

Decoding Apple's Stock Performance: A Comprehensive Analysis



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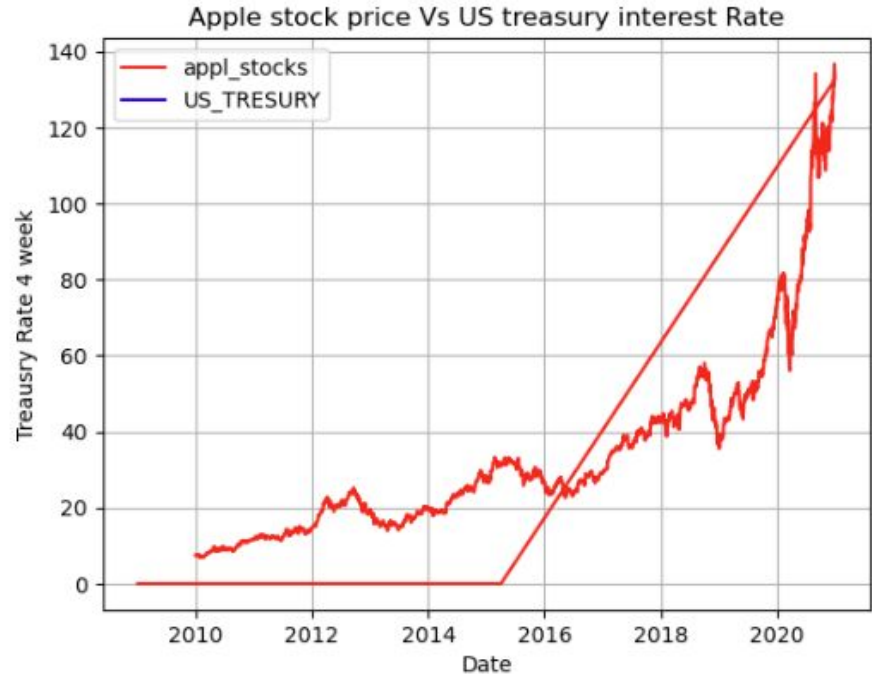
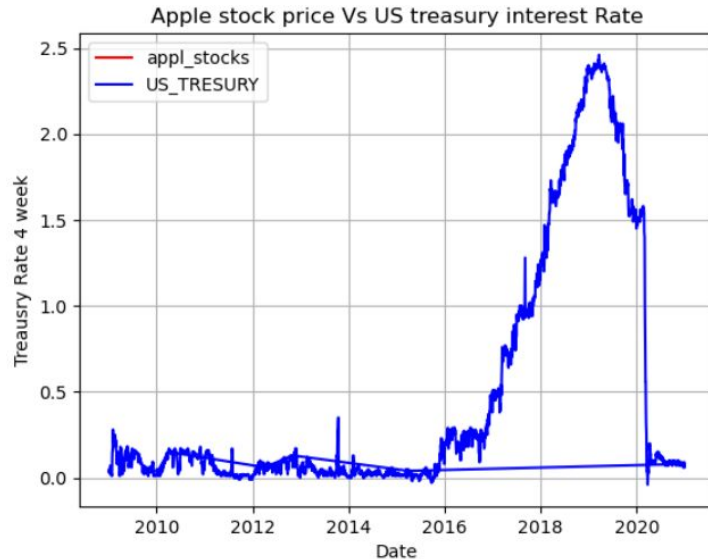
Question = What are the main factors behind Apple stock price increase for time period 2010 to 2020?

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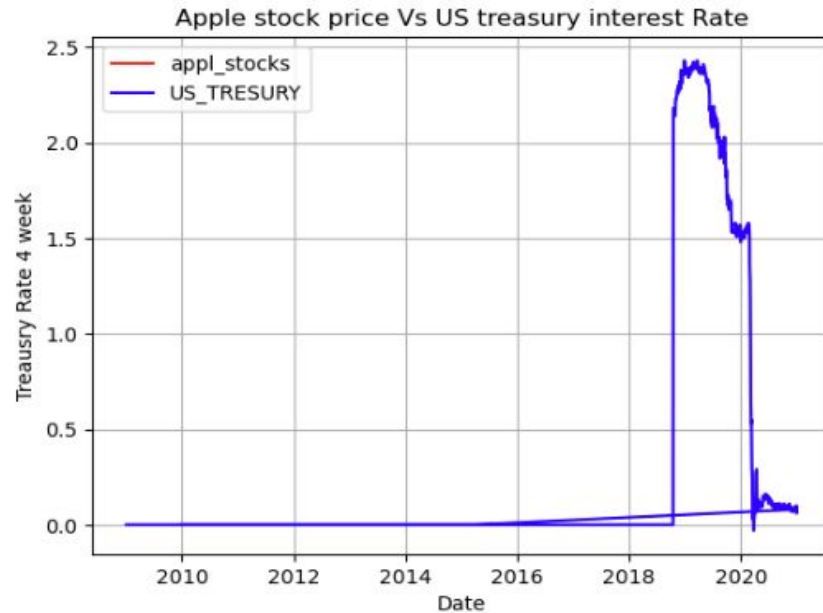
1.1. US Treasury 4 Weeks Bank Discount Interest Rate

- 1) For period 2010 to 2020
- 2) As Interest Rates increased, so did Apple stock price 2016-20

