Choosing Between Dollar-Cost And Value Averaging

by Andrew Beattie (Contact Author | Biography)

As investors, we face a bit of a dilemma: we want high stock prices when we sell a stock, but not when we buy. There are times when this dilemma causes investors to wait for a dip in prices, thereby potentially missing out on a continual rise. This is how investors get lured away from investing and become tangled in the slippery science of market timing - a science that few people can hope to master.

In this article, we will look at two investing practices that seek to counter our natural inclination toward market timing by canceling out some of the risk involved: dollar cost averaging (DCA) and value averaging (VA).

Dollar Cost Averaging

DCA is a practice where an investor puts a set amount of money into investments at regular intervals, usually shorter than a year (monthly or quarterly). DCA is generally used for more volatile investments like stocks or mutual funds, rather than for bonds, CDs, etc. In a broader sense, DCA can include automatic deductions from your paycheck that go into a retirement plan. For our purposes, however, we will focus on the first type of DCA. (To learn more, read *DCA: It Gets You In At The Bottom* and *Dollar-Cost Averaging Pays*.)

DCA is a good strategy for investors with a lower risk tolerance. If you have a lump sum of money to invest and you put it into the market all at once, you run the risk of buying at a peak, which can be unsettling if the prices fall after the investment, which is known as timing risk. With DCA, that lump sum can be tossed into the market in a smaller amount, lowering the risk and effects of any single market move by spreading the investment out over time.

For example, suppose that as part of a DCA plan you invest $1,000 each month for four months. If the prices at each month's end were $45, $35, $35, $40, your average cost would be $38.75. If you had invested the whole amount at the start of the investment, your cost would have been $45 per share. By using a DCA plan, you can avoid timing risk and enjoy the low-cost benefits of this strategy by spreading out your investment cost.

DCA Pitfalls

All risk-reduction strategies have their tradeoffs, and DCA is no exception. First of all, you run the chance of missing out on higher returns if the investment continues to rise after the first investment period. Also, if you are spreading a lump sum, the money waiting to be invested doesn't garner much of a return just sitting there. Still, a sudden drop in prices won't damage you as much as if you had put it all in at once.

Some investors who engage in DCA will stop after a sharp drop, cutting their losses; however, these investors are actually missing out on the main benefit of DCA: the purchase of larger portions of stock (more shares) in a declining market, thereby increasing their gains when the market rises again. When using a DCA strategy, therefore, it is important to determine whether the reason behind the drop has materially impacted the reason for the investment. If not, you should stick to your guns and pick up the shares at an even better valuation than before.

Another issue with DCA is determining the period over which this strategy should be used. If you are dispersing a large lump sum, you may want to spread it over one or two years, but any longer than that may mean missing the general upswing in the markets as inflation chips away at the real value of the cash. (For more insight, see *All About Inflation*.)

DCA may not, however, be the best choice for a long-term investment strategy. It may not even be the best choice for dispersing a lump sum.

Enter Value Averaging

One strategy that has started to gain favor is the value averaging technique, which aims to invest more when the share price falls and less when the share price rises. It is done by calculating predetermined amounts for the total value of the investment in future periods and then making an investment to match these amounts at each future period.

For example, suppose you determine that the value of your investment will rise by $500 each quarter as you make additional investments. In the first investment period, you would invest $500, say at $10 per share. In the next period, you determine that the value of your investment will rise to $1,000. If the current price is $12.50 per share, your original position comes to be worth $625 (50 shares x $15), which only requires you to invest $375 to put the value of your investment at $1,000. This is done until the end value of the portfolio is reached. As you can see in this example, you have invested less as the price has risen and the opposite would be true if the price had fallen.

Therefore, instead of investing a set amount each period, a VA strategy makes investments based on the total size of the portfolio at each point. Below is an expanded example comparing the two strategies:

		Dollar Cost Averaging			Value Averaging			
Period	Market Price	Amount Invested	Shares Purchased	Shares Owned	Amount Required	Shares Purchased	Shares Owned	Amount Invested During Period
Q1	$10.00	$1,000	100	100	$1,000	100	100	$1,000
Q2	$12.50	$1,000	80	180	$2,000	60	160	$750
Q3	$8.00	$1,000	125	305	$3,000	215	375	$1,720
Q4	$10.00	$1,000	100	405	$4,000	25	400	$250

	Average Cost	Total Cost	Current Value	Current Gain
DCA	$9.88	$4,000	$4,050	$50
VA	$9.30	$3,720	$4,000	$280

As you can see, the majority of shares are purchased at low prices. When prices drop and you put more money in, you end up with more shares (this happens with DCA as well, but to a lesser extent). Most of the shares have been bought at very low prices, thus maximizing your returns when it comes time to sell. If the investment is sound, VA will increase your returns beyond simply dollar cost averaging for the same time period. And it does so at a lower level of risk.Additionally, in certain circumstances, such as a sudden gain in the market value of your stock or fund, value averaging could even require you to sell some shares without buying any (sell high, buy low). Value averaging is a simple, mechanical type of market timing that helps to minimize timing risk.

DCA vs. VA

Choosing between the two depends on your reasons. If it is the passive investing aspect of DCA that attracts you, then stick to it. Find a portfolio you feel comfortable with and put the same amount of money into it on a monthly or quarterly basis. If you are dispersing a lump sum, you may want to put your inactive cash into a money market account or some other interest-bearing investment. If you are feeling ambitious enough to engage in a little active investing every quarter or so, then value averaging may be a much better choice.

In both these cases, we are assuming a buy-and-hold strategy - you find a stock or fund that you feel comfortable with and purchase as much of it as you can over the years, selling it only if it becomes overpriced. Legendary value investor, Warren Buffet, has suggested that the best holding period is forever. If you are looking to buy low and sell high in the short term, by day trading and the like, then DCA and value averaging are of little use. If you invest conservatively, however, it may be just provide the edge you need to meet your goals.

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Andrew Beattie is a freelance writer and self-educated investor. He worked for Investopedia as an editor and staff writer before moving to Japan in 2003. Andrew still lives in Japan with his wife, Rie. Since leaving Investopedia, he has continued to study and write about the financial world's tics and charms. Although his interests have been necessarily broad while learning and writing at the same time, perennial favorites include economic history, index funds, Warren Buffett and personal finance. He may also be the only financial writer who can claim to have read "The Encyclopedia of Business and Finance" cover to cover.