

2018 Personal Finance Case Study

January 8, 2018

*Your team focuses on providing clients with comprehensive financial planning and as a fiduciary. Jesse and Beth Russell were referred to your firm by a current client who praised your ability to consider all available information and provide families with many options so that they may best meet their goals*

*In your first meeting with the Russells you learned the facts below and completed parts of the attached balance sheet and budget, and income statement. Use all the information provided to assist the Russell family in reaching their financial goals and improving their financial well-being.*

**Personal Information**

Jesse and Beth met when they were both students at The University of Vermont. As freshmen, they lived down the hall from one another but met at the local ice skating rink at the end of their first year. They married several years after graduation as they wanted to wait until they had enough money for a wedding. Now ages 32 and 31, respectively, they live in Manassas Park, Virginia and have a 3-year-old daughter named Chloe.

Following graduation from The University of Vermont, the Russells moved to the Washington, D.C. area where Jesse worked for BB&T as a teller and Beth began taking licensing exams to teach elementary school. After working for three years as a teller, Jesse decided he wanted to go back to school to get his MBA. He was driven to go back to school, so he could increase his future salary. While Jesse obtained his MBA at The University of Georgia, Beth found a job teaching fourth-grade in Athens. Jesse did not work during school, so they did their best to live solely on her income. However, their expenses were too high at times and they accumulated some credit card debt.

Upon graduation three and a half years ago, Jesse took a job in Alexandria, Virginia, as a branch manager for Big National Bank. Beth found a job as a second-grade teacher in Alexandria but would like to stay home with their daughter. It’s important to them that Beth have the option of being a stay-at-home mom if they’re able to afford to live from Jesse’s salary. Originally, they were thinking that she would work until the birth of their second child; however, Chloe has a lot of food allergies and other childhood-related illnesses that have taken a lot of time to resolve or control. As a result, Beth is feeling more pressure and desire to be a stay-at-home parent to care for Chloe.

They’d like to buy a house or condo, so they have a home they can call their own in or near Alexandria, but recognize housing costs in northern Virginia are quite expensive. Given their student loans, credit card and auto debt, and need to save for a down payment, they’ve postponed buying a property. For now, they’re renting an apartment for $1,550 per month. However, they are also coming to realize that commuting almost one hour each way to work is also expensive in that they are paying for child care an extra 10 hours a week – which adds nearly $2,500 a year. Additionally, since they can’t commute together due to the differences in working hours they are driving nearly 1,000 miles a week combined that dramatically increases their transportation costs.

Jesse makes $100,000 annually and has been told he can expect his salary to grow by 3% each year. He’s contributing $1,000 per month to his pre-tax 401(k) as he’s trying to reduce their taxes. Big National Bank matches dollar for dollar up to the first 6% ($450 per month). He also saves the maximum amount to his Roth IRA as he’s heard he could one day make too much money to contribute. Beth is making $40,000 and saves $750 per month to her VRS Retirement Plan. In addition to continuing to save for retirement they are still saving $300 for the down payment on their new home. As they have tried to be prodigious savers they allot themselves only $8 per day for “lunch money.” This sometimes goes to lunch out for Jesse, but more frequently goes to Starbucks for coffee, the occasional “happy hour” with co-workers, or just a quick bite for Beth on the nights Jesse works late.

**Economic Assumptions**

The economy has been steadily recovering ever so slowly since the financial crisis in 2008. While the economy is back to “full” employment with an unemployment rate of about 4%, studies continue to show that wages for most Americans are just barely keeping pace with the inflation rate that has averaged less than 2% since the crisis.

**Retirement Investments**

Jesse would like to retire at age 60 whereas Beth could see herself rejoining the work force as a teacher (assuming she can raise their children without working) after their daughter and any future kids are more independent, such as late middle school or in high school. Jesse’s family health history isn’t great and many of the men in his family suffer from heart disease. Retiring at age 60 is important to him as he wants time to mark a few items off his bucket list. He’d like to go to Italy with Beth, write a memoir, and volunteer teaching kids how to play hockey.

