Comprehensive
Financial Planning Analysis

Prepared For:

John and Jane Doe

July, 2010

Johnston Investment Counsel

LIFE THE WAY YOU PLANNED IT.

Visit us online
jicinvest.com

Offices
331 Fulton Suite 429
Peoria, Illinois 61602
tel: 309.674.3330
tf: 877.848.3330
fax: 888.310.0514

Table of Contents

Executive Summary

Executive Summary

Introduction

- Johnston Investment Counsel (JIC) has conducted this comprehensive financial planning review on behalf of John and Jane Doe. JIC provides its analysis and recommendations with respect to the following areas:
  1. Existing financial condition,
  2. Retirement forecasting analysis,
  3. Education funding,
  4. Investment analysis,
  5. Estate planning, and
  6. Insurance analysis.

- The purpose of this section is to provide our summary observations. However, JIC strongly encourages the Does' to read the details of each section to understand the details and the context of JIC's observations.

Overall Thoughts And Observations

- Any forecasting analysis is, of course, subject to error – and perhaps significant error. With that said, JIC has attempted to be realistic but conservative in its assumptions.
- The challenge the Does' face is one of setting priorities and making sure expectations are reasonable. While there are incremental improvements that can be made to their financial situation, the major decision facing the Does' is funding retirement vs. funding college. There is simply not enough available income to do both.

Existing Financial Condition

- With the exception of their home mortgage and home equity loan, the Does' are debt-free. We strongly encourage them to maintain this discipline. Jane is a high-income earner. The Does' also have significant expenses, which we believe is an area to focus. Given the funds needed for retirement and/or education funding, expense control may not be sufficient. Income enhancement may be necessary (i.e. John goes back to work).
- The Doe balance sheet appears to be in relatively good order with net assets of approximately $450,000. This figure only includes the Caterpillar stock appreciation rights and restricted stock units that Jane is currently vested and whose value is "in the money" (current stock price is greater than the grant price).
- Being a Caterpillar family means the possibility of moving is reasonably high. With that said the Does' mortgage and home equity loan interest rates are substantially higher than current market rates. JIC recommends the Does' investigate refinancing their mortgage/home equity loan and calculate the "payback period" (how long they would have to stay in Morton to make the re-financing costs worthwhile). At a minimum, they should speak with their existing lender about the possibility of modifying the loan to obtain a lower interest rate. For a fee, some lenders allow borrowers to obtain current market interest rates without having to go through a complete refinancing.

Executive Summary

Retirement Forecasting Analysis

- In JIC's analysis, we assumed four different retirement income goals:
  1. Maintaining Jane's existing salary of $158,000 assuming 3% annual salary adjustments until retirement
  2. Maintaining 80% of Jane's inflation-adjusted salary
  3. Maintaining Jane's inflation-adjusted salary for the first 10 years of retirement (to accommodate increased travel and expenses) and 80% thereafter, and
  4. $100,000 in inflation-adjusted income.

- We believe forecasting for a 30-year retirement period is appropriate, particularly if the Does' are in good health and have longetivity in their family history.

- JIC assumed future investment returns will be below average 4.75% for a lower-risk portfolio and 6.25% for a higher-risk portfolio.

- It will be difficult for the Does' to achieve 100% of ending salary during retirement. The required changes to their existing lifestyle would be significant. Assuming retirement at age 67, and a 30-year retirement period, a portfolio value between $5.58 and $6.69 million (depending on investment return) will be required. This translates into annual contributions ranging between $68,000 and $116,000 between now and retirement.
  1. The annual contribution is significant even under the other withdrawal scenarios. 80% of ending salary would require annual contributions between $46,000 and $83,000, while the 100% for ten years / 80% thereafter scenario would require between $55,900 and $96,000. The $100,000 retirement income requires the smallest annual contribution of between $27,800 and $55,800.
     – Delaying retirement 3 years lowers the annual required contribution of a 30-year retirement period approximately 15% to 25%. Retiring at age 62 increases the annual contribution for a 30-year retirement period by approximately 40% to 50%.

Education Funding

- Total cost for both boys, at time of matriculation, assuming 100% parental payment, is estimated to be $433,000 at a public university. The private university four-year cost for both boys is estimated to be $590,000.

- To achieve this dollar amount by the time it is needed, annual contributions of $30,000, and $41,000 will be needed to pay the cost of public/private university, respectively.

Executive Summary

Investment Analysis

- In total, the Doe portfolio is allocated 80% stocks and 20% bonds. This allocation shows a willingness to accept significant fluctuations in portfolio value. JIC believes the stock allocation is on the high side of a reasonable range.
- We believe the Does' should consider additional asset classes such as real estate (reits), emerging market stocks and bonds, high yield bonds, alternative investments and perhaps commodities. The goal is to create a portfolio that is not as closely correlated to the returns of the stock and bond markets.
- For the vast majority of their portfolio, the Does' are using low-cost index funds – which is a very reasonable approach. The downside is that there is no chance of outperforming a market index. We prefer strategies that combine index and active management. In addition, we find there are times when one wants to weight different portfolio segments different than the index weight. For example, one may want to overweight small-company stocks or value stocks more than the specified index allocation.
- If the Does' were to accept JIC's recommendations to increase their asset class diversification, they would likely have to transfer John's Employer A, TIAA-CREF, and Jane's Employer B 401k to IRA accounts. By doing this, they would significantly increase the number of investment options available to them (instead of just the investment options selected by the employer).

Estate Planning

- On the surface, it appears that the Does' have covered "the basics" of estate planning. However, JIC was not given a copy of the will and other estate planning documents and, therefore, cannot make any authoritative estate planning observations.

