

---

# Why did the share prices of Apple (\$AAPL) not shoot up the month after the release of the iPhone 13?

A Beginner's Analysis of the Stock Market through a Complex Systems lens.



Me stretching to tell you that it's already priced in

The stock market is a self-organized trading system due to the interaction of several parts without centralized control. There are thousands of companies in this system evaluated by a share price or the cost of one share in a company (I.G., n.d). The price of a share fluctuates according to market conditions. It will likely increase if a company is perceived to be doing well and fall if it is not meeting expectations. The system we will be studying is the share prices of Apple. Since it is part of the stock market, it shares many of the earlier-described properties of the stock market. With that, I explored the question: **“Why did the share prices of Apple (\$AAPL) not shoot up the month after the release of the iPhone 13?”** I want to highlight a distinction between announcement and release because the release would imply that iPhone 13 reviews have been posted. I clarified because reviews heavily influence the price of \$AAPL.t

## **Apple (\$AAPL) in the Stock Market**

Apple is a mature company Steve Jobs, and Steve Wozniak co-founded in 1977. The pair garnered venture capital investments during Apple II's release and when Apple shares started selling in 1980. The company included mobile devices and wearables in computing, which is responsible for its success until today (Beattie, 2021). What maturity means is that Apple prioritizes consistent sales instead of market growth or high-impacting innovations because a 1% decrease today could

translate to a 24 billion loss. Apple is the highest level of analysis.

How Apple contributes to the analysis is that it is the reason why the share price exists in the first place. Apple's decisions as a company have the heaviest weight in determining the prices. While the company's actions are seen as attempts to improve its overall standing in the market as a whole, it still does not have enough power to directly dictate the price due to the nature of the stock market because it still takes in the perception of other levels before a price is settled on.

### **The Media**

In this paper, the media represents individuals and entities with wide reach and power to influence the supply and demand of a share. Examples of said individuals include technology pundits like YouTuber Marques Brownlee and successful investors who create content for co-investors like Warren Buffet. An example of entities referred to is the Wall Street Journal which broadcasts on many platforms with journalists that cover key stories that help investors make purchasing decisions by reporting about markets, mobility, personal tech, geopolitics, and health and science. This level was chosen as the second level of analysis to help explain how a significant external variable like the information broadcasters has the power to affect the share price.

### **Investors**

An investor is an individual that puts money into entities, such as businesses, for a financial return (CFI Team, 2022). The main goal of investors is to buy shares while they are low and sell high to make a profit (Bennett, 2021). For this paper, the type of investors being characterized are not professional investors with large amounts of money but are constrained to individual investors who bear the average American salary of 2019, which amounts to roughly 30 thousand dollars (USCB, 2022). These investors represent the lowest level in this system who interact by buying or selling \$AAPL. This level helps answer the explanatory challenge by understanding investors' thought processes when buying a share.

## **Analysis**

What gave rise to the explanatory challenge takes us to the Apple or system level and back to when the first iPhone was released on June 29, 2007 (Beattie, 2020). On the day of its release, Apple's stock rose 1.23%

and surged 16% within the next month. Steve Jobs reported that he hoped to sell 10 million iPhones in 2008. Analysts and investors were skeptical, but Apple sold 13.7 million iPhones in 2008.

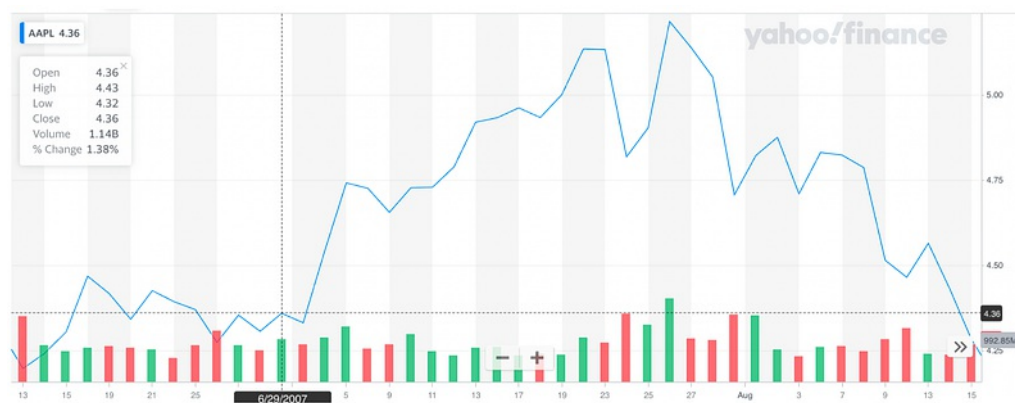


Fig. 1.1. A chart showing the valuation of Apple from 06/13/21 to 08/15/22. Historical data from Yahoo Finance.

