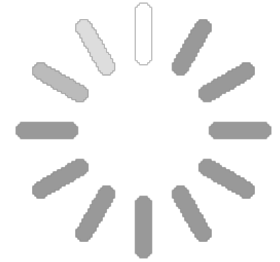# A Mechanical Method to Achieve Your Investment Target

The Missing Element In Dollar Cost Averaging

If you've been in the investment game long enough, you've probably heard of Dollar Cost Averaging (DCA). The formula based system has long been touted as the safer, easier way to accumulate a position in stocks or mutual funds without having to worry about market timing. For those who need a refresher, DCA simply involves investing a set amount every month, quarter, or year. This strategy works best for those either just starting out, or those who have already accumulated or inherited a lump sum and who want to gradually put it to work earning money.

The basic premise behind Dollar cost averaging is that, by investing the same amount of money every period, you'll be buying more shares when prices are lower, and fewer shares as prices go up. Over time, you'll end up paying a lower overall average cost for your shares.

Naturally, mutual fund companies have spent many years promulgating the benefits of this method. After all, getting investors to hand over money on a regular basis increases their funds under management, and the potential fees they can earn. Discount brokers have also long endorsed it, as each purchase is a trade that nets them a commission.

However, the one thing noticeably absent from the reams of literature supporting this strategy is the barest shred of any indication as to when to SELL. Indeed, one would get the impression from these individuals that it's always a good time to buy, it is just a matter of what. Our intent here is not to bash the moneychangers, but rather to point out that there may be a more complete alternative.

Along Comes Dollar Value Averaging

Dollar Value Averaging (DVA) is in many ways similar to the traditional DCA method, but with several important advantages. First and foremost, it has an actual selling component , where you do occasionally take some profits off the table. Second, the method forces you to invest more dollars when prices go down (as opposed to just buying more shares), thereby accelerating the reduction in your cost basis. This formula is also handier for those that are aiming for a specific target amount in overall investment, to pay for college, say, or a down payment on a house. Last, and certainly not to be overlooked, this strategy offers at least comparable and often better results than DCA while also taking on less risk.

So how does this magical formula work, you may be asking? Actually, the premise is quite simple, but it will require a little more math. Instead of aiming to put aside a certain amount every month, quarter or

year, the goal is to have your total investment increase by a certain amount every period. This may sound like the same thing, but a little example should begin to clear things up.

The Mechanics

Just to use nice round numbers, let's say you have $10,000 saved up, and you want to start investing so that maybe you can earn a little more money than your bank is currently paying you. In addition, you're also pretty sure that you can put aside an additional $100 per month on a consistent basis. The $10,000 is split in two, with half placed in the investment of choice (more on this later), and the rest goes into a linked cash account or money market fund.

Now, as we said before, we have $100 to put in each month. But we also expect there to be some return from the equity side. Here, each individual investor has some leeway, but rather than shoot for the moon, it's more reasonable to aim for something in line with the stock market's historical performance. In this case, we'll use 6% a year. So, we're projecting that the $5,000 in the equity portion will increase by $300 a year, or roughly $25 a month. Combined with the $100 a month that we will be adding, we want the equity investment to go up $125 per month. That is, at the end of the first month, we want $5,125; the second month, $5,250; the third, $5,375 and so forth.

Each month, one of three possible scenarios occurs. Either the market goes up, down, or it stays relatively flat.

For the first month, let's assume the market has been rising, and the value of our stock holdings is now $125 higher. Great. That means we've met that month's target of $5,125 in stocks. We then simply take the full $100 of new money for that month and add it to the cash fund, which increases to $5,100.

Our stock target for the second month is $5,250. But let's assume our stock position loses $125 in value this time, and goes back to $5,000. Even after adding our regular monthly $100 to buy more equities, we're still short of our target. That's where the cash fund comes in. We take $125 out of there, to meet our $5,250 requirement. That leaves us with $5,250 in stocks, and $4,975 in cash.

The third month rolls along, and there's been no change in our stock holdings, so our new money (plus $25 from the cash fund) is added to the equity side, and we meet our goal of $5,375.

A Semi-Theoritical Example: Value Averaging VS. Cost Averaging VS. Buy and Hold

The last few years have provided an excellent illustration of how this strategy performs in both up and down markets. Let's take a look at how things would have turned out using some real numbers. For this exercise, we'll assume we started out with $10,000 in January of 2008, and for a proxy of the general market, we'll use the Exchange Traded Fund (ETF) SPDR Dow Jones Industrial Average (DIA). As it turns out, at the end of the 40-month period that ended May 2011, DIA was roughly at the same level where it started. In between, the market took its infamous swoon and then, equally impressively, climbed all the way back. Applying the methods described above, Dollar Value Averaging would have generated our targeted $10,000 in stock holdings ($5000 + $125 X 40), and a cash balance of $5,225, giving us $15,225. So, with a total investment of $14,000 (the original $10,000 plus 40 monthly additions of $100), we realize an overall gain of 8.8%.