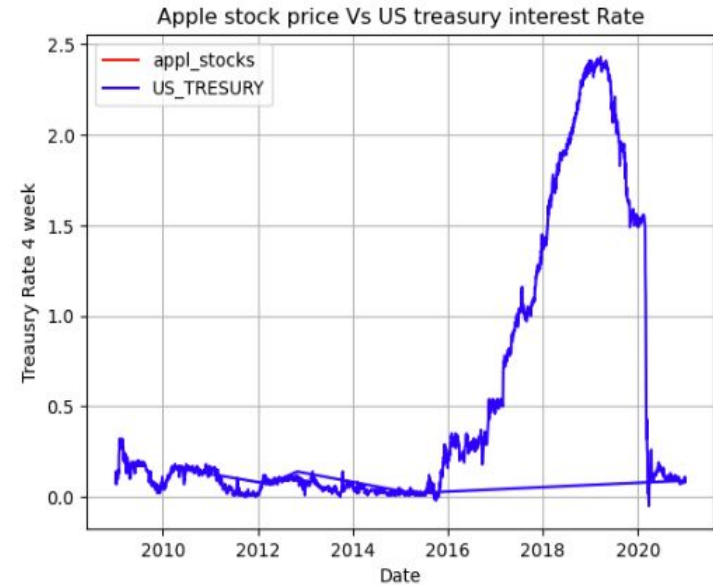


8 WEEK AND 13 WEEK BANK DISCOUNT RATE

- 8 week



13 WEEK

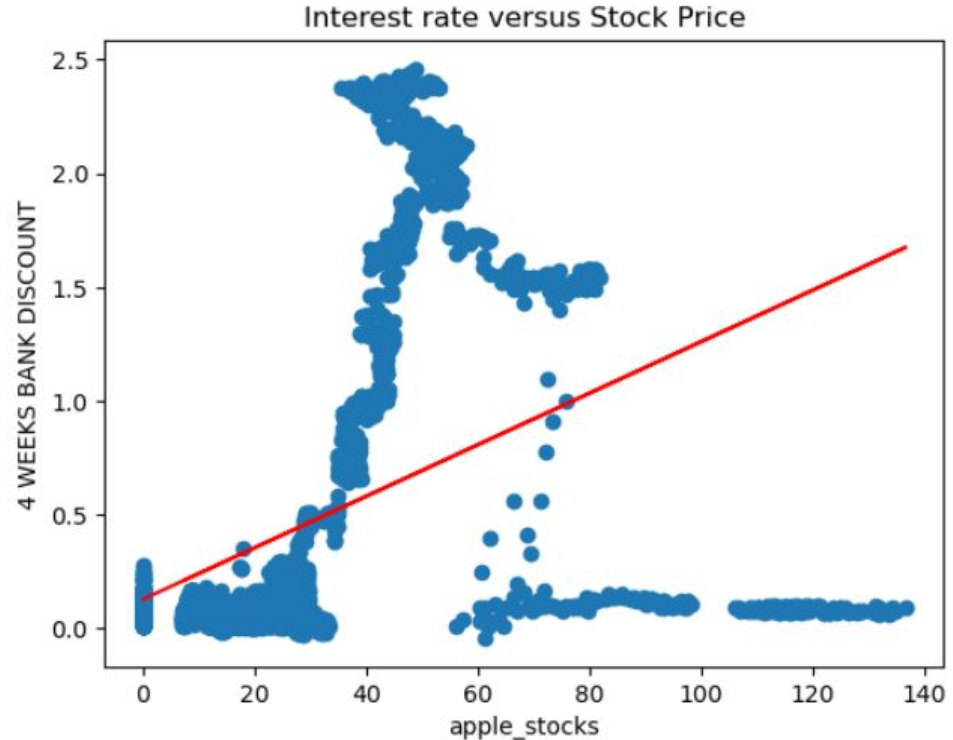


52 WEEK BANK DISCOUNT INTEREST RATE



1.1. US Treasury 4 Weeks Bank Discount Interest Rate

- 1) For Period 2009 to 2020
- 2) There is a R value of 0.3944651751275276 when comparing Interest Rate versus Stock Price
- 3) There is a weak positive linear relationship between stock price and interest rate.
- 4) We can conclude that as interest rate increases, so does the stock price of apple stock



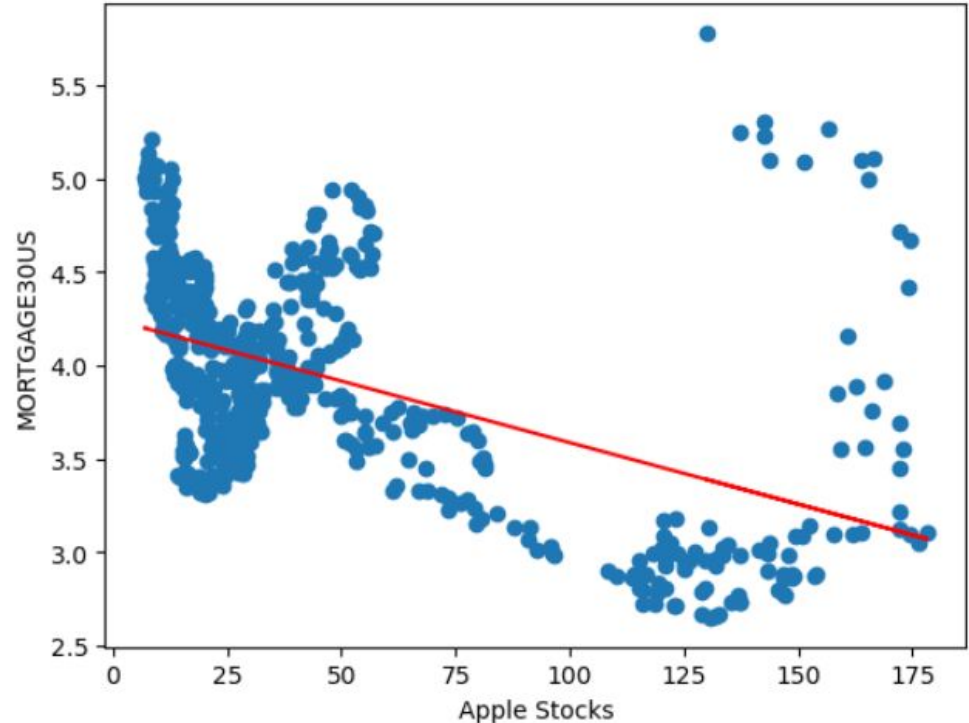
1.2. US Mortgage Rate versus Apple Stock Price

- 1) From 2009 to 2020
- 2) As Mortgage rates decreased going into 2019-20, apple stock price went up considerably. Also in 2014-16



1.2. US Mortgage Rate versus Apple Stock Price

- 1) From 2009 to 2020
- 2) R value of -0.489556 between apple stock price and US Mortgage rates
- 3) A negative correlation exists between Apple stock price and US Mortgage rates, so as US mortgage rates decrease, there tends to be a big jump in apple stock price

