

Benchmarking

What Is It?
Why Do You Want To Do It?

bivio

- Club
- Fund

bivio

We like to think about being in an investment club as a group of people running a little business.

In fact, we are a group of people managing a mutual fund.

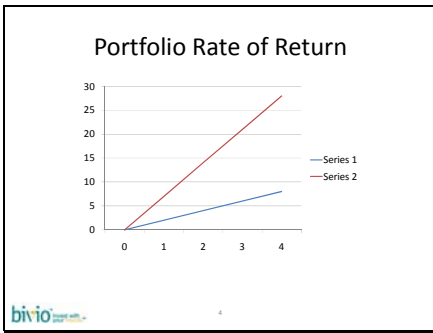
Contributions



bivio

When you make a contribution to your club, you are purchasing shares of your fund

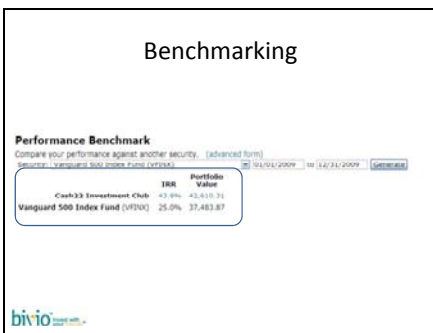
You, of course, do that with the intent that those shares will increase in value, just like anything else you invest in



You want to manage your portfolio so your money grows as much as it can

Ideally, you want the amount of effort you put into managing your investments to produce an increase in the rate of growth you achieve.

You'd like your growth to follow the red line rather than the blue one.



Comparing your rate of return to another investment is called benchmarking. There is a report in bivio that lets you do this. It is called the Portfolio Benchmark report. You get to it on the Accounting>Reports page. You select the investment you want to compare to and the time period over which you want to make the comparison

The comparison that is made is between IRR or Annualized Internal Rate Of Return for the two investments.

You should be watching this because it will give you a birds eye view of how good you are at making investing decisions. A higher number means your investments are growing faster than if you'd put the money into whatever you are comparing with.

What Investment to Compare to

- VFINX-Vanguard Index 500 Fund
- VTSMX-Vanguard Total Stock Market Index Fund

	IRR	Portfolio Value
Cash22 Investment Club	43.8%	42,610.31
Vanguard Total Stock Market Index Fund (VTSMX)	27.4%	38,124.83

- BRKB

	IRR	Portfolio Value
Cash22 Investment Club	43.8%	42,610.31
Berkshire Hathaway Inc Cl B (BRKB)	0.7%	30,803.29

bivio

How do you pick what to compare to?

A common selection is the Vanguard Index 500 fund. Why is this? Because it is commonly recommended as an investment choice for those who want to be invested in the stock market but do not want to have to choose investments. As we all know, it is not easy to beat. Most active mutual fund managers do not beat it.

You actually can compare to investing in almost anything that has a ticker symbol. Another popular comparison is to compare to the Vanguard Total Stock Market Index

And finally, it's always good to see how you're doing compared to Warren Buffet.

Time Horizon

- Your Efforts or Luck?
- At Least a Year
- Caveat

bivio

You need to pick a time frame over which to make your comparison.

The longer the time period, the better you have a chance that you are seeing your expertise in managing a portfolio rather than just luck.

It should be at least a year. Since IRR is an annualized return, it can be misleading if you extrapolate short term changes out over a year time frame.

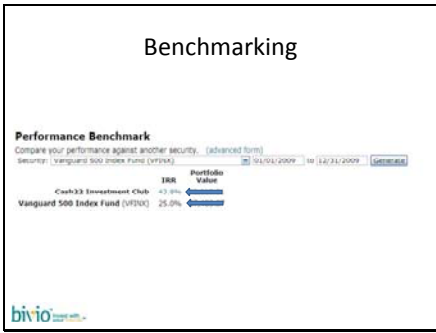
One thing to be aware of. If you have switched to bivio using the Edit Opening Balances method (possibly because you were previously doing manual accounting), you can only calculate IRR for the time period since you've switched. If you've switched by importing your data from another program, you do not need to worry about this.

