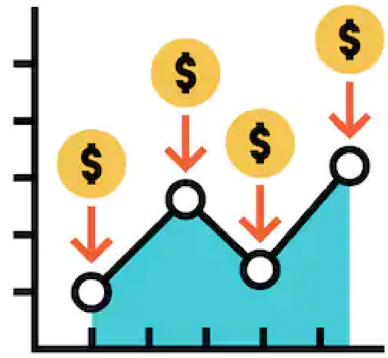
ANALYZE: Dollar Cost Averaging



Dollar cost averaging is an investment strategy that can help you stick to a long-term strategy, reduce volatility, and avoid emotion-driven decisions. One easy way to start: automate your investments.

Part I: Example

1. Imagine you are investing $200 in an index fund each month, regardless of the share price. Complete the table below using the example calculations from January and February.

Month	Share Price	Shares Purchased	Total Shares	Total Contribution	Average Cost per share	Portfolio Value
		Monthly Contribution ÷ Share Price	**Previous Total Shares + New Shares**	**$200 more each month**	**Total Contribution ÷ Total Shares**	**Total Shares × Share Price**
Jan	$50	$200 ÷ $50 = **4.00**	**4.00**	$200	$200 ÷ 4.00 = **$50**	4.00 × $50 = **$200**
Feb	$41	$200 ÷ $41 = **4.89**	4.00 + 4.89 = **8.89 shares**	$400	$400 ÷ 8.89 = $44.99	8.89 × $41 = **$364.49**
Mar	$37			$600		
Apr	$65			$800		

2. Why were more shares purchased in March despite spending the same amount in both February and March?

3. Why did the portfolio value increase in April, even though fewer shares were purchased?

4. Let's imagine that you bought $600 of stock in January at $50 instead of using dollar cost averaging.
    a. How many shares would you have purchased?

    b. When the price dropped to $37 in March, what would your portfolio have been worth?

    c. What was your portfolio worth in March using dollar cost averaging?

    d. How does spreading out your investment over time reduce the impact of price changes like the drop in March?

Part II: Dollar Cost Averaging in the Real World
Let's see what would have happened if you contributed the same amount per month to purchase an individual stock in 2023.

5. Use Google Finance to find the stock ticker symbol for a stock you are interested in purchasing. Write the ticker symbol below.

6. Make a copy of this Dollar Cost Averaging Spreadsheet and enter:
    a. The ticker symbol in cell B1
    b. The amount you want to invest each month in cell B2.

The spreadsheet will pull actual historical data for your chosen stock and populate the spreadsheet.

7. What was the average price you paid, per share, over the course of the year?

8. Compare the amount of money you invested in 2023 to the value of your portfolio when 2023 ended. Was this a wise investment strategy? Why or why not?

9. On January 1, 2023, If you had had a way of knowing the close prices for each month in the year...

    a. Which month would you have invested ALL of your money if you had the chance?

    b. During which month would you have sold all your shares?

    c. How much money would you have made using this transaction?

    d. Why is this strategy not possible to execute in the real world?

Part III: Summarize

10. In your own words, describe *dollar cost averaging*.

11. How can you benefit from dollar cost averaging as an investor?