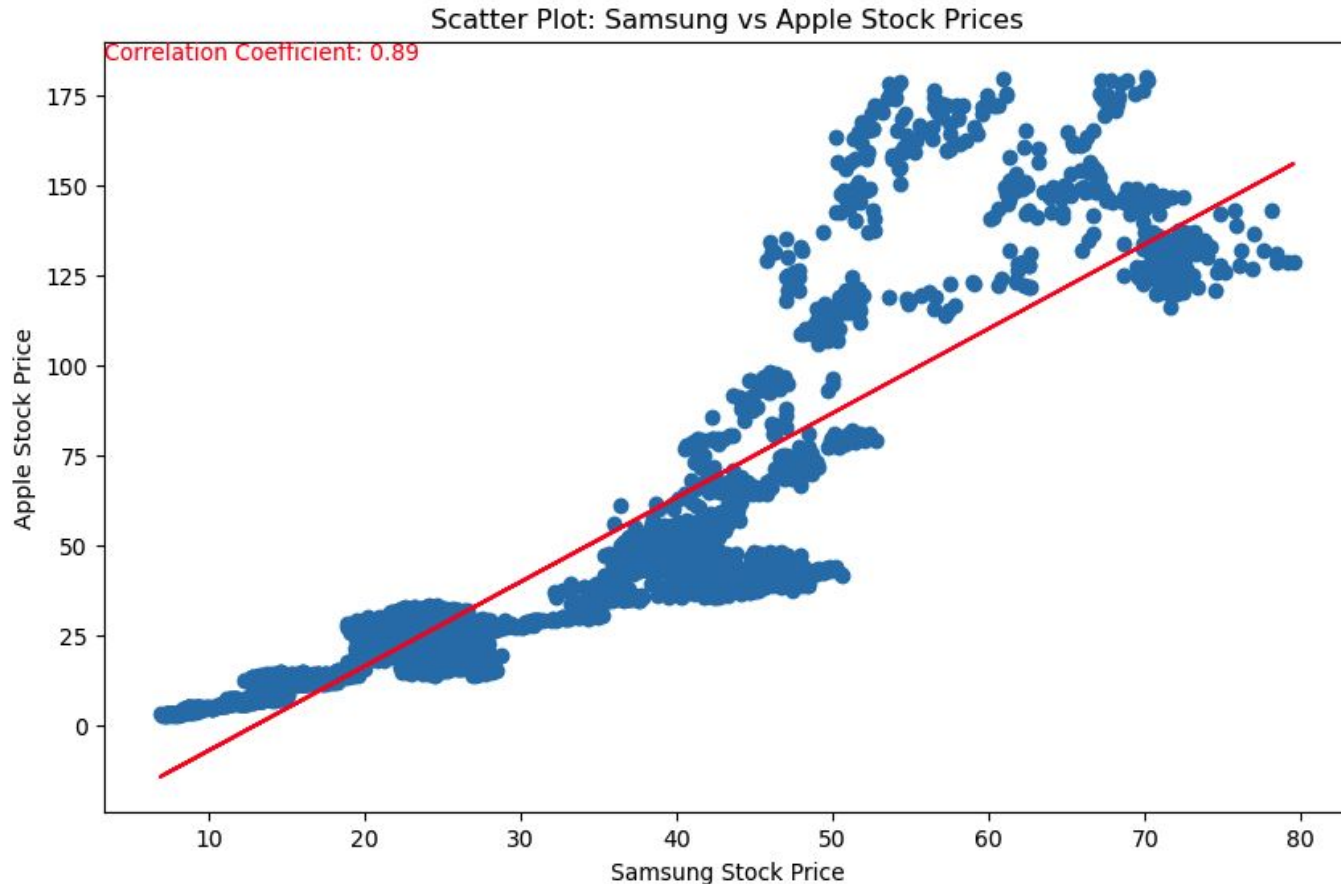


2. VS.

Apple and Samsung Stock Prices Over Time



2. Samsung vs. Apple



2. Samsung vs. Apple (2019)

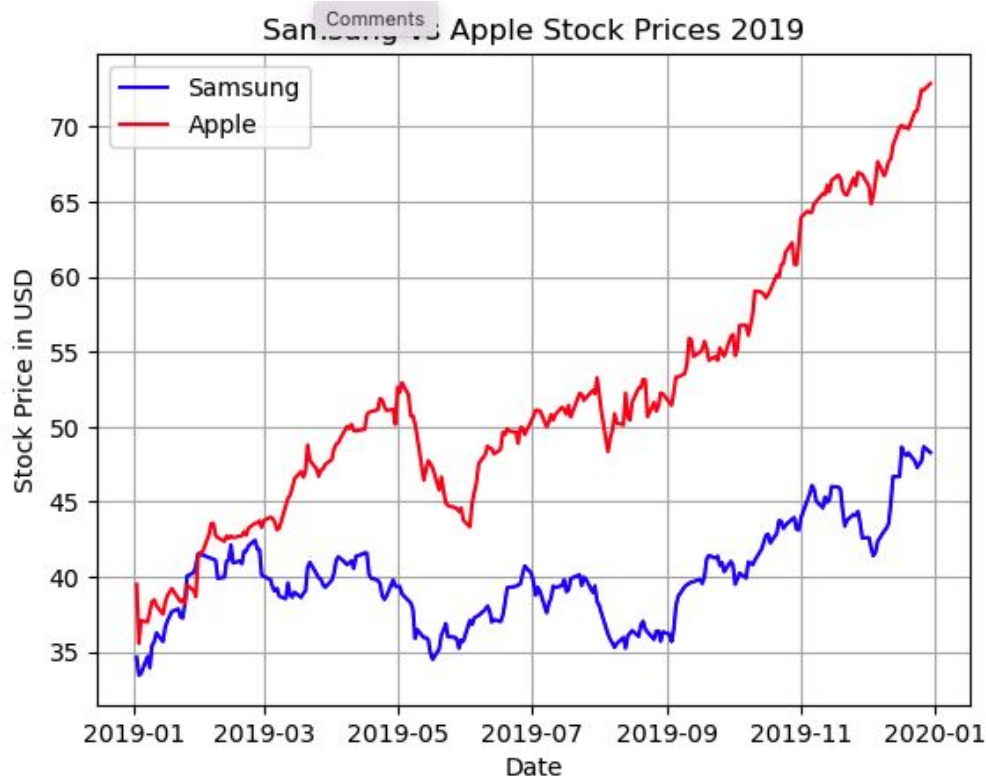
<Samsung in 2019>

1. Galaxy Fit
2. Buds*
3. Samsung Galaxy S10 Series
4. Galaxy Fold*
5. Galaxy Watch Active 2



<Apple in 2019>

1. AirPods (2nd Gen)
2. iPad Air (3rd Gen)
3. Mac Pro
4. iPhone 11 Series*
5. Apple Card*



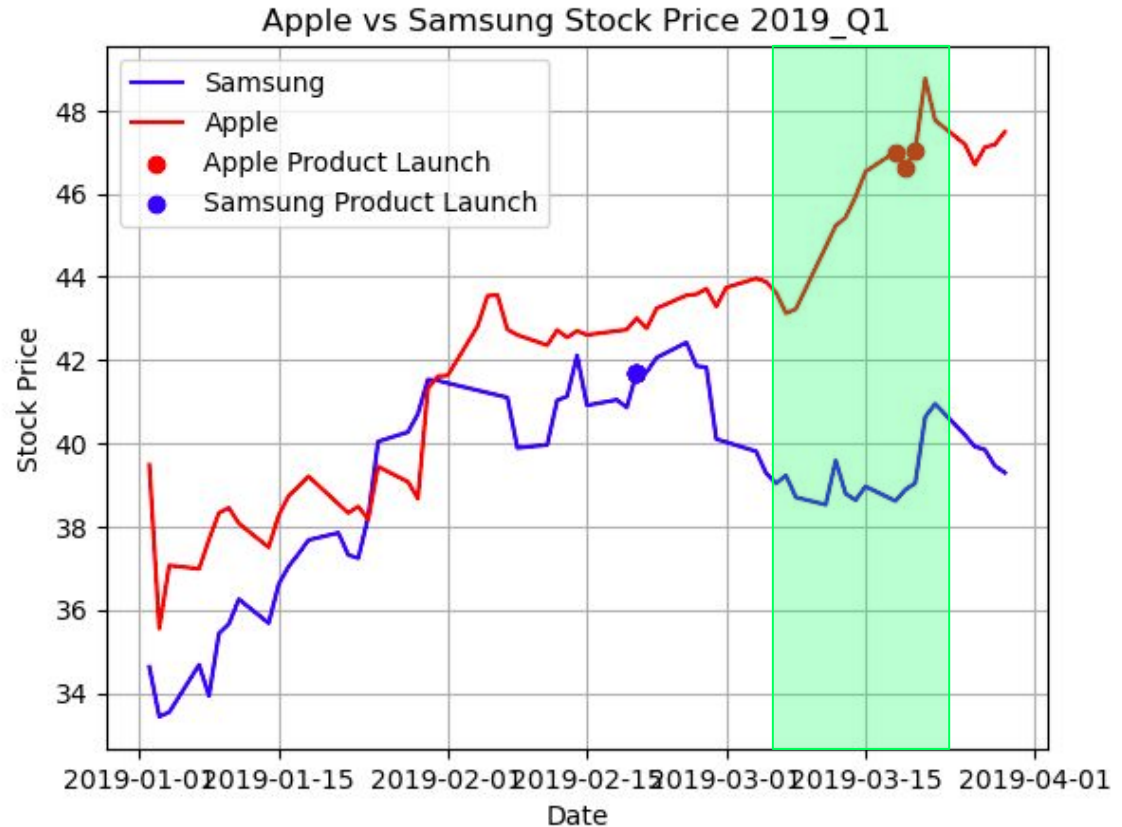
2. Samsung vs. Apple (2019 Q1)

<Samsung>

1. Galaxy Fit (Feb 20, 2019)
2. Buds (Feb 20, 2019)
3. Samsung Galaxy S10 Series (Feb 20, 2019)

<Apple>

1. AirPods (2nd generation): March 20, 2019
2. iPad Air (3rd generation): March 18, 2019
3. iMac (2019): March 19, 2019
4. Apple Card: March 25, 2019



