

Your time is money. Investing is like any other job with one exception: investing efficiency is highly quantifiable and can be compared. The past performance of hedge funds, mutual funds, private equity funds, investment clubs, and individual investors can be compared with a single number. This talk explains The Number, and demonstrates how to compare your own investing performance with big-time money managers.



Why are you investing? For fun or for profit? If it's for fun, then this talk is not for you. If it is for profit, you need to know if you are making a profit. We'll go over what it means to make a profit using bivio's Performance Benchmark Report. We'll explain The Number, also known as, Average Annual Rate of Return (AIRR). We'll conclude with a detailed analysis of a portfolio's AIRR.



Everybody loves going to investment seminars, because of the great food, beautiful views, fantastic coffee, and general zaniness of the speakers and participants. I'm here to do business. I assume you are, too. The business I'm in, is the business of marketing to individual investors. Marketing is tough, because you really don't know how good you are doing. The only real measure is increased revenues, but why did they go up? Perhaps it was completely unrelated to my efforts. It's difficult to measure the performance of marketing.

Investors have got it made, however. Investment performance is a precise science. You can know how well your investments have done, and more importantly, it is very easy to compare two seemingly unlike investments in terms of past performance. The goal of most money managers is to beat the S&P. If they can't beat the S&P, they lose customers. If they can, they get customers. They know this, but for the most part, most customers don't. That's unfortunate, because investing the S&P is so cheap (about \$10 per investment in SPY) today. If a money manager isn't beating the S&P, the obvious solution is to stop paying her and put your money in the S&P, because it offers high liquidity and the diversity of 500 instruments, which account for a huge portion of the world economy.

## How Do You Beat the S&P?Drink coffee

- Ouija board
- Throw darts at the stock page
- Listen to your broker
- Trust me, I know
- Compare your portfolio to the S&P

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4

Smart investors know they have to beat the S&P, but how do they? Perhaps they trust their friends or their stock broker? There are many online message boards that discuss every financial instrument imaginable, and some that are imaginary so you might try that. However, all of these people don't actually let you know how well you would be doing if you followed their advice. Some have to, like mutual funds, but they only tell you an annualized percentage rate, over specific time periods. While this is useful for comparing mutual funds with each other, it doesn't tell what you'll actually be making. All funds have fees, and those fees affect your return if you invest periodically, as most smart investors do. Your share of those fees is actually incorporated in the price as it fluctuates on a daily basis.

In order to be sure you are beating the S&P, you need to compare your actual cash flows as if you had invested them in the S&P on those specific days. That's a tough calculation. Fortunately, bivio's computers give it to you in one click.

This is How to Beat the S&P IRR Portfolio Value The One Minute Treasurer 40.3% 84.804.88 Vanguard 500 Index Fund (VFINX) 7.1% 65,405.42						
Transaction Date	Description	Investments	Returns	VFINX Shares		
02/04/2005	VFINX beginning market value	56,263.07		507.057		
03/23/2005	VFINX distribution reinvested, \$218.03			2.019		
04/01/2005	member contributions	1,250.15		11.5669		
06/24/2005	VFINX distribution reinvested, \$218.67			1.991		
07/01/2005	member contributions	1,250.15		11.353		
09/23/2005	VFINX distribution reinvested, \$283.01			2.528		
10/01/2005	member contributions	1,250.15		11.043		
12/28/2005	VFINX distribution reinvested, \$328.54			2.836		
01/01/2006	member contributions	1,250.15		10.878		
02/04/2006	VFINX ending market value		65,405.42			
		61,263.67	65,405.42	561.2754		
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The Performance Benchmark Report (only available at bivio) lets you compare your actual cash flows in your current portfolio with a comparable portfolio invested solely in the S&P 500. (We use the Vanguard 500 Index Fund, because it includes dividends and has the lowest fees in the industry.)

As you can see from this example, from 2/4/05 to 2/4/06 this club earned 40.3% on its money whereas if the same money was invested at the very same times in VFINX, they would have only earned 7.1%. Great return! Too bad it was only entered in hindsight. (An aside. If you listened to my advice from last year, you would have dumped part of AAPL from your portfolio, because it was taking up too much space. That was the wrong advice. ;-)

This report shows you when you invested and how much as well as reinvestments of dividends. The beginning and ending market values are determined using the closing prices in our database. You get this all with one click!

