

TARGET INC. (TGT)

- **Description:** Sells a wide variety of products at an affordable price while maintaining outstanding value and providing a good experience for customers
- **Chance of Increasing In Value:** This stock will most likely increase a lot because Target carries the necessities and most of the population will always need their products
- **Price/Earnings Ratio:** 14.86
- **Dividend Yield:** 3.00%
- **Beta:** .73 (Low volatility)
- **Positive News:**
 1. Target is a large well known corporation. They are on almost every corner. They have a lot of commercials and carry everything you could possibly need.
 2. Target has been around for a long time and has not gone out of business. They have good prices and customer service.
 3. Target has expanded outside of the United States. For example, they bought out Zellers in Canada. They now have a wider market to sell to.
- **Negative News:**
 1. Target's beta score is lower than one, meaning they do not take risks and wont move up and down with the market.

INSERT THREE MONTH STOCK CHART HERE

Mathematical Model	Equation In Context	Predicted Stock Price
Linear	$Target\ Closing\ Price = .2685(Time) + 59.247$	\$70.26
Logarithmic	$Target\ Closing\ Price = 2.9468 + 55.961$	\$70.65
Exponential	$Target\ Closing\ Price = 59.228e^{.0043(Time)}$	\$66.90

AFFILIATED MANAGERS GROUP INC. (AMG)

- **Description:** They partner with boutique asset managers to enhance revenue growth and strengthen the business operations of their affiliates
- **Chance Of Increasing In Value:** Sales will increase slowly in the future because that is what they have been doing recently
- **Price/Earnings Ratio:** 37.54
- **Dividend Yield:** N/A
- **Beta:** 1.62 (High volatility)
- **Positives News:**
 1. For the past 20 years, AMG's investments in other companies have been going rather well. They have been making a lot of money off of these businesses.
 2. AMG operates/owns/invests in independent companies. They share no ties to others.
 3. The beta score is over one, meaning they take risks and will move up and down with the stock market.
- **Negatives News:**
 1. On occasion, the price per share goes down and so does the stock.

INSERT THREE MONTH STOCK CHART HERE

Mathematical Model	Equation In Context	Predicted Stock Price
Linear	$AMG \text{ Closing Price} = 1.1817(Time) + 183.01$	\$231.46
Logarithmic	$AMG \text{ Closing Price} = 11.481 \ln(Time) + 1717.58$	\$214.22
Exponential	$AMG \text{ Closing Price} = 183.03^{0.0061(Time)}$	\$235.04

APPLE INC. (AAPL)

- **Description:** Apple produces high-quality, easy to use products that incorporate high technology for the individual
- **Chance of Increasing In Value:** Sales are likely to increase drastically in the future because more and more people switch to Apple products as they come out with newer/improved models
- **Price/Earnings Ratio:** 12.50
- **Dividend Yield:** 2.40%
- **Beta:** 0.73 (Low volatility)
- **Positives News:**
 1. **Reliable products:** Many people trust Apple products because they are such good quality. The products are well-made, and if there happens to be an issue with a product, the company offers great customer assistance, both on the phone and at their local Apple Stores.
 2. **In world-wide use:** Not only do a majority of people in the U.S. use Apple products, but people in other countries, such as Europe, Asia, etc. use them as well. Though based in America, Apple has spread throughout the world and continues to grow.
 3. **Popular brand:** Apple, thanks to social media, has a growing popularity in the market. Commercials hype up the apps, the products themselves, and the products' possibilities.
- **Negative:**
 1. **High prices could hurt business:** Due to their growing hype and popularity, as well as the amazing quality of the products, the prices for iPhones, Macs, iPads, etc. are fairly high for some. This could possibly hurt sales in the future if the economy worsens, and families' incomes decline.

INSERT THREE MONTH STOCK CHART HERE

Mathematical Model	Equation In Context	Predicted Stock Price
Linear	$Apple\ Closing\ Price = 3.0109(Time) + 479.92$	\$603.37
Logarithmic	$Apple\ Closing\ Price = 26.636\ln(Time) + 456.76$	\$611.25
Exponential	$Apple\ Closing\ Price = 479.91e^{0059(Time)}$	\$555.67

COSTCO WHOLESALE INC. (COST)

- **Description:** Costco sells its members quality goods & services at the lowest possible prices
- **Chance of Increasing In Value:** The sales are likely to increase because more and more people become members each year
- **Price/Earnings Ratio:** 23.83
- **Dividend Yield:** 1.24%
- **Beta:** 0.46 (Very low volatility)
- **Positives News:**
 1. Wide variety: Costco sells everything from food (frozen, produce, etc.), appliances (blenders, dryers, etc.), technology (TVs, cameras, etc.), clothing, and jewelry.
 2. Affordable: The prices are relatively low, or at least more affordable to compared to other places which compete with Costco.
 3. Large quantities: Not only are the prices lower, the quantities of a product per package are of greater proportion, giving people more for their money.
- **Negative News:**
 1. Membership: Not just any random person can go into Costco and shop. You must be a member and have a card to shop, or even enter the store. This could possibly hurt sales due to the fact that some people may not want to be a member.

INSERT THREE MONTH STOCK CHART HERE

Mathematical Model	Equation In Context	Predicted Stock Price
Linear	$Costco\ Closing\ Price = .0893(Time) + 115.75$	\$119.41
Logarithmic	$Costco\ Closing\ Price = 1.621\ln(Time) + 113.12$	\$119.57
Exponential	$Costco\ Closing\ Price = 115.71e^{.0008(Time)}$	\$119.14

STARBUCKS INC. (SBUX)

- **Description:** Starbucks sells coffee, tea, and food
- **Chance of Increasing In Value:** I think their sales are likely to steadily increase because looking back at old data, the stock sales seem to increase
- **Price/Earnings Ratio:** 451.69
- **Dividend Yield:** 1.50%
- **Beta:** 0.85 (Low volatility)
- **Positives News:**
 - 1) Location: There are so many Starbucks spread around to ensure that there will always be one close-by to consumers. Because of the large quantity of locations, the business is more successful.
 - 2) Popularity: Starbucks is becoming more and more popular each day. With the help of social media, such as TV commercials, Instagram, and Twitter, more people feel encouraged to purchase Starbucks products.
 - 3) Variety: Not only do they have coffee, they also have tea, smoothies, coffee-free Frappuccinos, breakfast foods, pastries, etc. Pretty much something there to please any customer.
- **Negative News:**
 - 1) Competition: There are similar restaurants near many Starbucks locations that pose as tough competition for Starbucks' business, i.e. Jamba Juice, Coffee Bean, etc. The competitors' success could take away from Starbucks' success.

INSERT THREE MONTH STOCK CHART HERE

Mathematical Model	Equation In Context	Predicted Stock Price
Linear	$Starbucks\ Closing\ Price = -.0152(Time) + 76.872$	\$119.41
Logarithmic	$Starbucks\ Closing\ Price = 1.216\ln(Time) + 73.906$	\$119.57
Exponential	$Starbucks\ Closing\ Price = 76.796e^{2E} - 04(Time)$	\$119.14