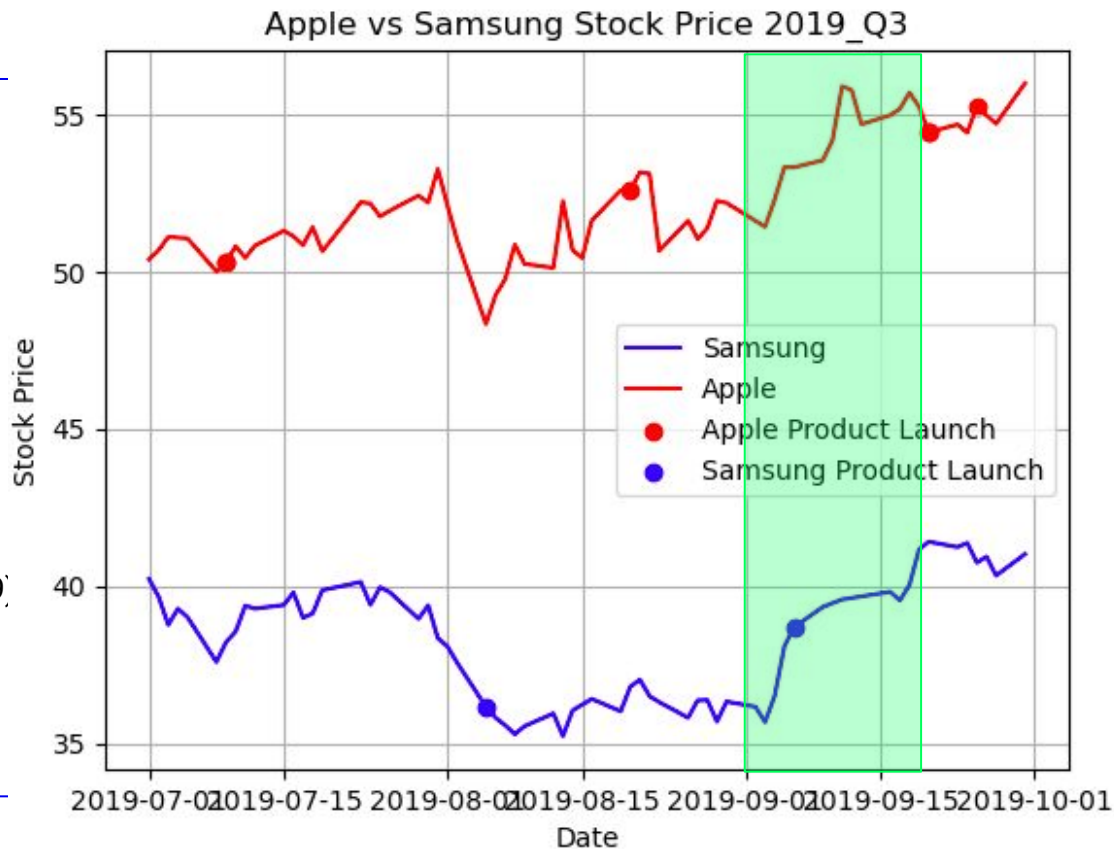
2. Samsung vs. Apple (2019 Q3)

<Samsung>

1. Galaxy Watch Active 2 (Aug 5, 2019)
2. **Galaxy Fold (September 6, 2019)**

<Apple>

1. MacBook Air (July 09, 2019)
2. MacBook Pro (July 09, 2019)
3. iPhone accessories (Aug 20, 2019)
4. iPhone 11 series (September 20, 2019)
5. Apple Watch Series 5 (September 20, 2019)
6. iPad (September 25, 2019)



2. Samsung vs. Apple Conclusion

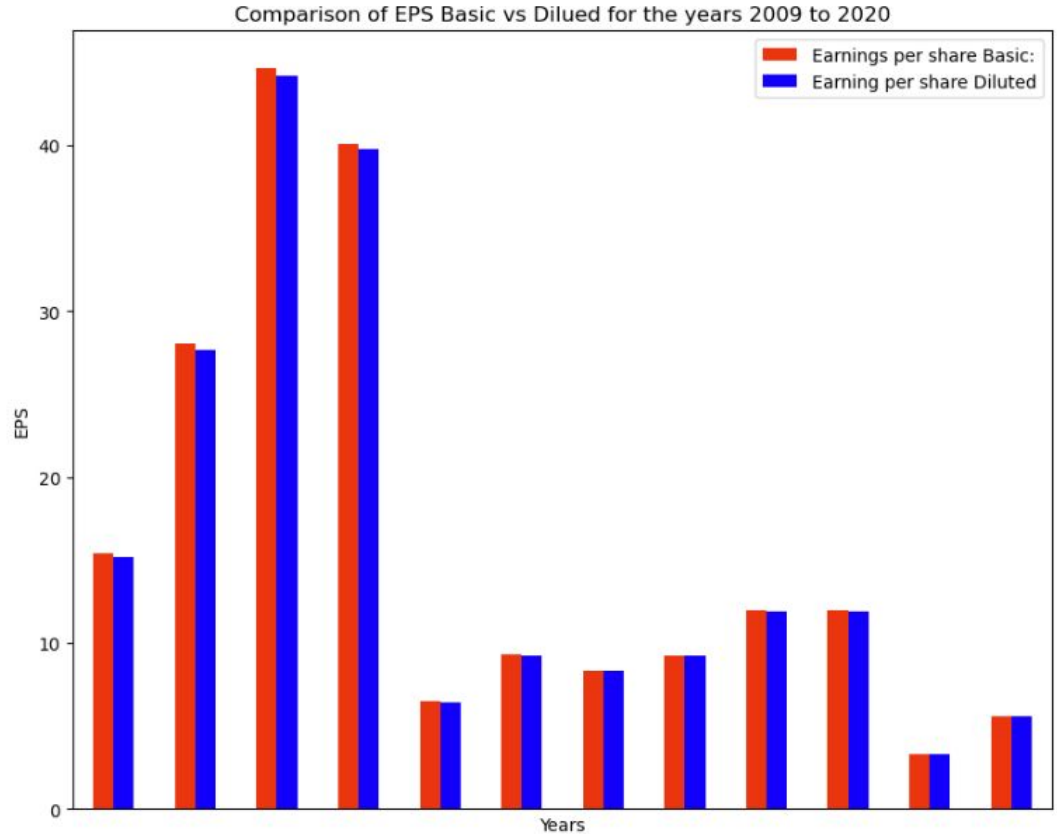
- Both stock prices increase over time
- Apple's product launch has a greater (positive) impact on Apple's stock price
- Apple's product launch has a greater (negative) impact on Samsung's stock price



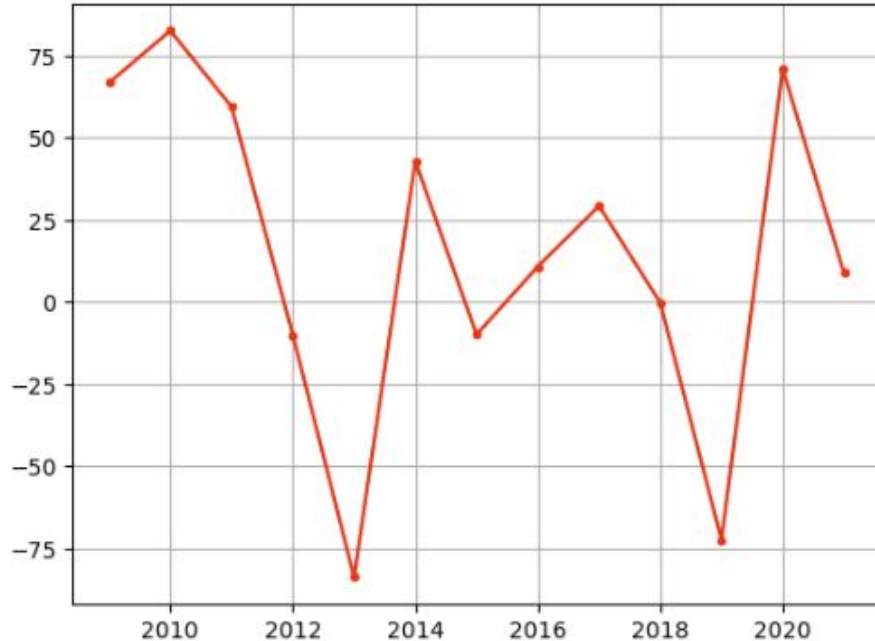
3. Apple's Earnings (Earnings per Share)

HIGHLIGHTS:

2012 - Apple's EPS was at all time high.