Actual Cash Flow Comparison

The screenshot shows a complex table with many columns and rows, likely representing a detailed cash flow analysis over time. The table is partially obscured but appears to have columns for dates, amounts, and possibly interest or fees. The Bivio logo is visible in the bottom left corner.

What is good about this tool is that you are comparing actual cash flows for your investments.

In the bottom half of the report, you will see the cash flows you had for the time period you selected. You will also see how many shares of your comparison investment the cash purchased. It's very important to make the comparison this way. Cash flow will have an effect on investment return. Otherwise you are not making an apples to apples comparison.



Based on the beginning and ending values of your account and the cash flows that you had, an IRR or Internal rate of return is calculated for each of the two investments.

One for the investment in your club and

one for the investment in the security you are comparing to. Determining the IRR using your actual contribution amounts and contribution dates involves solving for an unknown in a series of equations. It's a complicated trial and error process which fortunately is handled by our computer. You may be familiar with a function in Excel called XIRR which can make this calculation also.

What is IRR?

May 1, 2009- \$500 member contributions
Club IRR-43.8%
Time Invested:
244 Days/365=.668 or about 2/3 of the year
Ending Value:
Principle*(1+Rate)^{Time}
= \$500*(1.438)^(244/365)= \$649.82
Sum of the CD's= Account Ending Value



I Think of IRR as a magic CD rate. Every time you invest money in your club during the time period you are looking at, it is as if you have found a CD which pays the IRR rate of interest to put your money into. Here's an example:

On May 1 you received \$500 in member contributions

On that day, it was invested in this club's "Magic CD" which earned them 43.8%

It was invested for about 2/3 of the year.

The Ending value of that \$500 invested in that CD can be calculated using this formula to be

\$649.82

This calculation is made for each contribution that you make during the year.

At the end of the year, sum the value of each of the CD's and that's the ending value of the account.

How can I use this Information?

- Are your investing activities productive?
- Focus on important criteria to make investing decisions



Why do you want to compare your IRR to an investment in something else?

Over the long run, it can tell you whether your investing efforts are having an impact or whether you'd be better off just investing in an index.

It focuses you on what is important as you make investing decisions. You want to make Investing decisions that will maximize your IRR.

\$50,000 Investment

- “high yield”, 4 year CD 2.59% APY
- On Jan. 1, 2009-Make Investment
- January 31, 2009-\$51295
- Earnings-\$1295

bivio

Here’s an example

Suppose we have \$50,000 to invest

We can find a “high yield” 4 year CD that will pay 2.59% APY

On Jan 1, we put our \$50,000 into this CD. At the end of a year, we have \$51295 ($50,000 * 1.0259$)

We’ve earned \$1295

\$50,000

1/20/2009	40000	41033.13	
2/23/2009	800	817.62	
3/23/2009	1000	1020.02	2.59% APY CD's
4/23/2009	800	814.25	
5/7/2009	1000	1016.81	\$51153.42
6/7/2009	800	811.69	
7/7/2009	1000	1012.48	\$141.58 less
8/7/2009	900	909.25	
9/7/2009	1000	1008.09	
10/7/2009	800	804.78	
11/7/2009	1000	1003.79	
12/7/2009	900	901.51	

bivio

Suppose we didn’t have the entire \$50,000 available on the first of the year.

Instead, we started with \$40,000 invested on one of the 2.59 % CD’s on Jan. 1.

At the end of the year it was worth \$41033.13

Then, each month we put in these amounts. The total of all the amounts contributed during the year was still \$50,000 but we spread out the contributions over the year instead of putting it all in at one time at the beginning.

Each month’s contribution was invested in one of those CD’s earning 2.59% APY. We ended up with 12 CD’s.

At the end of the year, we figured out how much each one was worth


we added them together.

The total is \$51153.42

This was \$141.58 less than the amount we earned when we put all our money in in the beginning. Cash flow has had an effect on our investment returns.