Jesse’s Investments:

* Former Regional Bank Pre-tax “Traditional” 401(k): $9,692
* Former Regional Roth 401(k): $25,248
* Roth IRA: $11,863
* Big National Bank Pre-tax “Traditional” 401(k): $26,133

Beth’s Investments:

* Traditional IRA: $23,086
* 403(b): $13,658
* VRS Vested Balance Pre-tax Retirement: $2,551
* VRS Unvested Balance Pre-tax Retirement: $2,987

**Financial/Investable Assets (All accounts are owned jointly)**

* Checking account: $7,534
* Savings account: $1,000
* Brokerage account: $35,267

**Use/Personal Assets**

* 2013 Subaru Outback 2.5i Premium: $18,000
* 2009 Hyundai Santa Fe Limited AWD: $6,000

Beth drives the Subaru as they bought this when she was pregnant with Chloe and Jesse wanted her to have a very safe and dependable car.

**Liabilities**

* 2013 Subaru (Joint):
	+ The monthly payment is $550.01 and they know they have exactly 24 payments remaining, but could not find the loan balance. The Russell’s financed the Outback for six years at 4.9%.
* Visa (Joint):
	+ $13,500 balance (17% APR). They try to pay at least $300 per month.
* Mastercard (Joint):
	+ $9,000 balance (15% APR). They try to pay at least $250 per month.

**Student Loans**

Jesse worked very hard and did not have any student loan debt from his undergraduate degree but he did take out two unsubsidized Stafford loans to help pay for his MBA. Upon graduation he consolidated his two loans into one $20,000 Direct Loan with the U.S. Department of Education. He chose the standard repayment plan and has an interest rate of 6.2%. He has made 42 payments.

Beth had debt from undergraduate school which she consolidated into one $36,000 loan when Jesse started graduate school in August 2012. Her original loans had annual interest rates of 6.8% and 6.0% so her consolidation loan rate is 6.4%. She chose the extended repayment option and has made 66 payments so far.

**Life Insurance**

* Jesse has a group term life insurance policy through work that will pay 2x his salary.
* Beth has a group term life insurance policy through work that will pay 1.5x her salary.
* Neither of them have additional life insurance policies.

**Health Insurance**

Big National Bank offers Jesse a variety of health insurance plans. Currently he has chosen an “employee plus one” Silver HSA plan that covers himself and Chloe. Jesse’s portion of the premium is $62 which is withheld on a pre-tax basis from his semi-monthly paycheck. The total semi-monthly premium is $397 with his employer paying the $335 difference. If he were to keep the Silver HSA plan but change to the “family” plan to cover Beth as well, his portion of the semi-monthly premium would increase to $110 or $220 per month.

Beth has an “employee only” POS policy through her school system. Her cost is $150 per month (including dental.) While it offers very good coverage, it would be more expensive for her to add Chloe to her policy than it costs Jesse to add her to his. Her premium is withheld on a pre-tax basis. If Beth adds Chloe to her plan her monthly cost would increase to $284, and a family plan would cost $401.

**Auto Insurance**

Jesse and Beth have an auto insurance policy for their cars. They pay $155 monthly for both vehicles

* Coverage – “Split-limit” 50/100/50 (The same limits apply for “uninsured and underinsured” motorist)
* Collision and Comprehensive with deductibles of $750

**Renters Insurance**

Since they do not currently own a home and are renting an apartment, the Russells are paying $400 every six months for coverage.

**Additional expenses can be found in the balance sheet.**

**Financial Goals**

Jesse and Beth Russell have three primary goals for which they would like your assistance researching, analyzing, and building some strategies to achieve. Ordered from most important to least:

1. Manage their cash flow and debt level
2. Buy a house or condo in northern Virginia
3. Fund or at least maintain their retirement accounts

They realize that they are overspending their income because the balances on their credit cards keeps increasing but feel that they earn enough money that this should not be the case. They really want a solution to this dilemma as another priority for them is to have the option for Beth to stay at home with their daughter and any other future children. They’d like to have three children. If she did stay home, Beth would not earn any income for the foreseeable future.

**Cash Flow and Debt Planning**

Once a planner gets to know their client and has agreed to work together, the next step in the planning process is to analyze the clients’ current situation. To that end, fill-in the missing information in their income statement and balance sheet to determine the Russells’ available discretionary cash flow (unallocated income) and their net worth (how much their assets are worth after deducting any liabilities).