3. Apple's Earnings (EPS)



% Change on Earnings per Share
over the period of 2009 to 2022

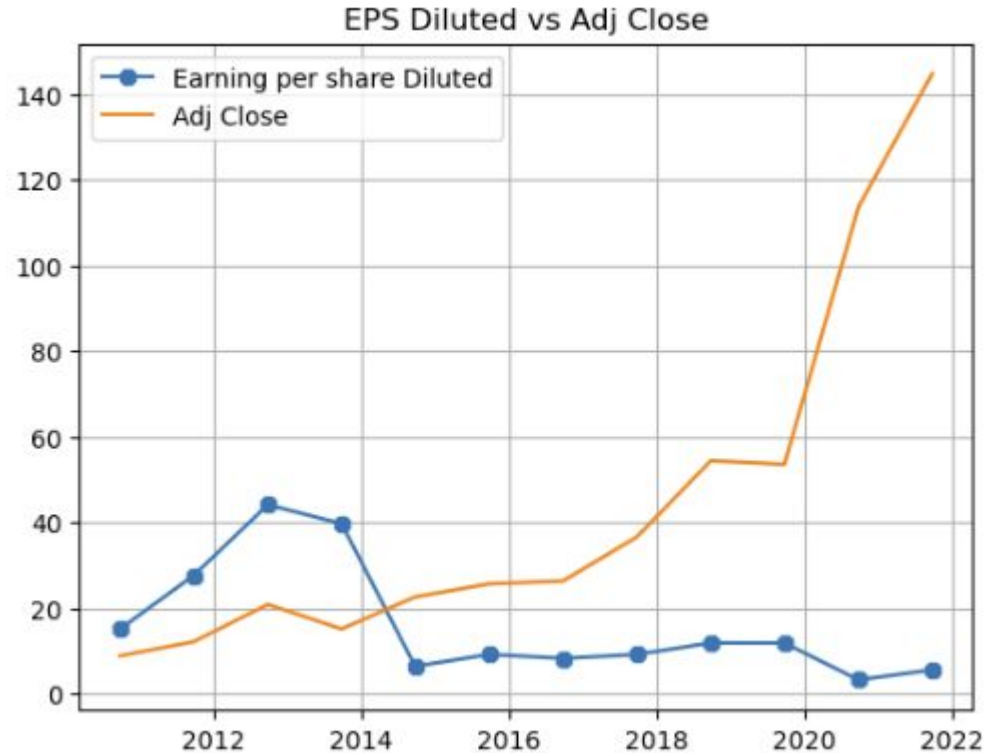
EPS % Change significantly decrease from
2012 to 2013. This happens again around
2019 when it dipped to -72%.

Date	Diluted EPS
2022	6.11
2021	5.61
2020	3.28
2019	11.89
2018	11.91
2017	9.21
2016	8.31
2015	9.22
2014	6.45
2013	39.75
2012	44.15
2011	27.68
2010	15.15
2009	9.08

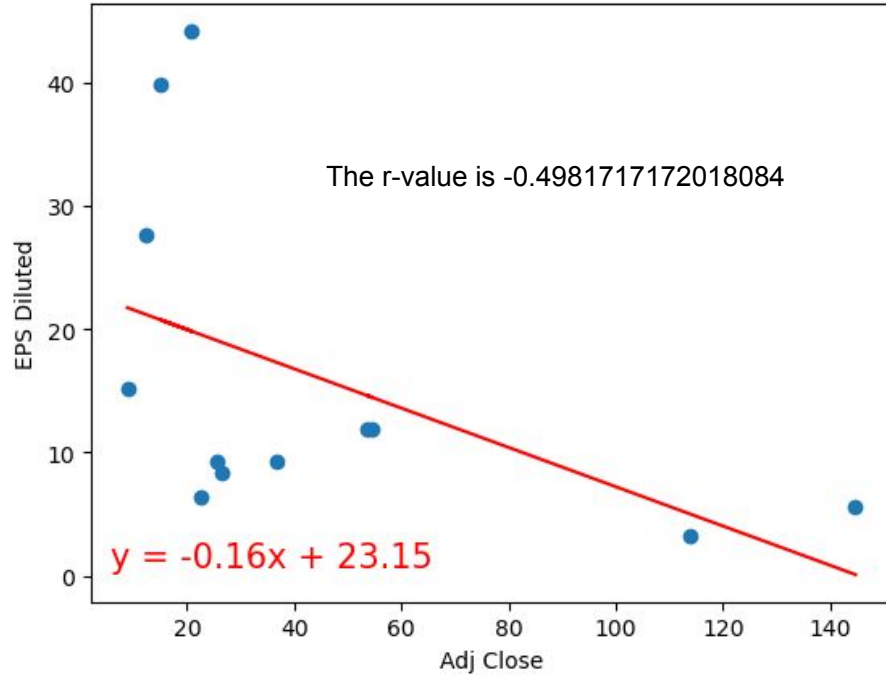
3. Apple's Earnings

EPS Diluted vs Adj Close

Consistent EPS Diluted drive up the Adj closing price up to the latest data.



3. Apple's Earnings



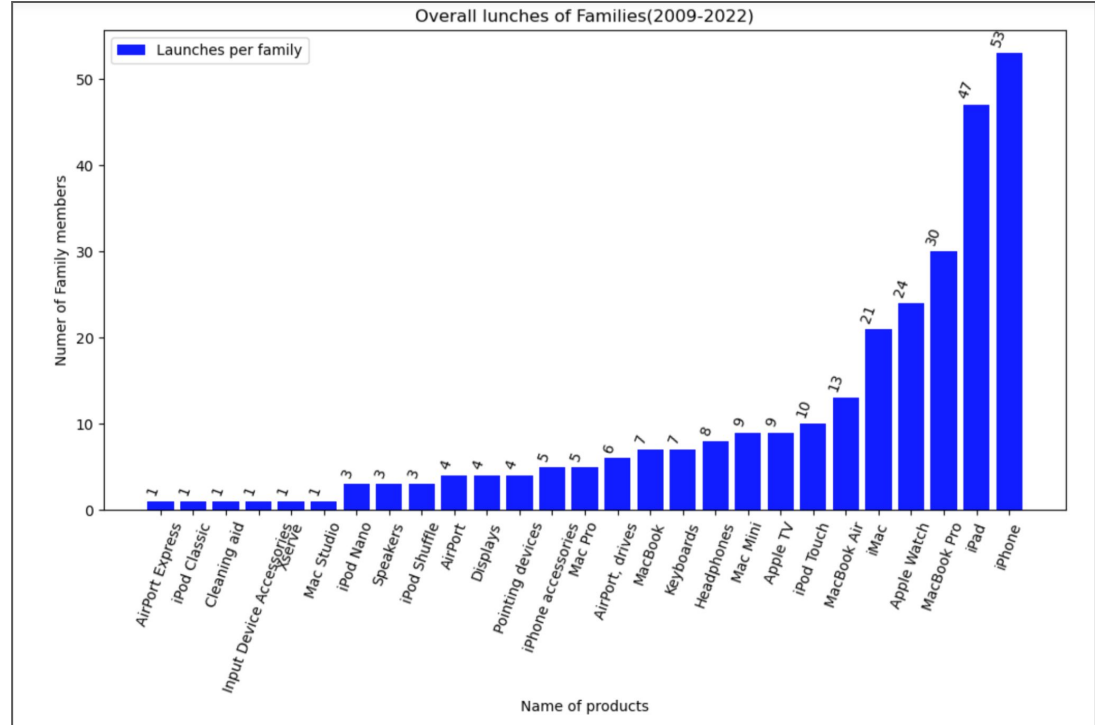
4. Apple's Product Launch

Family	Total_Launches
AirPort Express	1
iPod Classic	1
Cleaning aid	1
Input Device Accessories	1
Xserve	1
Mac Studio	1

Released_date	Family	Launches
0 2009-01-06	MacBook Pro	1
1 2009-01-29	MacBook	1
2 2009-03-03	AirPort	1
3 2009-03-03	AirPort, drives	2
4 2009-03-03	Keyboards	1
179 2021-11-01	Speakers	1
180 2022-03-18	Displays	1
181 2022-03-18	Mac Studio	1
182 2022-03-18	iPad	1
183 2022-03-18	iPhone	1