\$50,000

1/1/2009	40000	57462.78	
2/23/2009	800	1090.21	
3/23/2009	1000	1325.31	43.8% APY CD's
4/23/2009	800	1028.04	
5/7/2009	1000	1267.26	\$69358.83
6/7/2009	800	983.01	
7/7/2009	1000	1192.62	\$18205.41 more
8/7/2009	900	1040.75	
9/7/2009	1000	1121.26	
10/7/2009	800	870.62	
11/7/2009	1000	1055.21	
12/7/2009	900	921.76	



Now, suppose instead we had put those same amounts into our club.

Remember, our IRR was 43.8%.

It was as if, each time we invested in the club, we put the money in a CD with a 43.8% Return.


At the end of the year, we totaled how much each CD was worth and

We totaled them up. It was \$69358.83

We ended up with \$18205.41 more by investing in our own club than the Bank CD's

\$50,000

1/1/2009	40000	49969.44	
2/23/2009	800	967.53	
3/23/2009	1000	1188.88	25.0% APY CD's
4/23/2009	800	933.25	
5/7/2009	1000	1156.62	\$61084.32
6/7/2009	800	907.92	
7/7/2009	1000	1114.28	\$9930.90 more the Bank CD's
8/7/2009	900	984.03	
9/7/2009	1000	1072.84	\$8274.51 Less Than Club
10/7/2009	800	842.67	
11/7/2009	1000	1033.56	
12/7/2009	900	913.3	



Now, suppose instead we had put those same amounts on the same dates into the Vanguard Index 500 fund, VFINX.

The IRR we achieved there was 25.0%

Again, each investment had gone into a 25% APY CD.


Our ending total for the year was \$61084.32

\$9930.90 more than the bank CD's

\$8274.51 Less than investing in our club

Relative Return

- Club IRR-Benchmark IRR
- Bank- 2.59% IRR
- VFINX-25.0 % IRR
- Club- 43.8 % IRR
- Relative Return Club to Bank CD =43.8-2.59 =41.21% Better
- Relative Return Club to Vanguard Index 500 (VFINX) =43.8-25.0 =18.85% Better



What's usually most useful is to track "relative Return"

this is the difference between the return you achieved by your club investment management efforts and the return you would have received if you had done a lot less work and just purchased shares of a fixed income investment or your benchmark investment.

Relative Return > 0



bivio

If your relative return is greater than zero,

your investing decisions are paying off and you are earning more money than you would have in the investment you are comparing to.

Relative Return and Compounding

- Year 2000
- \$100,000
- 2 Investments-
 - 10% IRR
 - 11.5% IRR

bivio

Even a 1.5 percent relative return is something you should be proud of. Due to the magic of compounding, over the years, it will add up to a much higher ending value of your account.

Here's an example:

Suppose you had started your investing 10 years ago with

\$100,000.

You had the choice of two different investments,

one where you achieved a 10% IRR

and the other where you achieved "only" a little bit better return of 11.5% IRR.

Relative Return and Compounding

- Investment 1-(10% IRR) - \$259,374.25
- Investment 2-(11.5% IRR) - \$296,994.68

- \$37,620.43

1.5%=>14.5%

bivio

At the end of 10 years, this is what you would have had in your accounts:

Investment 1-(10% IRR) - \$259374.25
Investment 2-(11.5% IRR) - \$296994.68

An increase of \$37620.43

The 1.5% yearly difference in your IRR has meant that you have ended up with 14.5% more money.

This is because IRR is an annualized return. Due to the magic of compounding, you earn money not only on your principle but also on the income you've earned in previous years.

So, when you look at your club returns related to your benchmark returns, please pat yourselves on the back for almost any increase over the benchmark that you see. Your efforts are paying off more than it might seem.

Club vs VFINX 1 year Periods-Relative Return



bivio

It is interesting to plot relative return over a period of time. If your returns are consistently higher than your benchmark returns, you're efforts are paying off.

If you see a nice upward slope like this in the magnitude of your relative returns that may be an indication that you're learning something and getting better at making investing decisions.