- The Does' indicate that both John and Jane have established revocable living trusts. JIC has not been given copies of the trust documents and is therefore limited in its observations. With any type of trust, one consideration is the titling of property. If a revocable living trust is not funded or the assets designed to fund the trust do not have the proper titling, then the trust may not meet the Does' goals.
  - With that said, there are likely some assets that the Does' may not want inside their trust or may not want the trust to be the beneficiary (such as life insurance, IRA's and 401k's). JIC strongly encourages the Does' to review the titling of their assets and seek appropriate advice.

Executive Summary

Insurance Analysis: Life

- JIC's life insurance analysis assumed that, if either John or Jane should pass away, the home mortgage and the cost of college will be paid by the life insurance proceeds. In determining the amount of insurance needed for Jane, the remaining factor is the amount (and length of time) of salary replacement. In its analysis, JIC assumed 100%, 75%, and 50% inflation-adjusted salary replacement for a period of 10 years, 20 years, and until Jane reaches age 67.
  1. Based on this methodology, Jane should obtain additional life insurance of between $300,000 and $3 million, depending on the percent of salary replaced and the salary replacement time period.
- With respect to John, we assumed a $30,000 inflation-adjusted salary. This would allow Jane to hire full-time help for several years. We calculated John's life insurance requirement assuming this "salary replacement" for 10 years, 20 years, and until age 67 but believe the 10-year period is most appropriate (when the kids are at home).
  1. Assuming a 10-year salary replacement, John needs an additional $164,000 of insurance. If salary is to be replaced for 20 years and until age 67, the additional insurance need is $400,000 and $552,000, respectively.

Insurance Analysis: Disability

- Jane has disability insurance that, if qualified, could pay 60% of her annual base salary.
- It appears that in order to qualify for benefits Jane must be totally disabled and be prevented from engaging in any regular occupation or employment.
  1. There are better (more expensive) types of disability policies that would pay benefits based on the insured's own occupation.
  2. As an office worker, it would be difficult to meet the disability standard of "engaging in any regular occupation or employment". In other words, except for extreme circumstances, Jane would likely be able to find "regular occupation or employment".
  3. While a "own occupation" policy could be investigated, JIC believes Jane's existing disability insurance is sufficient and appropriate.

Insurance Analysis: Automobile

- At present, the Does' have bodily injury coverage for $100,000 for each person, $300,000 for each occurrence, and $100,000 property damage for each occurrence with no deductible. JIC recommends the Does' investigate increasing their bodily injury coverage to the $250,000 - $300,000 range. The increase in premium will likely be a few hundred dollars for the year.
- In addition, if the Does' have relatively few claims, they may want to consider establishing a deductible amount of anywhere between $100 and $500. Our experience has been that no-deductible auto insurance is expensive and establishing a relatively small deductible (particularly if there are few claims) can save money (or, alternatively, be used to purchase additional bodily injury coverage).

Insurance Analysis: Homeowners

- In its financial planning questionnaire, the Does' indicated their house had a market value of $340,000. However, based on their existing homeowners declaration page, the dwelling is protected for only $281,000. JIC recommends that Does' strongly consider increasing their dwelling protection to match the market value of the house.

Umbrella Insurance

- Unexpected events happen. In a blink of an eye an unfortunate auto accident could occur. Umbrella insurance provides significant protection for an inexpensive cost against infrequent and unexpected events.

Financial Planning: General Information And Observations

Summary Financial Statements

Income Statement		
	No Bonus	**Assuming Bonus**
Revenue	**$158,000**	**$200,000**
Fixed Expenses	134,900	134,900
Somewhat Discretionary	27,900	27,900
Discretionary	9,500	9,500
Total Expenses	**$172,300**	**$172,300**
Net Income	***$-14,300***	***$27,700***

Balance Sheet			
Personal Assets		**Existing Liabilities**	
Cash/Money Market	$59,000	1st Mortgage	$264,000
Home	340,000	Home Equity Loan	33,300
Automobiles	15,000	**Total Liabilities**	**$297,300**
Investment Assets			
John IRA/401k	$132,493	***Net Worth***	***$445,013***
Jane IRA/401k	172,720		
Jane – CAT SAR/RSU	20,400		
College Accounts	2,700		
Total Assets	**$742,313**		

Observations

- The following page provides a more detailed breakdown of the various expenses. These are the numbers supplied in JIC's financial planning questionnaire and are, of course, subject to error. We must assume that the aggregate figures are reasonable estimates of reality. Given the significant cash needs that will be required for retirement and education funding, JIC's recommendation is that the Does' concentrate on expense control and perhaps supplementing their income (i.e. John goes back to work).
- The Does' balance sheet is in reasonably good order. From the option statement, while Jane has many stock appreciation rights and restricted stock units, only 340 shares of restricted stock is vested and exercisable. The stock appreciation right that is exercisable currently has little, if any, value (grant price of $63.04, similar to current market price).
- The Does' interest rate on their mortgage is stated as 6% while their home equity line of credit is stated at 8.25%, both of which are excessive in today's interest rate environment.
  1. As a Caterpillar family, there is always the possibility of a transfer. However, the mortgage is 1.0% to 1.5% above current rates and the home equity loan may be 3.0% to 3.5% higher than what can be achieved.
     - JIC strongly encourages the Does' to consider re-financing their mortgage and home equity loan. At least the analysis should be done to determine the costs of refinancing and what the payback period is. At a minimum, they should talk to their existing lender about a loan modification (one way to possibly lower the interest rate without having the re-financing costs).

Expense Detail

Fixed Expenses	
Mortgage	$22,700
Utilities	6,400
Insurance	5,600
Taxes (1)	57,700
Food	15,900
Dependent Care	6,700
Other	3,400
401k Contribution	16,500
Total Fixed Expenses	**$134,900**

Somewhat Discretionary Expenses	
Clothing	4,800
Education	1,600
Food "Eating Out"	5,200
Non-Insurance Healthcare	2,900
Maintenance (car and home)	4,800
Transportation	3,400
Other	5,200
Total Somewhat Discretionary Expenses	**$27,900**

Discretionary Expenses	
Charitable Contributions	$2,300
Recreation/Entertainment	3,600
Travel	1,800
Vacation	0
Other	1,800
Total Discretionary Expenses	**$9,500**

1) Taxes include: federal tax of $35,000, state tax of $6,000, Social Security of $6,600, Medicare of $3,100, and real estate of $7,000.