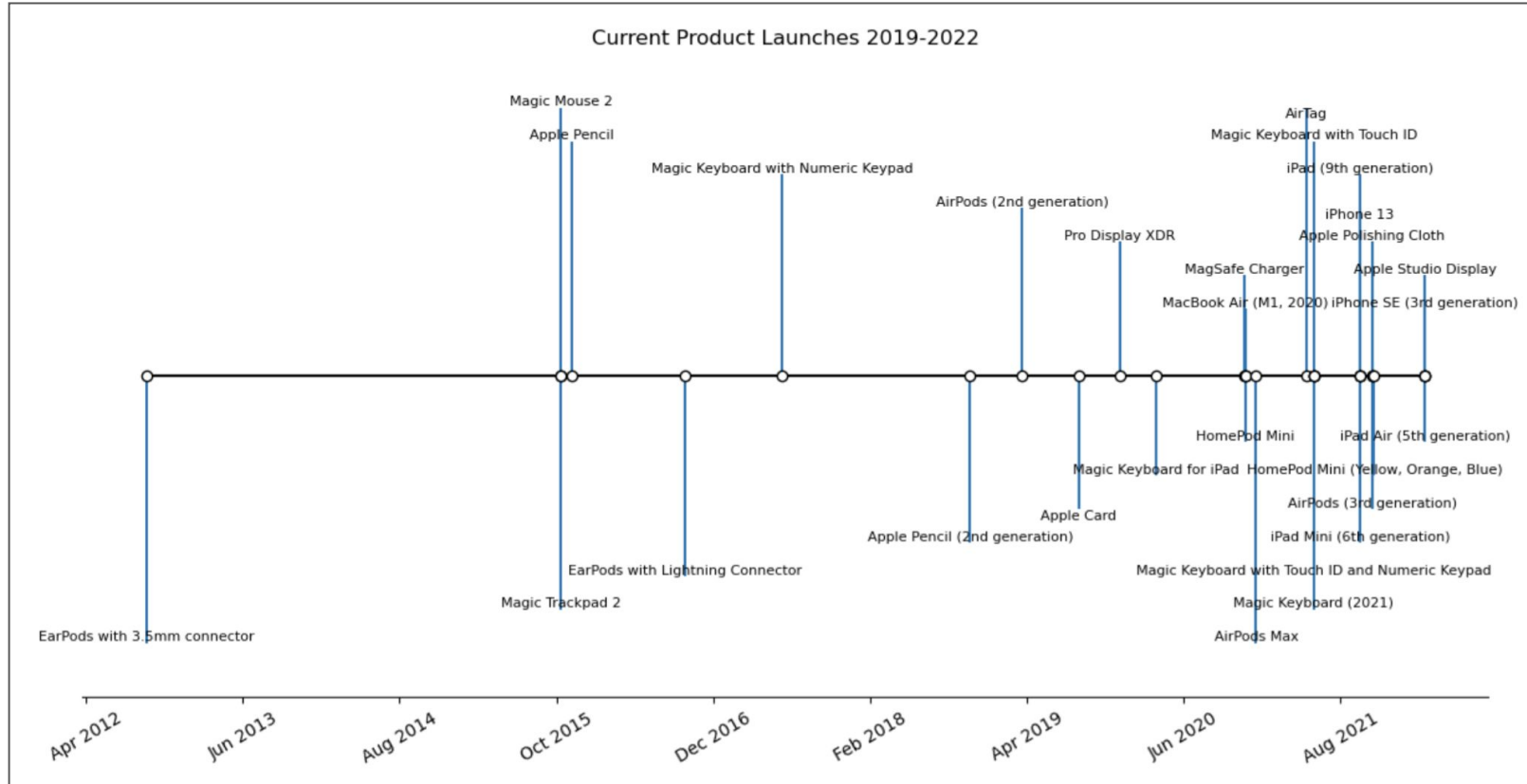
From 2009-01-06 to 2022-03-18

Released	Model	Family	Discontinued
2009-01-06	MacBook Pro (Early 2009) (17")	MacBook Pro	June 8, 2009
2009-01-29	MacBook (Early 2009) (White)	MacBook	May 27, 2009
2009-03-03	Mac Mini (Early 2009)	Mac Mini	October 20, 2009
2009-03-03	iMac (Early 2009)	iMac	October 20, 2009
2009-03-03	Mac Pro (Early 2009)	Mac Pro	August 9, 2010



- The highest iPhone Family with 53 products.
- There are 6 Families with 1 product.