The S&P didn't do too badly during this time period. Did your investments do better?



bivio's Performance Benchmark Report is a complex calculation. You wouldn't want to do it by hand or even in an Excel spreadsheet. Our software (refined over a period of six years) does it for you on your current portfolio over any time period. You might, say, want to look at the last year or the the last two years. You can compare to any Mutual Fund in our database. The value is calculated in real-time so there is nothing to update or audit. Our job is to help you know where you are and how you got there.

Basic Form						
bivio	The One Minute	Treasurer				
Performance Benc	chmark					
	formance against a mutual fund. <u>(adv</u> nguard 500 Index Fund (VFINX)	<u>vanced form)</u> ▼				
	12/31/1998 to 02/11/2006	Generate				
	The Only Defermence Number	-				
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The basic input form lets you set the date range and select from a standard set of mutual funds. For most users, the list is broad enough to give you an accurate picture of how your portfolio did compared to growth stocks, international stocks, etc.

Advanced Form						
bivio	The One Minute Treasurer					
Performance Ben	chmark					
	Compare your performance against a mutual fund. Mutual Fund <mark>: PRITX Symbol Lookup</mark>					
12/31/1998	to 02/11/2006 Generate					
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For those who like more control, you can enter any one of our 8,000 funds in the advanced form.



AIRR is a historical term used to measure the return of your investments. It's annualized to allow you to compare apples to apples. The "internal" part is a bit arcane. Internal means that you are comparing an investment in itself. It's really about whether a business should re-invest in itself or instead put the money in another investment or business. The Rate is important, because it means there's a regular return that is required. It allows you to compare your investments with instruments that provide a regular cash flow, such as money market accounts. And, return is the ultimate purpose of investing, that is, the amount of money you get back on top of the money you already put in.

Just call it "The Number", and you'll know what you are talking about.



Computing AIRR is very hard. It's an "iterative" computation that requires you to take the cash flows against historical prices. You need to iteratively value the percentage rate you are getting, and then annualize it. Not something you want to be doing on your desk calculator. We've been refining our software for a number of years. Many people have been scrutinizing our calculations, and we've been correcting problems as we encounter them. At this stage, we are quite confident in that the number you get, is the "right" number. We can safely say that bivio's calculation is more accurate than any other Club Accounting product.

We do the work so you don't have to. It's just a click on bivio, and more importantly, only on bivio, do you get to compare your AIRR with other instruments AIRR using the same cash flows. That's a real apples to apples comparison.

Just one click, and you know how you are doing in comparison to the S&P. It's so powerful that it was written up in Bonnie Biafore's book: Online Investing Hacks: 100 Industrial-Strength Tips & Tools

Member Overview							
bivio The One Minute Treasure							
	Nember Performance						
02/04/2005 to 02/04/2006 Show All Generate							
Name	Units	Market Value	Percent	Return Since	Annualized Internal Rate of Return		
Escobar, Rodrick	36.128882	1,569.75	1.9%	02/04/2005	44.0% detail		
Rodriguez, Tam	297.659006	12,932.90	15.2%	02/04/2005	40.4% detail		
Caesar, Rose	442.085903	19,208.06	22.6%	02/04/2005	40.3% detail		
Sherman, Rollie	561.235057	24,384.93	28.8%	02/04/2005	40.2% detail		
Chase, Sam	614.730404	26,709.24	31.5%	02/04/2005	40.2% detail		
	1,951.839252	84,804.88	100.0%				
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The Performance Benchmark Report gives you an overall view of your portfolio. If you are using bivio as an investment club, each member is making periodic investments in the club. Every member must make a constant choice to invest in the club or not. Every dollar counts in your total return. bivio lets members see how this particular investment is doing, that is, how well their money is working for them in their club. Note that every member will have a different return based on the time they joined the club, how much they invest, and how often. bivio's computers do all the calculations for you. DO NOT get caught up in differences that are within "reason". People spend a lot of time worring about the tenths of a percent when they should be considering why their club has a negative AIRR.

The next slide provides a detailed overview of Rodrick Escobar's investment in the club just by clicking on "detail" on the same line as his name.

