Cupertino, California. The company designs, develops and sells electronics to consumers, makes computer software and offers online services. Apple has been on top of their game when it comes to their competitors like Microsoft and now more currently Samsung in the phone industry. The products made by Apple are very easy to identify and they are must have items. For example, many people wait in line many hours to get the new Iphone that comes out every year with new improvements. Some of the other well-known products are the apple watch, Ipad, safari web browser, and Apple TV. Improving the technology was one of the driving ideas behind the company when Steve Jobs created Apple in January of 1977.  Even though Steve Job passed away, Tim Cook, the CEO, has been following the actions that Steve would have made since the company became as successful as it is. Apple is the world's largest information technology company by revenue and by total assets; but they are the world's second largest mobile phone manufacturer. At the end of the fiscal year in September in 2015, they had an annual revenue totaled to $233 billion. The revenue generation accounts for approximately 1.25% of the total United States GDP. That statistic is impressive since they are talking about a whole country and this is only one company. This stock will easily grow more over the years since they are always making new improvements and have the money to do that. So many customers of Apple are brand loyal, meaning that they will not buy any other type of product unless Apple doesn't produce it. This is true for Michele since her and her family all have iphones and ipads and everyone would refuse to get any other type of electronic

Reference: "Apple Inc." Wikipedia. Wikimedia Foundation, n.d. Web. 06 Dec. 2016.

Portfolio Analysis

After finding out my return objective, I could use solver to figure out the asset allocation of what the money should be invested in. As of right now, Michele has a lot of money invested in short term securities and some investment grade bonds which would only give her a return of about 6.5% or 7.0% give or take a few percent. After doing solver, I was able to figure out the statistics as shown below.

Asset Allocation

| | | | | |
|---|---|---|---|---|
| Money Market Fund | 1.5% | annual return | 6% | 0.083% |
| Treasury Bonds | 3.0% | yield to maturity | 12% | 0.347% |
| Investment Grade Bonds | 5.0% | yield to maturity | 17% | 0.852% |
| Domestic Equity Securities | 8.5% | annual expected return | 19% | 1.621% |
| International Equities | 12.8% | annual expected return | 15% | 1.938% |
| Alternative Assets | 17.0% | annual expected return | 32% | 5.379% |
| | | | 100.0% | 10.22% |
| Return Objective | 10.22% | | | |

This shows that Michele should invest most over her money in alternative assets since they are most return but it might have a higher risk. According to the data above, Michele's return objective would be on the far-right side of the Efficient Frontier since there is going to be more risk for the return that wants to be made. According to solver, it also says that Michele should also invest more money into international equities and domestic equity securities. Since solver finds the most ideal scenario to find the return objective, Michele should reinvest most of her stocks and her newly made 2 million dollars' worth of inheritance.