Expecting this pattern to continue, I was dismayed when I invested in Apple a week before the iPhone 13 release, only to see a 1.17% (\$1.72) rise in the share price after one month.

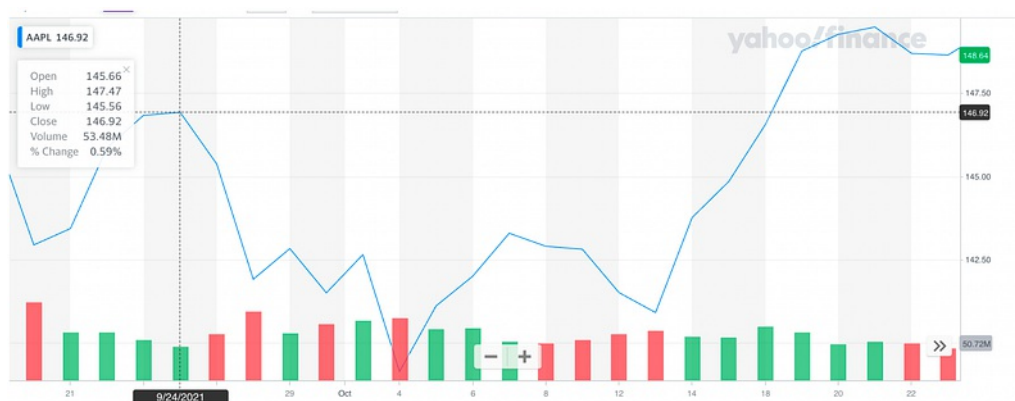


Fig. 1.2. A chart showing the valuation of Apple from 09/19/21 to 10/25/22. Historical data from Yahoo Finance.

Understanding how the levels interact: Apple→Media→Investors and comparing this instance of stock surge to the current condition of Apple will help us answer the explanatory challenge by citing an economic theory.

## Price Efficiency

Price efficiency is an investment theory claiming that share prices reflect the latest information and no entity can outsmart it because of the many diverse interactions from investors to the media and Apple (Liberto, 2021). It is an emergent property because no individual level can dictate it. Investors scrutinize every piece of information from or about Apple to outsmart co-investors for more profits. Be it the company's quarterly revenue report or an authority's critique about one of its products. At the

same time, the media broadcasts the processed information to help investors decide to buy or sell the share. The identification of this phenomenon and the general assumption of this effect **answers the explanatory challenge** because the described cycle will repeat itself, but with more perspectives from more investors and media players, it has a self-correcting effect on the price.