What Use is All this Information?

- Are you making good investing decisions?
- Focus on the future, not the past

bivio

It's a lot of work to manage a portfolio. If you aren't producing a return that is better than putting the money in a Bank CD or in the Vanguard Index 500 mutual fund, you need to make some changes to the way you are doing things.

Each time you look at your portfolio, you should be thinking, how can I get the best "CD" rate for the assets I have?

One really important thing you should be doing is making sure you are focusing your decision making on the future, not on the past.

Valuation Reports

Valuation (NAV) for 05/12/2010	Shares	Cost Basis per Share	Total Cost Basis	Price per Share	Market Value	Percent of Total
Cloudfont Technology Software Corp.	100,000.00	12.9136	1,291,360	61.4600	6,146,000	11.2%
Health Research Systems Inc (HRS)	40,000.00	46.7644	1,870,576	74.2000	2,968,000	5.5%
Lock Stores & Accessories Inc (LSCI)	220,000.00	19.2880	4,263,360	22.5200	4,954,400	9.2%
Medtronic Inc (MDT)	80,000.00	45.4160	3,633,280	43.2000	3,456,000	6.4%
Novartis Corp (NOV)	200,000.00	11.8880	2,377,600	20.9100	4,182,000	7.8%
Advanced Excess Inc (AEI)	100,000.00	18.2880	1,828,800	21.1200	2,112,000	4.0%
Biogen Biologics Inc (BBIG)	80,000.00	100.0000	8,000,000	100.0000	8,000,000	15.0%
Alkermes Corp (ALK)	100,000.00	18.0912	1,809,120	27.2400	2,724,000	5.1%
Novus Capital (NOVUS)	100,000.00	29.1100	2,911,000	30.0000	3,000,000	5.6%
United Medical Systems Inc (UMS)	200,000.00	40.5140	8,102,800	50.0000	10,000,000	18.7%
Total	1,300,000.00	37,888.70	51,004.76	48.4900	61,276,400	100.0%
Cash Account						
Subtotal						
Total Securities and Cash Accounts						



51,004.76

I think many of us tend to look at reports like this and one of the first things we do is go over to the

gains and losses column. When we see a positive number, we are happy, we "like" that stock. When we see a negative number, we are not so happy, that stock is not our friend. So, we tend to want to keep the stocks that make us happy and get rid of the ones that we don't like looking at.

We need to try not to do this,

there is actually no information on this report that tells us how to invest the \$51004.76 in assets we currently have, to achieve optimal results.

Looking through The Windshield

Holdings	Shares	Market Value	Cost Basis	Gain/Loss	Yield	Dividend
Common Stock	1,300,000	\$61,276,400	\$51,004,760	\$10,271,640	16.8%	\$8,102,800
Health Research Systems Inc (HRS)	40,000	\$2,968,000	\$1,870,576	\$1,097,424	3.7%	\$187,058
Lock Stores & Accessories Inc (LSCI)	220,000	\$4,954,400	\$4,263,360	\$691,040	1.4%	\$45,416
Medtronic Inc (MDT)	80,000	\$3,456,000	\$3,633,280	-\$177,280	5.1%	\$181,632
Novartis Corp (NOV)	200,000	\$4,182,000	\$2,377,600	\$1,804,400	4.3%	\$418,200
Advanced Excess Inc (AEI)	100,000	\$2,112,000	\$1,828,800	\$283,200	1.3%	\$182,880
Biogen Biologics Inc (BBIG)	80,000	\$8,000,000	\$8,000,000	\$0	0.0%	\$0
Alkermes Corp (ALK)	100,000	\$2,724,000	\$1,809,120	\$914,880	3.3%	\$272,400
Novus Capital (NOVUS)	100,000	\$3,000,000	\$2,911,000	\$89,000	3.0%	\$291,100
United Medical Systems Inc (UMS)	200,000	\$10,000,000	\$8,102,800	\$1,897,200	1.9%	\$1,810,280