Retirement Forecasting Analysis

Retirement Forecasting Analysis

Background

- This retirement forecasting analysis calculates the retirement fund balance and annual contributions necessary for the Does' to reach their retirement income goal.

- A summary of the process used is described below. More detail about the specific assumptions follows.
  1. JIC calculated the amount of money that needs to be available when Jane reaches retirement and the annual contributions required to reach that targeted amount. The amount required varies by:
     - When Jane retires,
     - The amount of the retirement income,
     - The length of the retirement period, and
     - The investment return earned on contributions and existing balances.

Assumptions

- In JIC's analysis, we assumed four different retirement income goals:
  1. Maintaining Jane's existing salary of $158,000 assuming 3% annual salary adjustments until retirement
  2. Maintaining 80% of Jane's inflation-adjusted salary
  3. Maintaining Jane's inflation-adjusted salary for the first 10 years of retirement (to accommodate increased travel and expenses) and 80% thereafter, and
  4. $100,000 in inflation-adjusted income.

- JIC assumed a 20, 25, 30 and till age 100 retirement period (note that if Jane retires at 70, the age 100 retirement period will be 30 years while if she retires at age 62, the age 100 retirement period will be 38 years).

- JIC assumed a below-average return assumption of 4.75% and 6.25%, reflecting two different portfolio allocations:
  1. We assumed future bond returns of 4.0% and future stock returns of 7.0%, both of which are below historical averages.
  2. The 4.25% return reflects a less risky portfolio allocation of 25% stocks and 75% bonds.
  3. The 6.25% return reflects a more risky portfolio allocation of 75% stocks and 25% bonds.
  4. Unless otherwise mentioned, JIC assumed a 3% inflation rate.

Assumptions (continued)

- JIC assumed three different retirement ages, 67 (Jane's normal full retirement age), 62 (the first year Jane is eligible for Social Security), and 70 (the year in which Social Security is maximized).
  1. This analysis assumes no change to Social Security, either in terms of benefits or eligibility age. However, given the financial condition of Social Security, there will likely be changes that, given the Does' income level, will probably not be beneficial to them. Since JIC has no idea what changes would be implemented, we cannot model those changes.
  2. To calculate the estimated Social Security benefit, JIC took Jane's existing Social Security statement and found that her age 67 estimated benefit in today's dollars is $30,480. We then increased that by an assumed inflation rate of 1%. Actually, the Social Security benefit increases by the rate of inflation which will likely be greater than 1%. However, we believe making conservative assumptions is appropriate in this situation. John will likely achieve a higher Social Security benefit by taking ½ of Jane's benefit instead of using his actual earnings history. We assumed John's benefit will be ½ of Jane's benefit.
  3. We then made the appropriate adjustments to the Social Security benefit if Jane should retire earlier / later.

- JIC assumed a beginning market value of investable assets of $288,000. This excludes tangible assets such as real estate and personal property as well as Caterpillar stock appreciation rights and restricted stock units.
  1. Note that the beginning market value used in this analysis is different than the market value used in the investment analysis. We lowered the asset value used in the retirement forecast to reflect that second quarter returns stock returns were down nearly 12%.

- This analysis Does' not incorporate future Caterpillar option/stock awards.

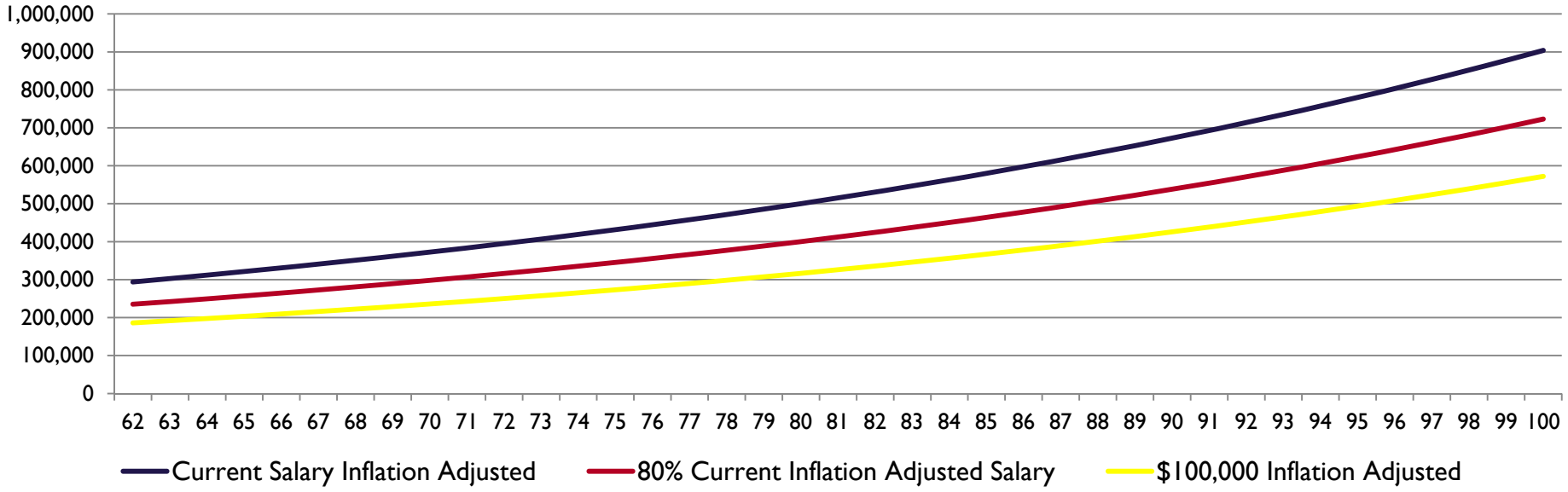
- For each scenario, we calculate what annual contribution would be required to achieve the target fund balance.