## The market is always at a critical point

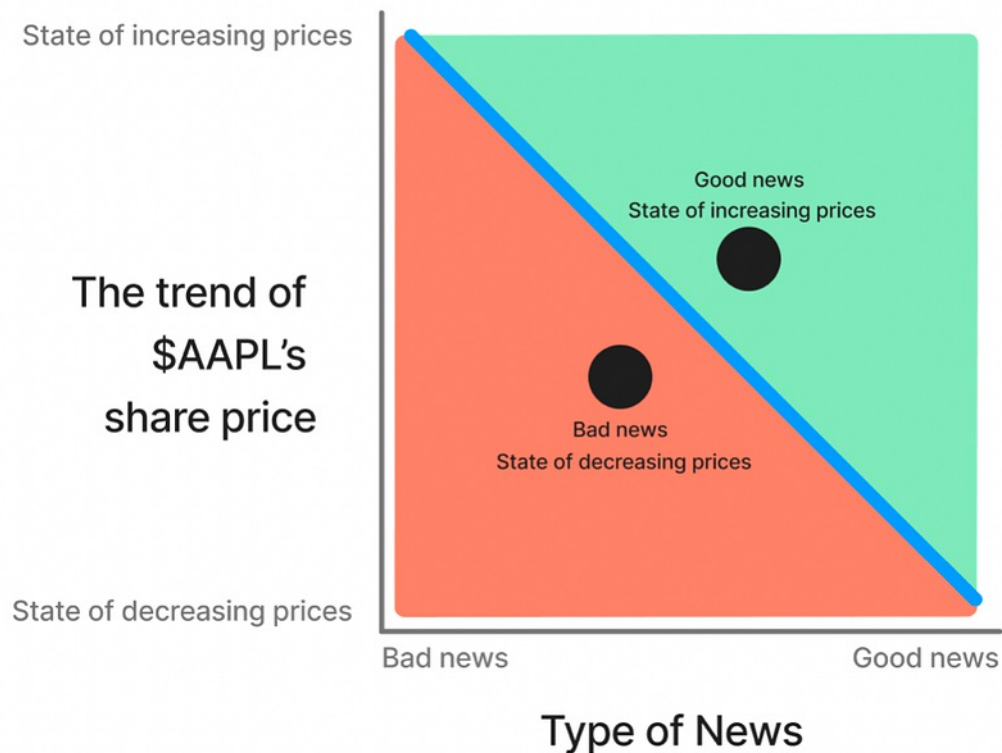


Fig 1. The system dynamics are explored through the trend of the \$AAPL share price in percentage and the type of news announced.

This portion of the paper explains the stability of the \$AAPL stock by highlighting that the state of the share price of \$AAPL is susceptible to the news of the moment (Beers, 2021). It is important to note that the highlighted areas of green and red in this 2-dimensional (trend of \$AAPL price and type of news) phase space are the basins of attractions; a spectrum corresponding to the intensity of the news and the price's uptrends/downtrends. To simplify, think of a car. An uptrend is like a car's acceleration state, while a downtrend is a car in a state of deceleration. The nature of stocks and sensitivity makes this system stand on and closely at the critical point, represented by the blue line. The two attractors, "bad news and downtrends" and "good news and uptrends," are intentionally located near the critical point because the increases observed in the stock market are not usually very large or an uptrend/downtrend of greater than 15%—even if it is large, \$AAPL will eventually be regulated back to a state of low uptrend/downtrend

defined as trends between 0.1% and 3%. These percentages are specific to Apple as a mature company.

The composition of this phase space and attractors are explained by the movement of share prices with news activity. Positive news will typically cause individuals to buy stocks. Good earnings reports, an announcement of a new product (but in the iPhone 13's case, it does not), a corporate acquisition, and positive economic indicators all translate into buying pressure and an uptrend or a positive increase in the price of \$AAPL. Negative news will cause people to sell stocks. A bad earnings report, a lapse in corporate governance, big-picture economic and political uncertainty, and unfortunate occurrences like COVID-19 all translate to selling pressure on investors and a downtrend or a decrease in the price of \$AAPL. A gray area not mentioned is the subjectiveness of the news—some bad news to others will be good to some. However, this is rarely the case for \$AAPL shares, so I did not include it. This topology can be temporarily modified by unforeseen circumstances such as COVID-19, which expands the “bad news and downtrend” basin of attraction because of the loss of investing privilege as people focus more on the essentials. **This analysis helps answer the explanatory by reinforcing the efficient price theory.**

## Anticipation

Fundamentally, stock prices tick up and down constantly due to fluctuations in supply and demand. Apple's prices are no exception. If more investors want to buy \$AAPL, its market price will increase. If more investors try to sell \$AAPL, its price will fall. Recall the buy high, sell low philosophy of investors.