Portfolio Performance	Value
Annual Return	12.0%
Dividend Yield	1.4%
Price-to-Earnings Ratio	18.5
Price-to-Book Ratio	2.1
Price-to-Cash Flow Ratio	10.5
Price-to-Operating Profit Ratio	10.5
Price-to-Fair Value Ratio	10.5

bivio

That is why we need to be looking at this report (or something equivalent) to make our portfolio decisions. This is a Manifest Investing Dashboard which you can pull up for your portfolio using the Manifest button on the Accounting>Investments Screen

This 12.0% projected annual portfolio return is part of what is going to affect my IRR. We need to keep our eye on this and keep making sure we are making investing decisions which optimize it. Your projected portfolio return will be affected by the projected returns of your various stocks and the amounts you have invested in each of them.

What Can We Compare it To?

Vanguard 500 Index	
Ticker	VFNDX
Holdings Updated	01/13/2010
% Cash	0.0
% Turnover	0.0
% Expense Ratio	0.16
Annualized Total Return (12/31/1999)	-0.9%
Growth Forecast	7.7%
Average P/E Ratio	14.5
Financial Strength	88.4
EPS Stability	73.6
Projected Yield	1.9%
Quality	69.7
PAR	10.5%

bivio

To help making decisions, it is interesting to compare our club Projected annual return to the Projected annual return of our benchmark.

If we make decisions that keeps our portfolio PAR above what is projected for our benchmark, we will have a greater chance of beating it's returns.

Things that Affect Your Portfolio Performance

- Choice of Stocks
 - Quality
 - High portfolio growth potential
- Buying and Selling
 - Buy Low
 - Sell High
- Cash Flows
- Market Momentum
 - Up
 - Down

bivio

Many things affect your portfolio performance.

Choice of Stocks

Quality-So you have increased confidence in predictions of future performance and hopefully minimize your downsize risk

High growth potential-For your entire portfolio. Statistically, you have more chance of "getting it right" if you are making a projection for a group of stocks than for an individual stock.

Buying and Selling

Buying the stocks when growth potential is high
Replacing them when growth potential is not as high

The dates of your cash inflows (member contributions), can affect your returns. Did you have cash to invest when the conditions were optimal?

Market Momentum

Up-Are you invested when the market is rising in general or are you sitting on cash that might be growing better elsewhere?

Down -If the market seems high, have you pulled out some cash to keep it safe to use when the inevitable correction comes? All of these things affect what your "Magic CD" Rate will be. These are all things you've heard before. The thing we need to talk about more is how we're doing if we apply them.

So What's Your IRR?

- What is your club's Magic CD Rate?
- Is it better than putting your money in the bank?
- Is it better than your benchmark rate?

bivio

What is your club's Magic CD Rate?

Is it better than putting your money in the bank?

Is it better than your benchmark rate?

If not, what might you try and do to change it?

Goal

- What are you going to benchmark against?
 - VFINX (Vanguard Index 500 Fund)
- What is your IRR and Relative Return?
 - 1 Year
 - 5 Year
 - Life of Club
- How are you doing?
- Keep your eye on the ball

bivio

I suggest you set a goal for your club (or yourself)

First, decide what you want to benchmark against. You might try starting with the default, VFINX.

Then, check how you've been doing. Look at your IRR and Relative returns for different time frames such as 1 year, 5 years and the life of your club.

How are you doing? If you need improvement, talk about how you might do that.

Start tracking your relative return.

1 year Periods-Relative Return



bivio

If you'd like, I can set up a graph like this for your club that you can look at each month to see how you're doing. Just fill in your club information in the survey when you leave the webinar today.

I think we may even start handing out bivio friends for when you're successful. You'll get a yellow friend for every time you beat the benchmark 3 months in a row. Three yellow friends earns you a green friend and green friends will earn you bivio bucks toward your annual subscription.

I'll post the details of how we'll do this on club café this week.

What is your club's "Magic" CD rate?



So, what is your club's Magic CD rate?

Keep your eye on the ball and the dollars will take care of themselves.

Thank You!

Questions?