Using Dollar Cost Averaging, and starting with the same lump sum of $10,000 and then adding that same $100 a month (but with no cash balance this time), we would have ended up with $14,646, a return of 4.6%. The buy-and-hold investor, meanwhile, would have registered a small loss of 2%, as DIA ended up slightly lower after the 40 months.

So What Gives Value Averaging Such A Big Edge?

Well, mainly, as we mentioned earlier, Dollar Value Averaging forces you to buy more during dips, and we had some fairly large dips over this period. In fact, there were several months during the dark days of the bear market that this method required buying several hundred dollars worth of new shares, with a maximum of about $950 in October of 2008. At those times, it was all funded by the cash that had been built up on the side. Indeed, the cash position fell as low as $1,365 at one point. At that time, DIA had lost 43.8% of its value from the starting point, and it turned out to be the low for the period.

The DCA method, on the other hand, was buying the same $100 worth every month, completely oblivious to market opportunities. In this way, it may be said that Dollar Value Averaging automatically incorporates one of the longest standing cardinal rules of investing. That is, to buy low and sell high. Repeated and compounded over several market cycles, the performance edge grows even wider. This aspect of the system also gives it some "contrary investing" appeal, as you tend to zig while the market zags.

The significant drop in the cash position in our example also highlights why using too high an assumed rate of return, like let's say 12% a year, would increase the chances that your cash reserves would be wiped out during a severe bear market.

But Wait, There's more!

Not only did DVA put in a solid performance versus the other two methods, it did so with significantly less market risk. Thanks to its considerable cash component, DVA's average market exposure was 68%, compared to 100% (at all times) for the other plans. In fact, the highest exposure (83%) occurred right at the bottom of the cycle, which is just when you want to put most of your money to work (buying low). Conversely, at the market peak for this period, DVA's exposure was down to 64% (selling high).

Moreover, our investment vehicle of choice, DIA, which reflects the Dow Jones Industrials, paid out a regular dividend, usually monthly. So how would that have changed things? Well, the buy and hold method, having never bought more shares, would have collected about $678 in payouts over the period. And good thing too, as that would have lifted the total return to positive territory, at 4.8%. Cost Averaging also fares considerably better, largely because that method leaves you holding the largest total shares. Dividends there amounted to $853, lifting the total return to 10.7%. And our reigning champion Value Averaging would have added $614, for a total gain of 13.1%.

At this point it should be noted that the Value Averaging results would have also benefited from whatever meager dividends were earned on cash. In keeping with the times, we assumed our money market fund earned nothing. Historically, though, the dividend component can play a large factor in enhancing this strategy's relative performance.

Your Mileage Will, Of Course, Vary

There are some additional real world considerations. Namely, with either Averaging method, the monthly adjustments suggested by the system may simply not be worth the trading costs when they're relatively small. The same applies to mutual funds that have minimum exchange requirements. Starting

with a larger size position would be one solution. But, barring that, an investor can use longer time periods. In the example above, this would mean adding $300 per quarter, $600 every six months, or $1,200 a year.

Also, many of you were likely quick to observe that the more up and down price movement, the better the system works. Each time the market goes up more than our 6% annualized target rate of increase, it provides us extra firing power in the form of more cash on the sidelines. And, during times of underperformance, that cash is put to use and lowers our per share costs.

As such, the ideal investment for the equity portion is something that's relatively volatile, so long as it's a fairly regular up and down movement. Hot sectors that shoot straight up for years at a time and then flame out would probably not be suitable. By nature, ETFs or mutual funds would be the most appropriate vehicles, as they are usually diversified enough. Individual stocks, on the other hand, can go to zero. But that just means potential investors need to be more selective, seeking out long-standing, financially secure and diversified companies that provide necessary products or enjoy some sort of monopolistic position, preferably with a decent dividend.

Also, you will have to make occasional adjustments in your monthly target. In the example above, once the equity portion reached $10,000, a 6% expected annual growth rate would indicate a $50 increase every month, compared to the original $25.

Finally, Value Averaging (like Cost Averaging) works best in up and down markets. In an extended bull market like the one we experienced in the '80s and '90s, buy and hold would have fared better. But if the past 10 years are any indication, it may be a while before we get another multi-decade bull run.

The Bottom Line

In sum, although it requires more effort and discipline, Dollar Value Averaging provides a mechanical system of investment that helps eliminate the psychological traps of trying to time the market, while also helping us to buy low and sell high at least part of the time. Plus, it can also be used to achieve a specific investment goal over a set time frame. And while it may not always outperform Cost Averaging or Buy and Hold methods, over time, and thanks to compounding effects, it gains an edge while also reducing overall risk.

At the time of this article's writing, the author did not have positions in any of the companies mentioned.