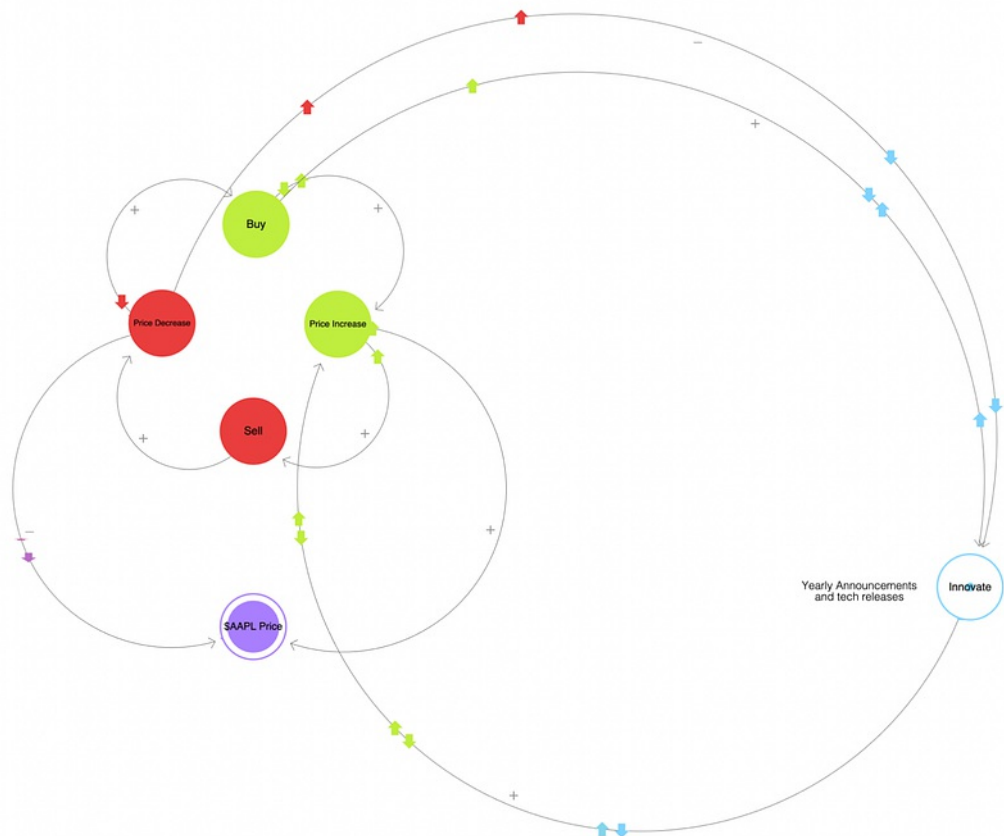


Fig. 1. A network of the actions in the “buy high, sell low” philosophy. [Interact with the network here.](#)

Network analysis reinforces the answer to the explanatory challenge by analyzing the movement of price, a *conserved* resource on the market (network) level. Networks are standard in economics, which the stock market is part of (McAllister & Wilkins, 2020). Each node represents actions that have the power to affect the price of \$AAPL (purple). The *directed* nodes in this *distributed* network—whereby every node and edge can affect one another—represent the flow of price throughout the price affectors and the time for the effect to take place. One thing to note, however, is that every buy contributes to Apple’s power to innovate. After Apple innovated by launching the first iPhone, it made way for the business model of following up with yearly releases of an “upgraded” version of the iPhone. This model was proven to increase the number of buys, increasing the price of \$AAPL. Investors noticed this positive network effect, which helps **answer the explanatory challenge**: the yearly act of Apple **innovating** is already priced in or anticipated by investors (Constable, 2020). The effect formed the “innovation” node with directed edges: the effects of innovating are already reflected in the price of \$AAPL.

## References Used

Beattie, A. (2020, March 14). *Steve Jobs and the Apple Story*.

Investopedia. <https://www.investopedia.com/articles/fundamental-analysis/12/steve-jobs-apple-story.asp>

Beattie, A. (2021, September 10). *How Did Apple Get So Big?*

Investopedia. <https://www.investopedia.com/articles/personal-finance/042815/story-behind-apples-success.asp>

Beers. (2021, September 30). How the News Affects Stock Prices.

Investopedia. <https://www.investopedia.com/ask/answers/155.asp>

Bennett, L. (2021, March 13). *21 Best Places to Sell Your Antiques & Collectibles (for the Most Cash!)*. MoneyPantry Media

<https://moneypantry.com/sell-your-antiques/>

Constable, S. (2020, May 4). What Is 'PricedIn'? LLC.

WSJ. <https://www.wsj.com/articles/what-is-priced-in-11588427033>

Corporate

Finance Institute. (2022, October 23). *Investor*.

<https://corporatefinanceinstitute.com/resources/wealth-management/investor/>

Liberto, D. (2021, September 8). Price Efficiency Definition.

Investopedia. <https://www.investopedia.com/terms/p/price-efficiency.asp>

McAllister, K., & Wilkins, J. (2020, August). Network Analysis. *Forum*.

[https://course-resources.minerva.edu/uploaded\\_files/mke/00230232-2212/network-analysis.pdf](https://course-resources.minerva.edu/uploaded_files/mke/00230232-2212/network-analysis.pdf)

US Census Bureau. (2022, June 9). *Income and Poverty in the United States: 2020*. Census.gov.

<https://www.census.gov/library/publications/2021/demo/p60-273.html>

By [Carl Kho](#) on [December 27, 2022](#).

[Canonical link](#)

Exported from [Medium](#) on October 31, 2025.