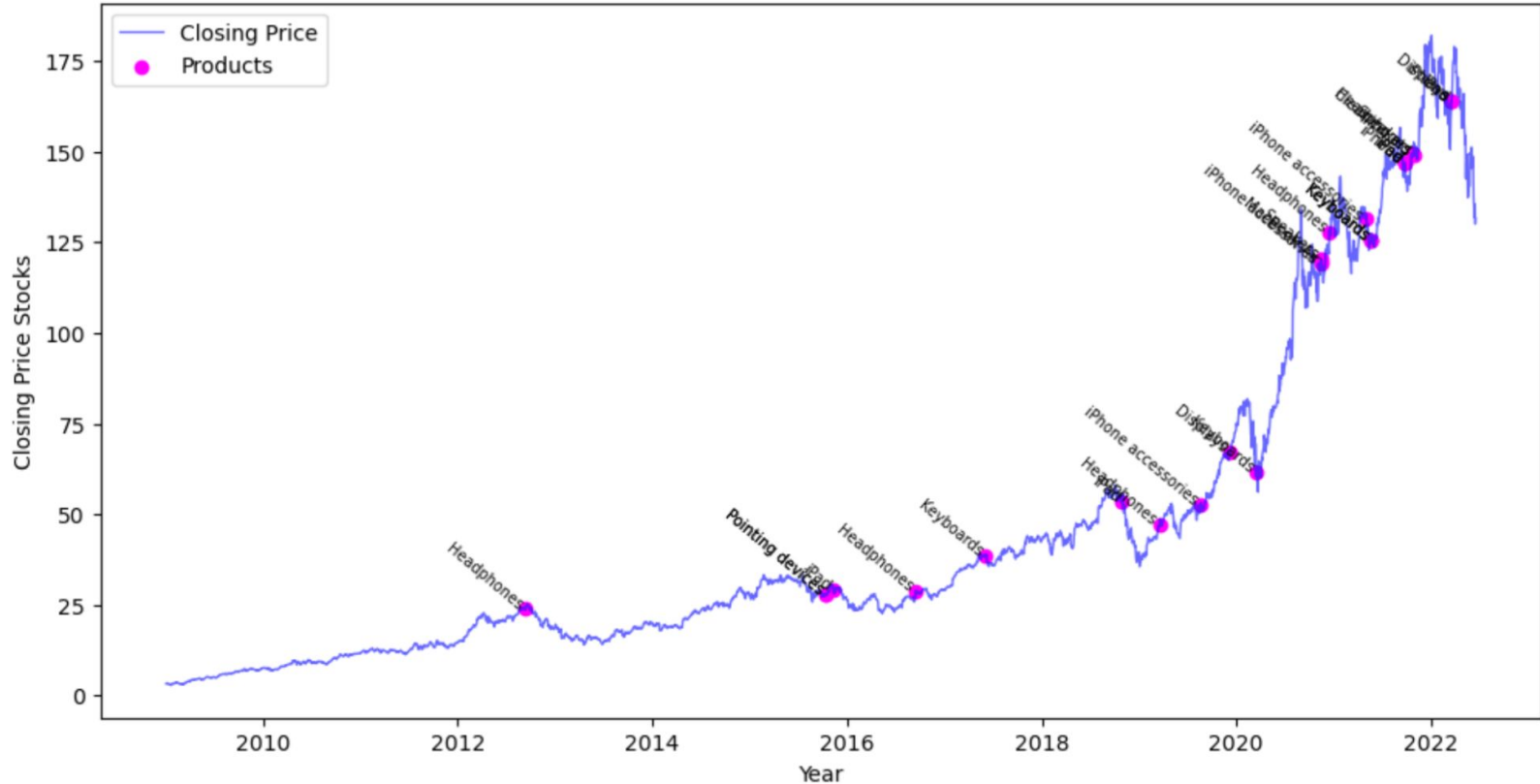
4. Apple's Product Launch



- 28 Current Products
- The oldest product is the EarPods with 3.5 mm connector

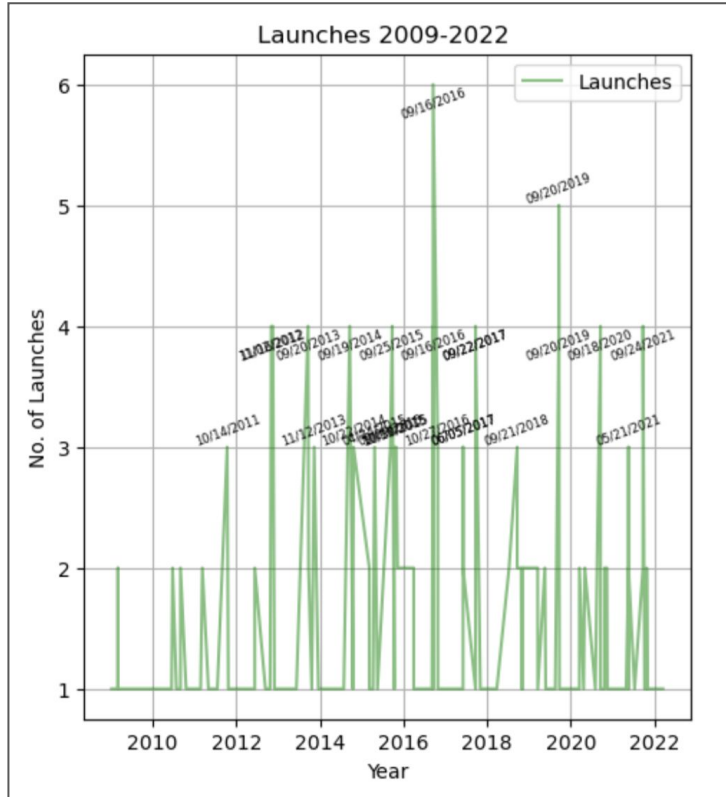
4. Apple's Product Launch

Current products Vs Closing Price Stocks



- Not always the current products launches have a direct impact on stocks.

4. Apple's Product Launch



- September 16/2016

4 Apple Watch Family products :

- 1.-Apple Watch Series 1
- 2.-Apple Watch Series 2
- 3.-Apple Watch Hermès Series 2
- 4.-Apple Watch Edition Series 2

6 iPhone Family products :

- 1.-iPhone 7 (32 & 128 GB)
- 2.-iPhone 7 (256 GB)
- 3.-iPhone 7 Plus (32 & 128 GB)
- 4.-iPhone 7 Plus (256 GB)
- 5.-iPhone 6S (32 GB)
- 6.-iPhone 6S Plus (32 GB)

1 EarPods Family products :

EarPods with Lightning Connector

- September 20/2019

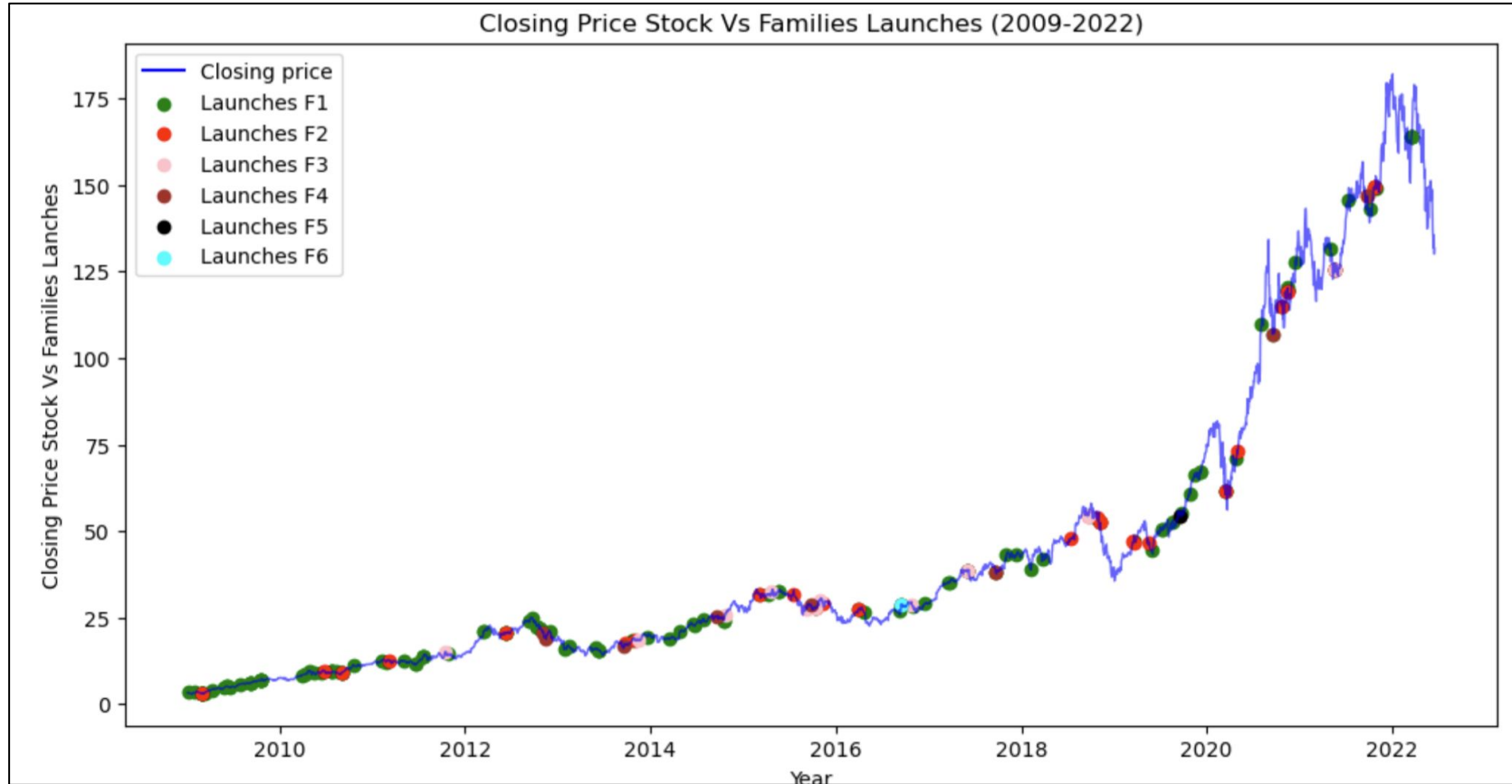
4 Apple Watch Family products :

- 1.- Apple Watch Series 5
- 2.- Apple Watch Hermès Series 5
- 3.- Apple Watch Nike Series 5
- 4.- Apple Watch Edition Series 5

4 iPhone Family products :

- 1.- iPhone 8 (128 GB)
- 2.- iPhone 8 Plus (128 GB)
- 3.- iPhone 11', 'iPhone 11 Pro
- 4.- iPhone 11 Pro Max

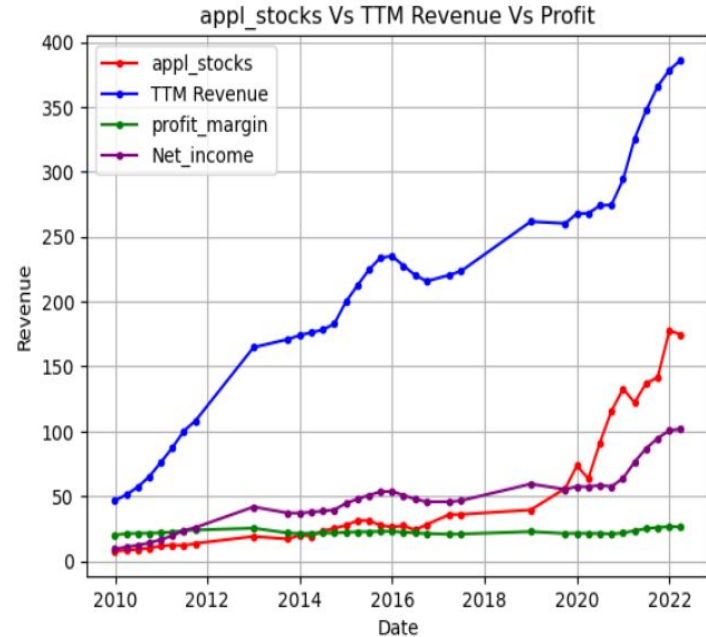
4. Apple's Product Launch



- Not all product launches have a direct or immediate impact on stocks.

