Dollar-Cost Averaging

Dollar-cost averaging is the sensible practice of putting a fixed dollar amount in an investment periodically (usually monthly). By doing this, the investor is automatically buying more of the investment when it is inexpensive and less when it is expensive. Consequently, it almost guarantees the investor will pay a below average price over time.

A simple example will help illustrate. The first table shows the results of buying a fixed number of shares every period for eight periods of an investment that bounces between the price of $40 and $60. Because the investor buys 5 shares every period, the amount invested bounces between $200 and $300 every period. At the end of eight periods, the investor has purchased a total of 40 shares and invested a total of $2,000.

	Period1	Period2	Period3	Period4	Period5	Period6	Period7	Period8	Total
Price	$40	$60	$40	$60	$40	$60	$40	$60	
No. Shares	5	5	5	5	5	5	5	5	40
Investment	$200	$300	$200	$300	$200	$300	$200	$300	$2,000

The next table shows the results of buying a fixed dollar amount of $250 every period and letting the number of shares purchased vary. At the end of the eight periods, the investor has invested the same $2,000. But the number of shares has increased from 40 to 41.67. This occurs because the investor is automatically buying more shares when the price is inexpensive and fewer shares when the price is expensive.

	Period1	Period2	Period3	Period4	Period5	Period6	Period7	Period8	Total
Price	$40	$60	$40	$60	$40	$60	$40	$60	
No. Shares	6.25	4.167	6.26	4.167	6.25	4.167	6.25	4.167	41.67
Investment	$250	$250	$250	$250	$250	$250	$250	$250	$2,000

The effect seems slight. But when dollar-cost averaging is applied over a number of years, the effect can be profound.

Even more interesting is what happens when the price is more volatile. In the next table, we assume the price varies between $20 and $80 instead of $40 and $60. When the price is more volatile and an investor follows a dollar-cost averaging strategy, the number of shares purchased goes up from 41.67 to 62.50.

	Period1	Period2	Period3	Period4	Period5	Period6	Period7	Period8	Total
Price	$20	$80	$20	$80	$20	$80	$20	$80	
No. Shares	12.50	3.125	12.50	3.125	12.50	3.125	12.50	3.125	62.50
Investment	$250	$250	$250	$250	$250	$250	$250	$250	$2,000

The more volatile the investment is, the more an investor is buying when the investment is cheap and not buying when it is expensive. Dollar-cost averaging and volatility, in a sense, allow an investor to effortlessly time an investment.

Dollar-cost averaging seems turns investing on its head. Most investors would say that timing is very difficult (if not impossible) and volatility is a bad thing and should be avoided. Dollar-cost averaging seems to show that timing successfully is practically a mathematical certainty and volatility results in even greater profit.

However, there is one huge caveat to dollar-cost averaging. Dollar-cost averaging an investment that continually goes down in price would be a disaster. If an investor is going to dollar cost average an investment, it is imperative that the investment goes up in price, or at least does not go down. If the investment continual does down, the investor can lose a huge sum of money.