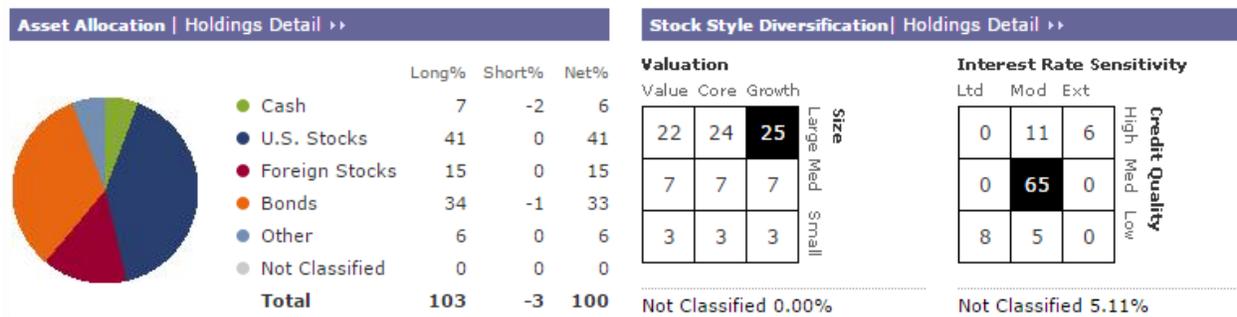


It's recommended that you transfer most of Bob's investments to his TSP account and Sue's to an IRA at Vanguard. This includes the money in your employer plans which are expensive. For example, Sue has the option to invest in the Dreyfus S&P 500 index at a cost of 0.2% which is four times more expensive as Vanguard's S&P 500 index. The law allows you to transfer the funds in the employer plans after you've reached 59 ½ but your plans don't have to allow it.

According to Morningstar, your annual investment expense is \$3832. The recommended plan would reduce that to \$720.

Combined investments

Below is a Morningstar X-Ray of your combined investments.



Some observations:

- Your stock allocation is tilted toward growth stocks. Historically, a tilt in the other direction toward value stocks has provided greater return with the same volatility. Since 1972, value stocks have outperformed growth stocks by an annualized 2%. The expected future premium for value stocks is estimated at 1%.
- Your USAA bond funds hold bonds with medium to low credit quality. As compensation for the lower credit quality (and higher risk) these bonds pay higher interest rates but can decline in value during times of market distress. That is just when you need the safety of bonds. For example, in 2008 the S&P 500 stock index declined 38% while the total US bond market as represented by Barclays Aggregate Bond Index increased 5.2%. The USAA Income Fund declined 5% 2008. During market declines, standard portfolio management calls for rebalancing back to the target stock/bond allocation. In 2008 this would have been achieved by selling bonds and buying stocks. An investor in the USAA fund would have had to sell more shares in order to rebalance than an investor in a total bond market index fund.
- Your USAA S&P 500 and Extended Market Index Funds have expense ratios of 0.25% and 0.48% respectfully. You can get the same indexes at Vanguard for 0.05% and 0.10%. \$10,000 invested in the USAA fund in 2005 would have grown to \$19,635 today vs. \$20,082 with the Vanguard fund.
- Your CREF Equity Index tracks the Russell 3000 and costs 0.61% vs. 0.15% for the same thing at Vanguard.

- Your CREF Stock fund has a ten year annualized return of 6.2% vs. 7.2% for Vanguard’s S&P 500 index.
- The Mass Mutual Retire Smart 2020 comes in two share classes but your option menu doesn’t tell us which one you have. The share classes cost 0.85% or 0.95%, both of which Morningstar labels as “high”.

USAA Funds

As previously mentioned, USAA funds are expensive. There’s generally an inverse relationship between cost and performance. This is exemplified below where I compared some of your USAA funds with their Vanguard counterparts. I only compared funds for which Vanguard had a competing fund of the same asset class. The Vanguard funds have ticker symbols beginning with V. The expense ratios are in parentheses.

Three of the four domestic USAA funds have underperformed their Vanguard counterparts over all time periods shown. The USAA Aggressive Growth and International funds have outperformed only recently. This is an example of the saying that “performance comes and goes but costs remain the same”.

USAA Aggressive Growth Fund (0.88%) vs. Vanguard Large Cap Growth Index (0.09%)

Total Return % (12/21/2015)	1-Day	1-Week	1-Month	3-Month	YTD	1-Year	3-Year	5-Year	10-Year	15-Year
USAUX	0.83	-0.03	-2.36	3.15	5.24	4.13	16.06	11.39	6.12	2.70
VIGAX	0.74	-0.39	-3.87	1.73	2.22	1.60	15.40	12.87	8.20	5.28
Category (LG)	0.75	0.13	-2.82	1.74	2.64	1.96	14.88	11.43	7.13	4.50
+/- VIGAX	0.09	0.36	1.51	1.41	3.02	2.53	0.67	-1.48	-2.08	-2.59
+/- Category (LG)	0.08	-0.16	0.46	1.41	2.60	2.18	1.18	-0.04	-1.01	-1.80
Rank in Category	29	65	32	20	30	32	33	52	76	90

USAA Income stock fund (0.79%) vs. Vanguard Large Cap Value Index (0.09%)

Total Return % (12/23/2015)	1-Day	1-Week	1-Month	3-Month	YTD	1-Year	3-Year	5-Year	10-Year	15-Year
USISX	1.57	0.24	-0.89	6.76	-2.27	-3.44	12.55	10.88	4.90	4.53
VVIAX	1.48	0.08	0.14	8.01	0.32	-0.91	14.61	12.01	6.45	5.47
Category (LV)	1.46	0.03	-1.29	5.30	-2.92	-3.91	11.96	10.05	5.61	5.67
+/- VVIAX	0.09	0.16	-1.03	-1.25	-2.59	-2.53	-2.06	-1.13	-1.55	-0.95
+/- Category (LV)	0.11	0.20	0.41	1.46	0.65	0.47	0.59	0.84	-0.71	-1.14