5 Profit Margin Vs Apple Stocks Vs Revenue

- Apple revenue increased dramatically in the 2010s, from \$65 billion at the start of the decade to \$274 billion by the end. Revenues declined 2016 slightly and in 2023.
- Apple stocks declined in the 2015 ,2022
- We don't see any Decline in Profit Margin

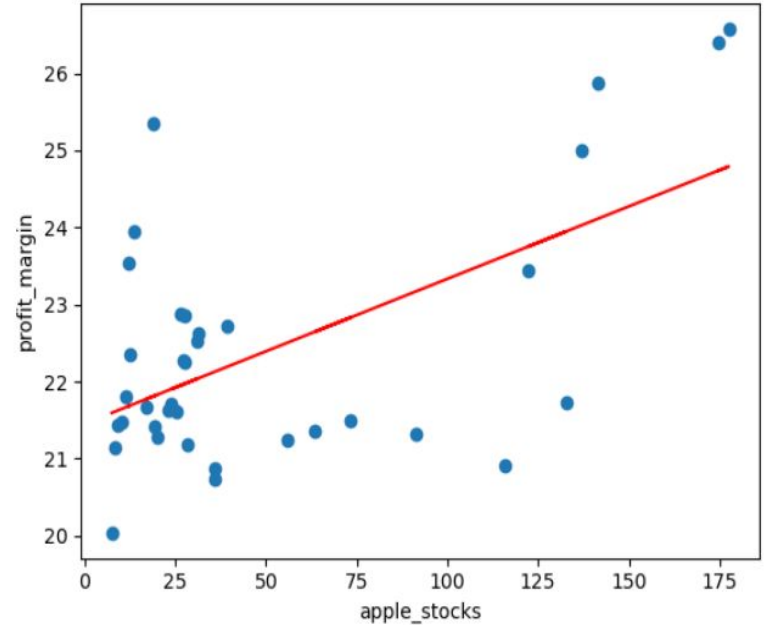


5 Moderate Correlation

- Apple stocks declined in the 2014 where we don't see decline in profits
- R-value = 0.5777756478783644

R value shows that there is no strong correlation between stocks and profit margins

The r-value is 0.5777756478783644

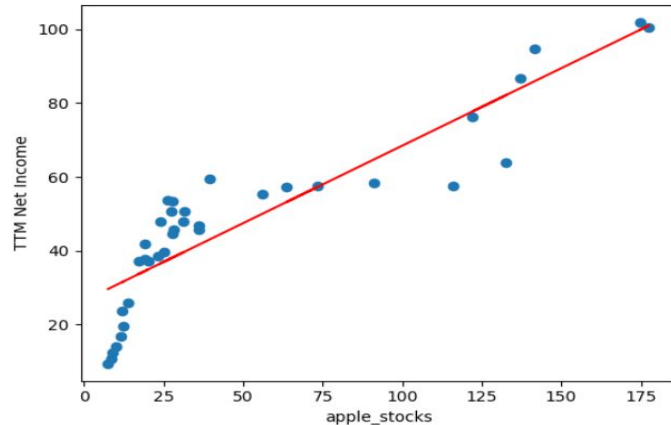


5 Positive Correlation

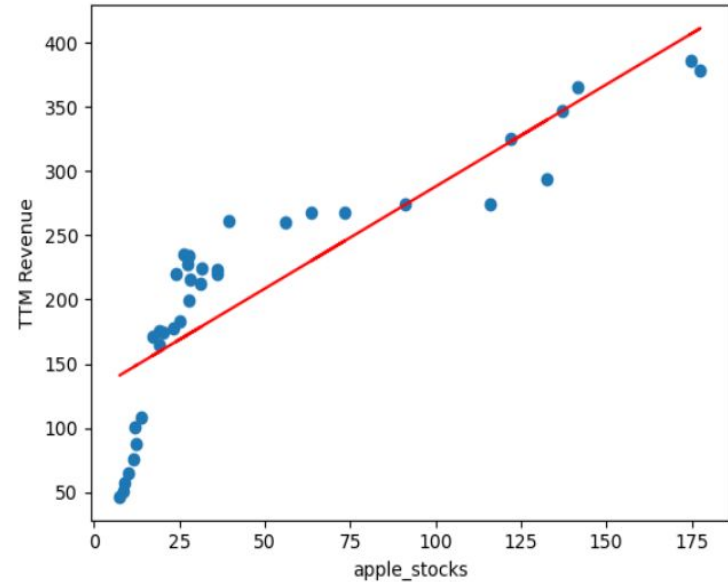
Apple Stocks have Direct relation with Revenue and Net income

	Revenue	Stocks
Declined	2019	2018
Declined	2016	2015
Declined	2023	2022

The r-value is 0.8890835866477735



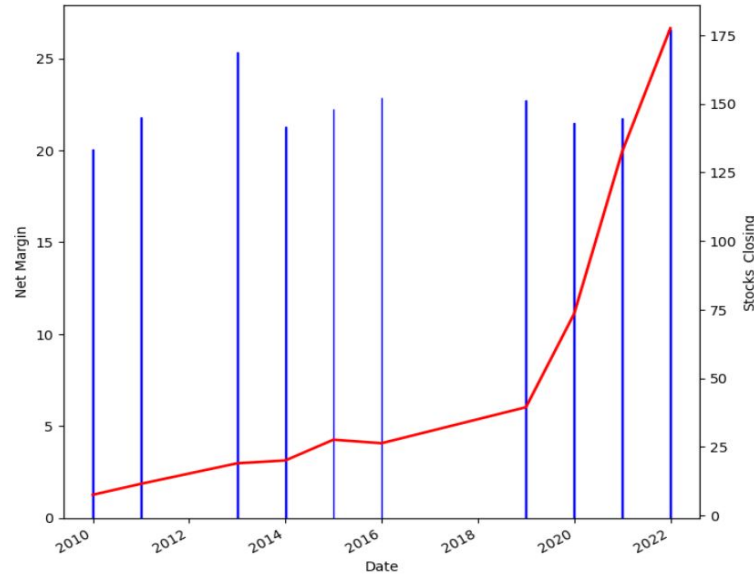
The r-value is 0.8572578506265814



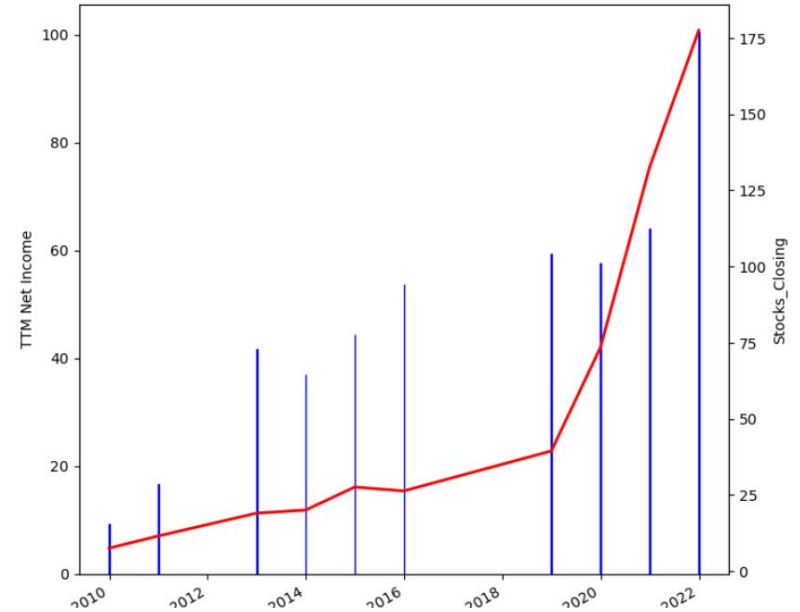
5 Profit Margin Vs Apple Stocks Vs Revenue

- Apple Profit margin seems to be consistent over the years
- Apple TTM Income and revenue has increased drastically over the years which is directly related to stocks

Stocks Closing vs Net Margin



Stocks Closing vs TTM_Income



Thank you for listening!