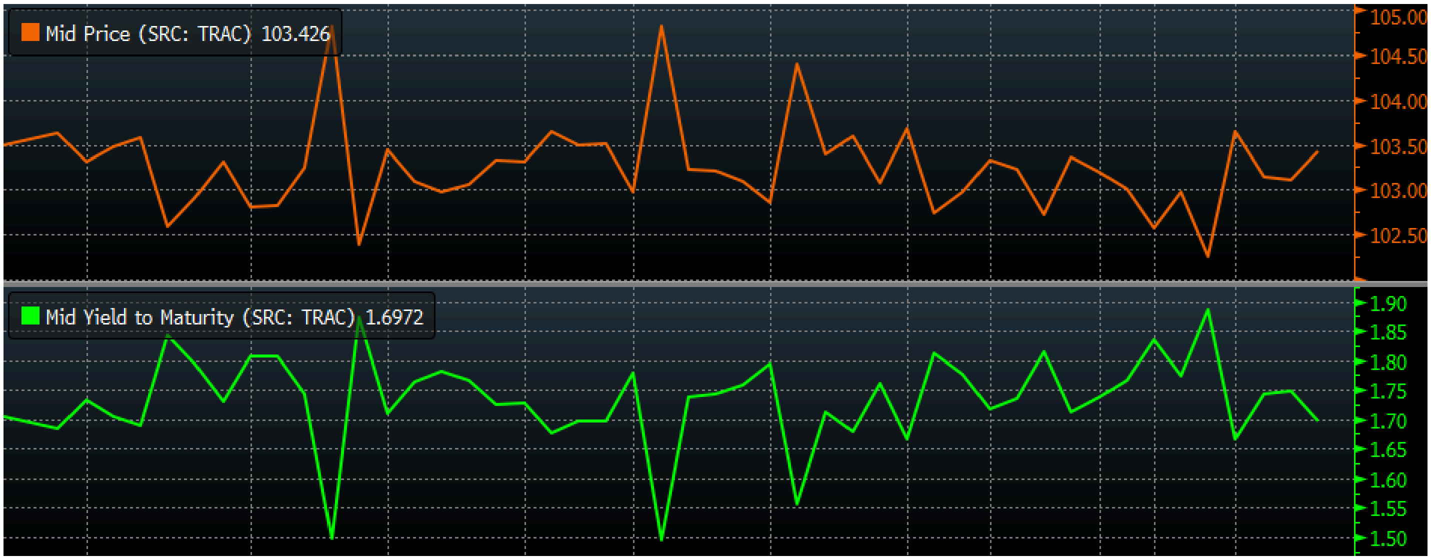
Fixed Income Security

The bond that I picked for this project was the company Nike Inc. The symbol of the corporate bond is **NKE3998567**. On the company's website, their mission statement states that, "NIKE, Inc. fosters a culture of invention. We create products, services and experiences for today's athlete while solving problems for the next generation." Some of the products that Nike makes for both genders of all ages are shoes, clothing and customizable shoes called NikeID. These very broad categories get broken down into many different sub categorizes to each demographics. The shoes get broken down into different sport categories like running, basketball, football, soccer, golf, tennis and more. The clothing for gets broken down into T-Shirts, polo shirts, hoodies, jackets, shorts, surf & swimwear and accessories. The customize tab on the website gives you the option to personalize shoes like their own brand Nike, Converse and Jordan's for any person. Also under this tab, the new NikeID shoe is able to be customized for $170. The different types of NikeID shoes could be for running or leisure but there are innovations that could be used. The NikeID was one of the big steps in advancements in sports footwear that was created in their Nike Sport Research Lab.

According to the U.S Securities and Exchange Commission, the main reason why corporation issues out bonds is because the bond "raises money for a variety of purposes, such as a building a new plant, purchasing equipment or growing the business." The reason for why Nike issued out this bond was to improve the Nike Sport Research Lab to innovate new products. By doing this, they were able to make up new ideas just like the customizable NikeID shoes.

The payment details of this bond is that it is semi-annual payment frequency. The first offering date of the bond was on 4/23/2013 and the dated date was 3 days after on 4/26/2013. The first coupon date was 11/01/2013 and the coupon rate is at 2.25% according to Bloomberg. This bond also has a fixed coupon rate so rate will never change over time even though the bond maybe slightly effected. This corporate bond is a callable bond and the specific date to call the bond back to the corporation is on 02/01/2023. Overall, this bond is very well rated since it was rated A1 by Moody's Rating on 10/26/2015 but also it was giving the rating of AA- on 11/06/2013. Both of these rating suggest that this is a very good bond since the rating means that there is low possible risk. The maturity date of the bond is 05/01/2023 which is good since the yield at the offering was 2.27% and the price at the offering was $99.83. Also the original maturity size and the amount outstanding size are equal to each other $500,000 which means the yield to maturity is on track.

According to Bloomberg, the coupon risk rate of this particular bond under the workout column, the risk is 6.094 and under the OAS (option-adjusted spread), the risk is 6.318. The convexity of the bond is .387. This means that the coupon rate is higher since the convexity or market risk is lower. The duration of the bond is 5.887 which means that the price will rise by 5.887% if it drops by a percentage over the 10 years.




Using Bloomberg, I was able to gather real data to show the correlation between price and the yield to maturity of the Nike corporate bond. I thought this would be a good way to represent the data since you can physically see the changes between the price and the bond. This might not be the ideal graph to do depict the relationship but you can still see the inverse relationship just because they are lined up. Every time that the price dips down, the yield to maturity goes up the same amount on the same graph line. The same thing happens when the price increases, the yield to maturity does the inverse action of decreasing. The correlation is very obvious when there is a huge drop in the yield to maturity and there is a huge spike up in the price.

Alternative Investment

For Michele, her return objective is 10.22% and for the asset allocation, 32% of her money should be invested in an alternative investment. To do some of the math, 32% of her investable assets is worth $766,736.43. At that price, she could invest in a very nice house that could be rented out to people and overtime build a very good return overtime. Something else that she could invest in something very rare like a collectable baseball card like Babe Ruth that could become more collectable overtime. Since I was talking about rentals a few moments ago, she could be able to make a complex that could be rented out to people which would make her returns even increase faster than just the stock market if all conditions are good.

Derivative Security

For Michele’s derivative security, I think that she should invest in S&P 500 futures to lower the risk of her portfolio. By selling S&P 500 futures, her portfolio would be ok if the stock market went down since she would be able to sell her S&P 500 futures to make the money back rather than lose the money like most people would without the futures contract. This hedge would be able to make other riskier investments since she like to invest her own money personally and since she needs a slightly higher than average return. I also think that she could buy some future options so that she would be able to buy lower valued stocks if the stock takes off in price. Since it’s a future option, she has the right to buy but not the obligation to buy at the set price so if the price decreases, she doesn’t need to accept the option but she would be out money since you have to pay a premium.

Bench Mark

| Index | Explanation | % |
|---|---|---|
| S&P500 | Most of my stocks would be there. Ex. Apple | .57% |
| DJIA | All of the investments will be made in the DOW JONES | .53% |
| DJU | For investable assets, possibly owning houses for rent and utilities will be included | .29% |

Concluding Remarks

Michele was going on the wrong path with her investments only because she didn't know her own return objective. Since we found out that she needs a 10.22% return objective, we learned that she needs to invest in different things like investable assets, international equities and domestic equity securities. In the old portfolio, she was invested in mostly short term securities and investment grade bonds. Overall, Michele will have an easier time at getting her return objective if she reinvests in the items above but she also is exposed to a higher risk as well.