Member Detail					
Date	Description	Investments	Returns		
02/04/2005	beginning market value	261.62			
04/01/2005	single payment	250.01			
07/01/2005	single payment	250.01			
10/01/2005	single payment	250.01			
01/01/2006	single payment	250.01			
02/04/2006	ending market value		1,569.75		
		1,261.66	1,569.75		
	The Only Performance www.bivio.com	Number			

Rodrick bought in quarterly. He knows that investing more often is going to reduce his return, because he'll be making lots of small investments and broker fees are going to add up. Here you see that he put in about \$1,262 over the course of the year, including his decision to keep his money from last year in the club for the current year. Remember, you don't leave your money in an investment, because it is already there. You leave it there, because it performed well in the past, and it is therefore likely to perform well in the future. That's why we have \$1,262 in investments, not just the \$1,000 in additional investments Rodrick made over the course of the year.

Name	Shares	Market Value	Percent of Portfolio	Return Since	AIRR		
Apple Computer (AAPL)	300.0000	21,555.00	25.8%	02/04/2005	86.1% detai		
Whole Food Market (WFMI)	400.0000	28,336.00	33.9%	02/04/2005	59.3% detai		
First American Corp (FAF)	200.0000	9,230.00	11.0%	02/04/2005	38.4% detai		
AFLAC Inc (AFL)	200.0000	9,432.00	11.3%	02/04/2005	29.3% deta		
IAC InterActiveCorp (IACI)	150.0000	4,174.50	5.0%	07/05/2005	14.1% <u>detai</u>		
Target Corp (TGT)	200.0000	10,992.00	13.1%	02/04/2005	9.0% detai		
		83,719.50	100.0%				
AIRR on Investments (excludes cash) = 40.8% Differs from Performance Benchmark (40.3%); only includes stock and excludes idle cash.							
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You can also look at all the investments the club is holding, and compare their performance numbers on bivio's Investment Performance Report. An important point is that the sum of the investments AIRR is not going to add up to the club's AIRR as a whole. The problem lies in the cash that sits in the bank not earning anything. Most clubs have a lot of it. My club had a 37% return on investments in 2000, but had an overall performance of only 13%. We sat on a lot of cash, because we couldn't agree on what to invest on. My personal recommendation would be that you put the money in SPY if you are having trouble deciding. Yes, you might lose money, but they you might gain, and odds are way in favor of you gaining than losing.

You can also "drill down" on this report. The next page evaluates the cash flows on Whole Foods.

Investment Detail							
Date	Description	Investments	Returns				
02/04/2005	beginning market value	12,395.70					
02/07/2005	cash distribution, qualified dividend		25.65				
04/04/2005	buy, 65 shares	6,497.40					
04/04/2005	commission	11.00					
04/13/2005	cash distribution, qualified dividend		16.88				
07/13/2005	cash distribution, qualified dividend		25.00				
10/12/2005	cash distribution, qualified dividend		25.00				
01/11/2006	cash distribution, dividend		860.00				
02/04/2006	ending market value		28,336.00				
		18,904.10	29,288.53				
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Whole Foods pays dividends. That gives you real cash flow, and an actual return. Note that the dividends are not re-invested. This makes a lot of sense, because it doesn't make sense to invest \$25 at a time. It's never free, and indeed, it probably costs you more than if you just let this small amount of money sit around until you are ready to collect it with other dividends and more investment capital.

Note that this club decided to continue its investment on 2/4/2005, that's what "beginning market value" of 12,395 is telling us. Any day you can pull your money from an investment, and sometimes that's a good thing to do. There's a big difference between unrealized and realized gains. One of the reasons people didn't get out early enough during the Internet Bubble was they treated unrealized gains as "found money". In reality, you are spending time any time you are evaluating your portfolio, and therefore your investment returns are earned by hard work, perhaps distributed over the course of a year, but work nevertheless. Your time is an extremely valuable commodity!



Whether it is AIRR of investments, your member contributions, or your entire club or personal portfolio, The Number is the most practical and rational way to compare investments. The Performance Benchmark Report lets you know whether you are beating the S&P or any other fund so you can go head-to-head with any fund manager, and see how you fare, over any time period. That's something a mutual fund prospectus can't give you.