Summary of Retirement Planning Observations

- Unless there are poor health concerns, we strongly encourage the Does' to plan for an extended retirement period (30 years).

- It will be difficult for the Does' to achieve 100% of ending salary during retirement. The required changes to their existing lifestyle would be significant. Assuming retirement at age 67, and a 30-year retirement period, a portfolio value between $5.58 and $6.69 million (depending on investment return) will be required. This translates into annual contributions ranging between $68,000 and $116,000 between now and retirement.
  1. The annual contribution is significant even under the other withdrawal scenarios. 80% of ending salary would require annual contributions between $46,000 and $83,000, while the 100% for ten years / 80% thereafter scenario would require between $55,900 and $96,000. The $100,000 retirement income requires the smallest annual contribution of between $27,800 and $55,800.
     – Delaying retirement 3 years lowers the annual required contribution of a 30-year retirement period approximately 15% to 25%. Retiring at age 62 increases the annual contribution for a 30-year retirement period by approximately 40% to 50%.

Retirement Income Forecast



Observations

- This chart shows the inflation-adjusted income for three of the retirement income scenarios analyzed by JIC.
  1. Over $300,000 in annual withdrawals will be required to maintain Jane's existing inflation-adjusted salary (assuming 3% inflation).
  2. Over $200,000 in annual withdrawals will be required to maintain an inflation-adjusted $100,000 withdrawal.

A Calculation Example

	100% Current Salary	80% Current Salary	$100,000
Today's Income	$158,000		$100,000
Income At Age 67 (3% Inflation) = A	$340,741	$272,593	$215,659
Less Estimated Social Security At Age 67 = B	$59,219	$59,219	$59,219
Required Amount From Other Sources To Achieve Target Retirement Income (A-B)	$281,522	$213,374	$156,440

Observations

- This table shows the basic calculation approach. Today's income is increased for 26 years (when Jane is 67) at an assumed 3% growth rate. That is the "base income" that is to be replaced.
- From that amount, we subtract the inflation adjusted Social Security benefit. This is the Social Security benefit listed on Jane's most recent statement inflated at a 1% inflation rate. We estimate Jane's age 67 Social Security benefit to be $39,479. John's Social Security benefit is ½ of Jane's or $19,740. Adding the two together provides the total Social Security benefit estimate of $59,219.
- The required amount from other sources is simply the difference between the estimated income at 67 and the estimated Social Security benefit.

AGE 67 ANALYSIS:
Required Asset Value At Retirement Age (67) And Annual Contributions Required

Length of Retirement Period	20 Years		25 Years		30 Years		33 Years	
Assumed Portfolio Return	4.75%	6.25%	4.75%	6.25%	4.75%	6.25%	4.75%	6.25%
Target Withdrawal During Retirement:	**Asset Value Required At Normal Retirement Age (67) ($Mil)**							
100% of Ending Salary	$4.82	$4.26	$5.80	$4.97	$6.69	$5.58	$7.19	$5.90
80% of Ending Salary	3.65	3.23	4.39	3.77	5.07	4.23	5.45	4.45
100% of Ending Salary for 10 Years ; 80% Thereafter	4.29	3.82	5.02	4.36	5.70	4.82	6.08	5.07
$100,000 In Today's Dollars	2.68	2.37	3.22	2.76	3.72	3.10	3.99	3.28
Target Withdrawal During Retirement:	**Annual Contributions Required To Achieve Target Asset Value**							
100% of Ending Salary	$78,260	$46,705	$97,972	$58,293	$116,092	$68,214	$126,254	$73,467
80% of Ending Salary	54,593	29,910	69,534	38,693	83,268	46,212	90,970	50,194
100% of Ending Salary for 10 Years ; 80% Thereafter	67,421	39,602	82,362	48,385	96,095	55,904	103,797	59,886
$100,000 In Today's Dollars	34,821	15,879	45,775	22,319	55,845	27,831	61,491	30,751

AGE 70 ANALYSIS:
Required Asset Value At Retirement Age (70) And Annual Contribution Required

Length of Retirement Period	**20 Years**		**25 Years**		**30 Years**	
Assumed Portfolio Return	**4.75%**	**6.25%**	**4.75%**	**6.25%**	**4.75%**	**6.25%**
Target Withdrawal During Retirement:	**Asset Value Required At Retirement Age = 70 ($Mil)**					
100% of Ending Salary	$5.08	$4.49	$6.10	$5.23	$7.04	$5.88
80% of Ending Salary	3.80	3.36	4.57	3.92	5.27	4.40
100% of Ending Salary for 10 Years ; 80% Thereafter	4.49	4.01	5.26	4.57	5.96	5.05
$100,000 In Today's Dollars	2.74	2.28	3.29	2.63	3.79	3.17
Target Withdrawal During Retirement:	**Annual Contributions Required To Achieve Target Asset Value**					
100% of Ending Salary	$66,382	$36,648	$83,493	$46,398	$99,221	$54,746
80% of Ending Salary	45,065	21,983	57,877	29,284	69,655	35,535
100% of Ending Salary for 10 Years ; 80% Thereafter	56,619	30,445	69,432	37,746	81,209	43,997
$100,000 In Today's Dollars	27,256	9,731	36,477	14,986	44,954	19,485

AGE 62 ANALYSIS:
Required Asset Value At Retirement Age (62) And Annual Contribution Required

Length of Retirement Period	20 Years		25 Years		30 Years		38 Years	
Assumed Portfolio Return	4.75%	6.25%	4.75%	6.25%	4.75%	6.25%	4.75%	6.25%
***Target Withdrawal During Retirement*:**	**Asset Value Required At Retirement Age = 62 ($Mil)**							
100% of Ending Salary	$4.36	$3.85	$5.24	$4.50	$6.05	$5.05	$7.21	$5.77
80% of Ending Salary	3.80	3.36	4.57	3.92	4.65	3.88	5.54	4.44
100% of Ending Salary for 10 Years ; 80% Thereafter	3.90	3.48	4.58	3.97	5.20	4.39	5.55	4.62
$100,000 In Today's Dollars	2.51	2.22	3.01	2.59	3.48	2.91	4.15	3.32
***Target Withdrawal During Retirement*:**	**Annual Contributions Required To Achieve Target Asset Value**							
100% of Ending Salary	$103,568	$68,635	$128,877	$84,271	$152,141	$97,657	$185,519	$115,186
80% of Ending Salary	74,590	47,023	94,056	59,049	111,950	69,345	137,622	82,828
100% of Ending Salary for 10 Years ; 80% Thereafter	90,297	59,494	109,763	71,520	127,657	81,816	137,691	87,268
$100,000 In Today's Dollars	50,381	28,968	64,966	37,978	78,373	45,693	97,607	55,794

Education Funding

Education Funding

Observations

- JIC calculated the four-year inflation adjusted cost of a public university (University of Illinois) and a private university (Augustana College). The estimated all-in cost (tuition, room/board, and fees) for fall 2010 at the University of Illinois is just under $30,000, while Augustana's all-in cost is $40,400. We assumed a higher future inflation rate for the University of Illinois since funding from the State of Illinois has been dropping.
  1. The assumption used in our forecast our detailed on the next page.

- Total cost for both boys, at time of matriculation, assuming 100% parental payment, is estimated to be $433,000 at a public university. The private university four-year cost for both boys is estimated to be $590,000.

- To achieve this dollar amount by the time it is needed, annual contributions of $30,000, and $41,000 will be needed to pay the cost of public/private university, respectively.

Education Funding Analysis: Assumptions

	Public (1)	Private (1)
Current Tuition	$14,904	$32,235
Living Expenses	13,390	8,181
Fees	1,683	0
Estimated All-In Cost, Fall 2010	**$29,977**	**$40,416**
Tuition Inflation	8%	6%
Living Expense Inflation	3%	3%
Fees Inflation	6%	n/a

(1) University of Illinois @ Urbana-Champaign and Augustana College are the public/private schools used in this analysis.

Observations

- Jic used the University of Illinois at Urbana-Champaign and Augustana College as its proxies for public/private education. The estimated all-in cost for fall 2010 is just under $30,000 for the University of Illinois and approximately $40,500 for Augustana College.
  1. At the University of Illinois, once a child matriculates, his tuition cost is "frozen" for the next four years. This analysis reflects the freezing of tuition upon matriculation.
- Jic assumed a higher inflation rate for the University of Illinois given recent experience as well as the deteriorating financial condition in the State of Illinois which will likely lower future state support.

Expected Four-Year Cost and Required Annual Contribution

	Public University		Private University	
	Expected Four-Year Cost	Required Annual Contribution	Expected Four-Year Cost	Required Annual Contribution
Sam (Matriculation: Fall, 2020)	$203,394	$15,840	$278,970	$21,725
Paul (Matriculation: Fall 2022)	$229,280	$14,188	$310,753	$19,230
Total	**$432,674**	**$30,028**	**$589,723**	**$40,955**

Observations

- Based on the assumptions from the prior page, JIC estimates total public university cost of just under $433,000 and total private university cost of approximately $590,000.
  1. These figures assume that John and Jane will pay 100% of each child's undergraduate education.
- The required annual contribution to fund 100% of this cost by each child's matriculation date is $30,000 (public university) and $41,000 (private university).

Investment Analysis

Investment Analysis

Observations

- In total, the Doe portfolio is allocated 80% stocks and 20% bonds. This allocation shows a willingness to accept significant fluctuations in portfolio value. JIC believes the stock allocation is on the high side of a reasonable range.
- The portfolio analyzed by JIC consists entirely of tax-deferred accounts (401k, IRA, 403b, etc). Given their retirement income goals, it is likely that at some point taxable accounts will have to be established (enough money cannot be contributed to tax-deferred accounts).

Stock Portfolio

- 82.7% of the stock allocation is invested to the U.S. market. Nearly all of this allocation is invested to various broad market index funds (designed to replicate the US stock market). This is a low cost, broadly diversified (at least within the U.S. market), investment strategy.
  1. However, as an index fund, there is no chance to outperform the benchmark index and investors must accept the company size and investment style allocation of the underlying portfolio. JIC believes establishing "tilts" – emphasizing various market segments (either with active managers and/or index funds) may be able to add value above an index.
- 13.0% of the stock portfolio is allocated to international stocks – in two different mutual funds (Fidelity Diversified International and Fidelity Spartan International Index). The Fidelity International Index Does' a good job of providing international equity exposure by producing returns similar to the MSCI EAFE Index (the most common developed international stock market index). While the Fidelity Diversified International has a competitive long-term track record, recent results have been less exciting. We believe there are other, better alternatives to this fund.
- Lastly, 4.3% of the stock portfolio is invested to Caterpillar stock. While we prefer diversification, it is likely that , over time, given Caterpillar employee stock ownership goals, that the percentage Caterpillar stock represents of the Doe stock portfolio will increase.

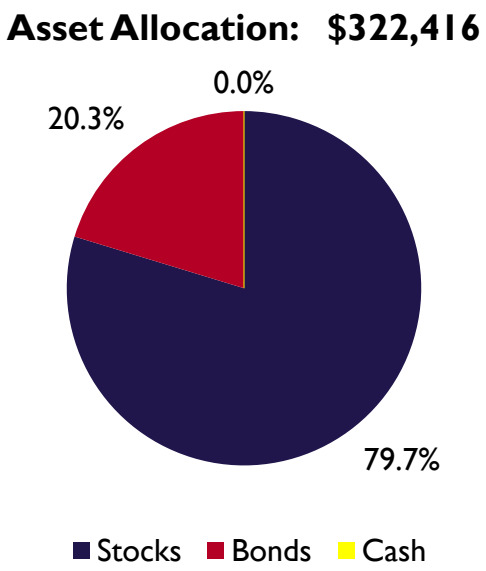
Bond Portfolio

- The bond portfolio is invested to two bond funds one of which is the Fidelity US Bond Index. It is designed to track the Barclay's Aggregate Bond Index which consists of government, corporate, and mortgage debt. The Aggregate index is one of the best known and most tracked indices. The fund's expense ratio is 0.32% which is reasonable for a bond index fund (but there are other less costly alternatives). Perhaps more troubling is the tracking error the fund has had relative to the index. While the tracking error appears to have recently improved, over longer-term time periods, returns have significantly lagged the Aggregate index (by more than the expense ratio). While this fund is acceptable, we believe there are other index-fund alternatives.

Additional Thoughts

- We believe the Does' should consider additional asset classes such as real estate (reits), emerging market stocks and bonds, high yield bonds, alternative investments and perhaps commodities. The goal is to create a portfolio that is not as closely correlated to the returns of the stock and bond markets.
- Using an index strategy is a low cost, relatively simple way to get market exposure. The downside is that there is no chance of outperforming a market index. We prefer strategies that combine index and active management. In addition, we find there are times when one wants to weight different portfolio segments different than the index weight. For example, one may want to overweight small-company stocks or value stocks more than the specified index allocation.
- If the Does' were to accept JIC's recommendations to increase their asset class diversification, they would likely have to transfer John's Employer A, TIAA-CREF, and Jane's Employer B 401k to IRA accounts. By doing this, they would significantly increase the number of investment options available to them (instead of just the investment options selected by the employer).

Investment Analysis

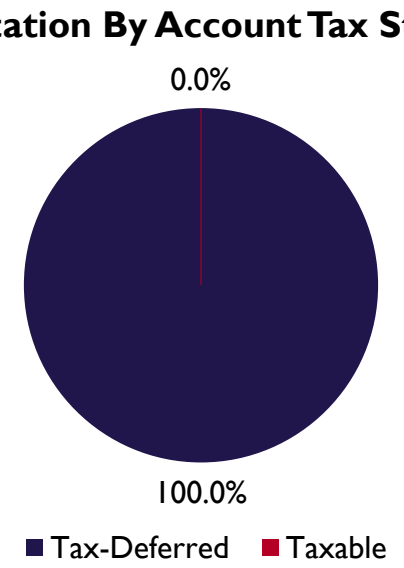


Observations

- In aggregate, the Does' asset allocaiton is 80% stocks and 20% bonds.
  1. Data for this chart includes John's Fidelity IRA, Employer A account, TIAA-Cref account, and Jane's Caterpillar and Employer B 401k's.
  2. Data is generally based on March 31, 2010 statements and Does' not reflect the decline in market value that occurred during the second quarter.

- From a quantitative perspective (young age / long time horizon, stable employment income), JIC believes this asset allocation is on the high side of "reasonable". While quantitative factors are important, perhaps more important is the Does' risk preference and their willingness to accept fluctuations in portfolio value.
  - The Does' current stock allocation will likely result in significant short-term fluctuations in portfolio market value but, over many years, should provide for a higher long-term return.

Investment Analysis

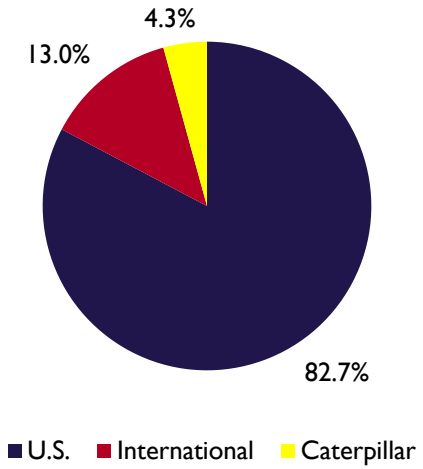


Observations

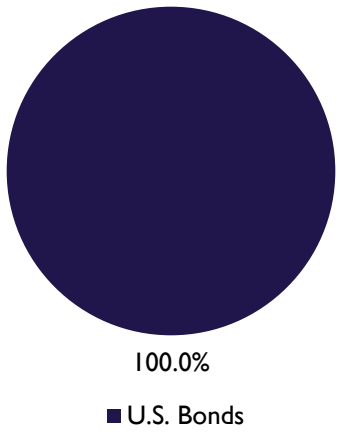
- At present, 100% of investment assets are allocated to tax-deferred accounts (401k, 403b, IRA, etc).
- The contributions made to tax-deferred accounts will not be sufficient to meet the Does' retirement income goal. Therefore, one (or more) taxable accounts will likely be necessary.

Stock & Bond Allocation

Stock Allocation: $257,047



Bond Allocation: $65,369



Observations

- The stock portfolio is allocated 83% U.S. stocks, 4% Caterpillar and 13% developed international stocks. The stock allocation is almost entirely invested to various index funds (except for Caterpillar and an international holding). Most of the index fund investment is allocated toward a total market index consisting of large-, mid-, and small-company stocks with allocations to value, core, and growth stocks (although there is a small allocation to an S&P 500 index fund).
- 4.3% of the stock portfolio is invested to Caterpillar stock. While we prefer diversification, it is likely that , over time, given Caterpillar employee stock ownership goals, that the percentage Caterpillar stock represents of the Doe stock portfolio will substantially increase.
  1. JIC only included the Caterpillar stock in Jane's 401k and not the stock appreciation rights or restricted stock (since most are not vested).
- The bond portfolio is 100% invested to U.S. bonds via two bond mutual funds, one of which is a bond index fund consisting of US government, corporate, and mortgage-backed securities across the maturity spectrum. The concept of a low-cost bond market index fund is appropriate.
- Except for a small amount, the Does' have opted for a low-cost index fund strategy. This is a very reasonable strategy. However, JIC typically prefers a combination of active and index fund management. In addition, JIC generally recommends adjustments to the investment style allocation based upon its market outlook.
- In order to provide additional diversification benefits, JIC believes the Does' should consider additional asset classes including, emerging market stocks and bonds, real estate, alternative investments, high yield bonds, and perhaps commodities. The purpose of adding these asset classes is to reduce overall portfolio volatility.

Doe Portfolio
Fund Investment Performance For Periods Ending March 31, 2010

	Ticker	Investment Style	3 Months	YTD	1 Year	3 Years	5 Years	10 Years
Large-Cap Stocks								
Fidelity Spartan Total Market Index	FSTMX	Large Core Stocks	6.1%	6.1%	52.5%	-3.8%	2.6%	-0.1%
Russell 3000 Index (Benchmark Index)			***5.9%***	***5.9%***	***52.4%***	***-4.0%***	***2.4%***	***-0.1%***
International Stocks								
Fidelity Diversified International	FDIVX	Developed International Stocks	0.6%	0.6%	50.3%	-6.5%	3.9%	4.0%
Fidelity International Index	FSIVX	Developed International Stocks	0.8%	0.8%	54.1%	-6.9%	3.9%	1.2%
MSCI EAFE (Benchmark Index)			***0.9%***	***0.9%***	***54.4%***	***-7.0%***	***3.8%***	***1.2%***
Bonds								
Fidelity US Bond Index	FBIDX	Intermediate-Term Bond	1.7%	1.7%	7.4%	5.2%	4.9%	4.9%
Barclays Aggregate (Benchmark Index)			***1.8%***	***1.8%***	***7.7%***	***6.1%***	***5.4%***	***6.3%***

Observations

- Performance for the Fidelity Total Market Index, and Fidelity International Index is what we would have expected – returns that are very similar to the indices they are seeking to mirror.

- Over longer time periods, the Fidelity Bond Index has exhibited significant tracking error to its benchmark index. With that said, recent results have been more in-line with the underlying index. Regardless, JIC believes there are better (and lower cost) bond index funds than the Fidelity Bond Index.

- The Fidelity Diversified International fund is the only actively-managed mutual fund in the Doe portfolio. Over longer-term time periods it has outperformed its benchmark index, however, recent performance has been sub-par. We do believe there are more compelling developed international mutual fund alternatives. However, this is an acceptable fund.

Detailed Allocation By Account

	$ Stocks	$ Bonds	$ Total	% Stocks	% Bonds	% Total
John – Fidelity IRA	$66,714	$19,893	$86,607	77.0%	23.0%	26.9%
John – TIAA-Cref	4,278	0	4,278	100.0	0.0	1.3%
John – Employer A	37,301	11,305	48,606	76.7	23.3	15.1%
Jane Caterpillar 401k	108,515	21,830	130,345	83.3	16.7	40.4%
Jane Employer B 401k	40,239	12,341	52,580	76.5	23.5	16.3%
Total	**$257,047**	**$65,369**	**$322,416**	**79.7%**	**20.3%**	**100.0%**

Estate Planning

Observations

- In answering JIC's financial planning questionnaire, the Does' indicate that both Jane and John have wills that were developed and/or reviewed within the last five years. In addition, the Does' indicate that:
  1. They have appointed an executor and trustee for their estate,
  2. They have appointed a guardian for their minor children should both John and Jane pass away,
  3. They both have a health care power of attorney and a living will, and
  4. Someone has power of attorney over their financial affairs presumably if both John and Jane become incapacitated.

- On the surface, it appears that the Does' have covered "the basics" of estate planning. However, JIC was not given a copy of the will and other estate planning documents and, therefore, cannot make any authoritative estate planning observations.

- The Does' indicate that both John and Jane have established revocable living trusts. JIC has not been given copies of the trust documents and is therefore limited in its observations.
  1. However, with any type of trust, one consideration is the titling of property. If a revocable living trust is not funded or the assets designed to fund the trust do not have the proper titling, then the trust may not meet the Does' goals.
     – It is critical that assets have the proper titling to fund the trust. With that said, there are likely some assets that the Does' may not want inside their trust or may not want the trust to be the beneficiary (such as IRA's and 401k's). JIC strongly encourages the Does' to review the titling of their assets and seek appropriate advice.

Insurance Analysis

Insurance Analysis

Life Insurance

- JIC's life insurance analysis assumed that, if either John or Jane should pass away, the home mortgage and the cost of college will be paid by the life insurance proceeds. In determining the amount of insurance needed for Jane, the remaining factor is the amount (and length of time) of salary replacement. In its analysis, JIC assumed 100%, 75%, and 50% inflation-adjusted salary replacement for a period of 10 years, 20 years, and until Jane reaches age 67.
  1. Based on this methodology, Jane should obtain additional life insurance of between $300,000 and $3 million, depending on the percent of salary replaced and the salary replacement time period.
  2. As a company benefit, Caterpillar offers "optional employee life" that can be purchased in the amounts of 100%, 200%, 300%, or 400% of annual base salary (up to $1 million). JIC Does' not know the cost of this insurance but our experience has been that group life insurance costs are generally quite competitive. If the Does' decide to purchase additional insurance on Jane, JIC recommends comparing the cost of Caterpillar's optional employee life with other commercially-available products.
- With respect to John, we assumed a $30,000 inflation-adjusted salary. This would allow Jane to hire full-time help for several years. We calculated John's life insurance requirement assuming this "salary replacement" for 10 years, 20 years, and until age 67 but believe the 10-year period is most appropriate (when the kids are at home).
  1. Assuming a 10-year salary replacement, John needs an additional $164,000 of insurance. If salary is to be replaced for 20 years and until age 67, the additional insurance need is $400,000 and $552,000, respectively.
  2. While face value amounts are limited, Caterpillar Does' provide a spousal insurance benefit.

Disability Insurance

- Jane has disability insurance that, if qualified, could pay 60% of her annual base salary.
- It appears that in order to qualify for benefits Jane must be totally disabled and be prevented from engaging in any regular occupation or employment.
  1. There are better (more expensive) types of disability policies that would pay benefits based on the insured's own occupation.
  2. As an office worker, it would be difficult to meet the disability standard of "engaging in any regular occupation or employment". In other words, except for extreme circumstances, Jane would likely be able to find "regular occupation or employment".
  3. While a "own occupation" policy could be investigated, JIC believes Jane's existing disability insurance is sufficient and appropriate.

Insurance Analysis

Automobile Insurance

- At present, the Does' have bodily injury coverage for $100,000 for each person, $300,000 for each occurrence, and $100,000 property damage for each occurrence with no deductible.
- There are higher levels of insurance coverage available for small increases in annual cost. Given the Does' income and assets, JIC recommends the Does' investigate increasing their bodily injury coverage to the $250,000 - $300,000 range. The increase in premium will likely be a few hundred dollars for the year.
- In addition, if the Does' have relatively few claims, they may want to consider establishing a deductible amount of anywhere between $100 and $500. Our experience has been that no-deductible auto insurance is expensive and establishing a relatively small deductible (particularly if there are few claims) can save money (or, alternatively, be used to purchase additional bodily injury coverage).

Homeowners Insurance

- In its financial planning questionnaire, the Does' indicated their house had a market value of $340,000. However, based on their existing homeowners declaration page, the dwelling is protected for only $281,000. JIC recommends that Does' strongly consider increasing their dwelling protection to match the market value of the house.

Umbrella Insurance

- Unexpected events happen. In a blink of an eye an unfortunate auto accident could occur. While existing limits may be sufficient, JIC strongly recommends the Does' obtain umbrella insurance. If, for example, the bodily injury limits were exceeded, then the umbrella insurance would pay any remaining claim (up to the umbrella limits). Otherwise, the Does' may be responsible for paying any judgment. Umbrella insurance provides significant protection for an inexpensive cost against infrequent and unexpected events.

Life Insurance Need: Jane

	100% of Salary			75% of Salary			50% of Salary		
	10 Years	20 Years	Until 67	10 Years	20 Years	Until 67	10 Years	20 Years	Until 67
Salary Replacement	$1,460,483	$2,724,364	$3,506,422	$1,095,363	$2,043,273	$2,629,817	$730,242	$1,362,182	$1,753,211
College Cost	589,723	589,723	589,723	589,723	589,723	589,723	589,723	589,723	589,723
Mortgage	297,000	297,000	297,000	297,000	297,000	297,000	297,000	297,000	297,000
Estimated Insurance Need	2,347,206	3,611,087	4,393,145	1,982,086	2,929,996	3,516,540	1,616,965	2,248,905	2,639,934
Current Insured Amount	1,320,000	1,320,000	1,320,000	1,320,000	1,320,000	1,320,000	1,320,000	1,320,000	1,320,000
Additional Insurance Required	1,027,206	2,291,087	3,073,145	662,086	1,609,996	2,196,540	296,965	928,905	1,319,934

Observations

- JIC assumed that if Jane should prematurely pass away, college (we assumed private college in this analysis) and the mortgage should be paid off. The remaining variable is the amount of salary replacement.
  1. Jic assumed 3 different inflation-adjusted salary replacement ratios: 100%, 75%, and 50%.
     - If the mortgage and college were paid off, that would significantly reduce monthly expenses ($22,000 per year for the mortgage). Therefore, a 100% salary replacement ratio may not be necessary.
  2. Jic calculated the cost of "salary replacement" insurance for three different lengths of time: 10 years, 20 years, and until Jane reaches age 67 (normal retirement age).
  3. A life insurance benefit that would produce at least twenty years of replacement income would require additional insurance of approximately $0.9 to $2.3 million depending on the percent of salary replaced.

- Note: We did not present value the cost of college back to today's dollars. The value shown is the expected total cost upon matriculation. In theory, a smaller number could be used with the proceeds invested to achieve the target amount. However, since we do not know when Jane or John would pass away, it is a more conservative assumption to simply fund the future cost now.

Life Insurance Need: John

	100% of Salary		
	10 Years	**20 Years**	**Until 67**
Salary Replacement	277,307	517,284	665,776
College Cost	589,723	589,723	589,723
Mortgage	297,000	297,000	297,000
Estimated Insurance Need	1,164,030	1,404,007	1,552,499
Current Insured Amount	1,000,000	1,000,000	1,000,000
Additional Insurance Required	164,030	404,007	552,499

Observations

- JIC assumed that if John should prematurely pass away, college (we assumed private college in this analysis) and the mortgage should be paid off. The remaining variable is the amount of salary replacement.
  1. We assumed a $30,000 inflation-adjusted salary for John. With this amount, Jane would be able to hire assistance, particularly while the kids are still at home.
  2. A life insurance benefit that would produce at least ten years of replacement income would require additional insurance of approximately $165,000.

- Note: We did not present value the cost of college back to today's dollars. The value shown is the expected total cost upon matriculation. In theory, a smaller number could be used with the proceeds invested to achieve the target amount. However, since we do not know when Jane or John would pass away, it is a more conservative assumption to simply fund the future cost now.