USAA Small Cap Stock (1.15%) vs. Vanguard Small Cap Stock Index (0.09%)

Total Return % (12/23/2015)	1-Day	1-Week	1-Month	3-Month	YTD	1-Year	3-Year	5-Year	10-Year	15-Year
USCAX	1.33	0.31	-2.03	1.81	-4.11	-3.84	10.66	8.57	6.02	6.38
VSMAX	1.44	0.34	-2.17	1.25	-2.57	-2.69	13.07	10.59	7.90	8.76
Category (SB)	1.17	0.20	-2.73	1.30	-4.15	-4.09	10.92	8.45	6.28	8.07
+/- VSMAX	-0.11	-0.03	0.14	0.56	-1.54	-1.14	-2.41	-2.02	-1.87	-2.38
+/- Category (SB)	0.15	0.11	0.71	0.50	0.03	0.25	-0.26	0.12	-0.25	-1.69
Rank in Category	43	49	16	40	60	60	66	57	57	89

USAA International (1.12%) vs. Vanguard Developed Market Index (0.09%)

Total Return % (12/24/2015)	1-Day	1-Week	1-Month	3-Month	YTD	1-Year	3-Year	5-Year	10-Year	15-Year
USIFX	-0.26	1.05	-0.60	5.75	1.31	-0.12	4.55	4.66	5.01	5.69
VTMGX	-0.25	1.45	-1.06	5.66	0.49	-0.97	5.14	3.88	3.19	3.87
Category (FG)	-0.11	1.00	-0.47	5.81	1.54	0.55	5.54	4.02	3.95	4.34
+/- VTMGX	-0.01	-0.41	0.46	0.09	0.81	0.86	-0.59	0.78	1.82	1.82
+/- Category (FG)	-0.15	0.05	-0.14	-0.06	-0.23	-0.67	-0.99	0.64	1.05	1.36
Rank in Category	83	39	57	49	51	57	67	36	21	11

Recommended allocation

The recommended allocation is tilted toward value stocks. I've kept your bond allocation at its current 40%.

- 18% US stock market index
- 18% US value index
- 12% International stock market index
- 12% international value fund
- 30% TSP G Fund
- 5% Intermediate term bond index
- 5% short term inflation linked bonds

			Bob TSP	Bob 403b	Bob IRA	Bob Roth	Sue 403b	Sue Roth	Sue IRA
			46,022	15,867	307,677	96,049	14,598	90,141	206,662
	% Target	\$ Target							
US Stock	18%	\$ 139,863							
Vgd Total Stk Mkt (VTSAX, 0585)					83,811				56,052
US Value	18%	\$ 139,863							
Vgd Mid Cap Value (VMVAX, 5835)					25,614	60,164		54,085	
Int'l	12%	\$ 93,242							
Vgd Total Int'l (VTIAX, 0569)					55,874				37,368
Int'l Value	12%	\$ 93,242							
Vgd Int'l Value (VTRIX,0046)					21,301	35,885		36,056	
Bond									
Vgd Short Term TIPS (VTAPX, 0567)	5%	\$ 38,851			20,001				18,850
TSP G Fund/ Vgd Intermediate Bond (VBILX, 5314)	35%	\$ 271,956	46,022		101,077				94,392
TIAA Traditional				15,867			14,598		
	100%	\$ 777,016							

Optimizing your TSP and TIAA CREF options

You can roll some of your traditional IRA and TIAA money into your existing TSP account. However, you can't get the value exposure there so that portion can be rolled to value funds at Vanguard. The TSP has a slight cost edge over Vanguard. This is shown on the table below.

		Vanguard Index	
C Fund	0.029%	S&P 500	0.05%
I Fund	0.029%	Total International	0.14%
F Fund	0.029%	Total Bond Market	0.07%

The impact of these cost differences is not very large when both are already very low. For example, if we assume \$100,000 starting investment and international market returns of 5% before expenses, the TSP I Fund would support an annual payment to you of \$6,483 vs. \$6,380 for the Vanguard fund over a thirty year retirement. This is only an example of the impact of cost. That implied 6.4% withdrawal rate is too high to plan on.

While the cost impact is small, it's still recommended that you move some of your money to the TSP in order to take advantage of the **G Fund**. And since you're going to move some money to get into the G Fund you might as well take advantage the lower cost C and I Funds.

The **G Fund** invests in non-marketable US Treasury bonds. When interest rates rise, the value of marketable bonds will fall. Since the G Fund is not marketable it will retain its value. This is a valuable option in a rising interest rate environment. However, there is a tradeoff. The G Fund has a current yield of 2.125% vs. 2.4% for the total bond market which is represented by the F Fund. In my view the tradeoff is worth it.

You both have positions in **TIAA Traditional** accounts that you should keep. TIAA Traditional is somewhat like the G Fund in that its value will not decline if interest rates rise. Also, TIAA Traditional uses a "vintage" system to determine the interest rate that's paid on your account. Your contributions were assigned an interest rate according to the year (vintage) that they were made. These rates don't change and your current "blended" rate is most likely higher than is now available in the bond market. Before contributing new money to TIAA Traditional, you should know that some contracts will not allow you to access the money for ten years.

Maximizing your Roth accounts

Withdrawals from Roth accounts are tax free and there are no required distributions. In view of these advantages, it's recommended that you hold the investments with the highest expected growth rates. Those would be both the US and international value funds.