* Step one: Transfer all given asset and liability information from the case to the balance sheet.
* Step two: Transfer all given income and expense information to the income statement. Take care to notice that much of the data they provided was monthly, but your statement records annual amounts
* Step three: Calculate the missing payments and/or remaining balances using a financial calculator or on-line calculators available at [www.dinkytown.net](http://www.dinkytown.net) (your computer will need Java to use this site).
	1. Auto loan
	2. Jesse’s student loan
	3. Beth’s student loan

**Overall Response To The Russells**

1. What would you advise Beth and Jesse to do to meet their goals?
2. If you find that all their goals together are unattainable, what recommendations or alternatives would you suggest?

The Russells also have a few specific questions they want you to answer. They are:

**Debt and Savings focused questions:**

1. What are the minimum payments on the two credits cards?
	1. Chase Sapphire Visa: $13,500 balance; minimum monthly payment of 2% of balance; annual interest rate is 17%
	2. Capital One Quicksilver MC: $9,000 balance; minimum monthly payment of 1% of balance plus monthly interest plus any fees (assume no fees); annual interest rate is 15%.

ANSWER:

1. How much faster can they pay off the balance if they pay $500 per month on each card? What recommendation might be made about other uses of their income to help them pay the extra amount? Use the calculator found at <https://www.dinkytown.net/java/PayoffCC.html>.

ANSWER:

1. What is the maximum repayment period on Jesse’s student loans? What is the maximum repayment period on Beth’s student loans? What are the pros and cons of Beth choosing a longer repayment option for her student loans? What other repayment options are available, regardless of the Russells’ eligibility? Visit <https://studentaid.ed.gov/sa/repay-loans> to help guide your search.

ANSWER:

1. How much can Jesse contribute to a Roth IRA for tax year 2017? If Beth were to stop working would she still be able to contribute to a Roth IRA? Since Jesse is concerned that one day he won’t be eligible to contribute to a Roth IRA, what is the maximum that Beth and Jesse could earn and still contribute in 2018?

ANSWER:

1. How much “free money” is Jesse receiving per year from Big National Bank because of the company’s matching contribution to his 401(k)? Does Jesse have to defer income into the 401(k) to get the match? Not sure, visit <https://www.thebalance.com/maximizing-401k-match-2894175>.

ANSWER:

**Home purchase focused questions:**

1. Beth and Jesse Russell have been struggling to determine the best way to balance their desire to save for a home (condo or house) and save for retirement. Based on the information available from Merrill Lynch at <https://www.merrilledge.com/article/10-tips-to-help-you-boost-your-retirement-savings-whatever-your-age-ose>, what advice would you provide the client as to how to maximize their retirement savings?

ANSWER:

1. Jesse and Beth really want a permanent home for their daughter, but have been super diligent about saving for their retirement so much of their money is saved in tax-advantaged retirement accounts. Is there a way that they could access their IRA accounts for part of the down payment? If so, how much could they access without paying a penalty on the distribution?

ANSWER:

1. How much (as a percentage of purchase price) does a bank typically want a buyer to have for a down payment? What other applicant information (e.g., credit score, employment history, mortgage payment ratio, mortgage payment and other credit payment ratio) might the bank consider when deciding if the Russells are a good credit risk for a mortgage?

ANSWER:

1. Given their competing financial obligations, would you recommend that they use a 20 year or a 30-year mortgage? What are the pros and cons of each option? How would your recommendation change if you knew that it was very important to Jesse and Beth to pay as little interest as possible? How would your recommendation change if they also wanted to open a 529 savings account for Chloe?

ANSWER:

1. The Russell’s financed the Outback for six years at 4.9%. How early would they pay off the loan and how much interest could they save if they immediately increased their payment by $100 per month for the remainder of the loan? Use the loan calculator at <http://www.dinkytown.net> to answer.

ANSWER:

**Insurance focused questions:**

1. Beth recently spoke to a friend who was in the hospital after a car accident and is now wondering if they have enough coverage in case they hurt another person or property. What is the minimum auto coverage required by the State of Virginia? What seems to be the general minimum recommended coverage to provide adequate liability protection?

ANSWER:

1. If Beth stops working what would happen to her health insurance coverage through work? The repeal of the “individual mandate” is not effective until 2019. Assuming she leaves work in 2019 or later, she can avoid the fine, but does she still need health insurance? What are her options to have health insurance coverage?

ANSWER: