# **Portfolio Project**

Malia Latimer







## **Excel Worksheet**

Stock and ADR Prices		18-Jan	25-Jan		1-Feb		8-Feb		15-Feb		22-Feb		1-Mar	8-Mar	15-Mar		22-Mar		29-Mar		5-Apr		12-Apr		19-Apr	26-Apr
Canon (CAJ) Karime	\$	23.98	\$ 25.00	\$	23.87	\$	24.63	\$	24.81	\$	23.98	\$	23.25	\$ 22.28	\$ 23.76	\$	23.96	\$	24.45	\$	23.93	\$	23.71	\$	24.02	\$ 22.68
ВР	\$	32.38	\$ 31.40	\$	31.76	\$	32.81	\$	32.16	\$	31.06	\$	28.49	\$ 29.75	\$ 28.05	\$	29.67	\$	29.61	\$	29.70	\$	30.54	\$	31.41	\$ 28.35
Adobe (ADBE)	\$	513.34	\$ 502.72	\$	535.98	\$	511.31	\$	479.50	\$	438.40	\$	466.68	\$ 431.53	\$ 421.66	\$	466.45	\$	466.33	\$	458.58	\$	426.77	\$	436.40	\$ 399.12
AMD	\$	131.93	\$ 111.13	\$	116.78	\$	128.23	\$	121.47	\$	115.65	\$	113.83	\$ 105.53	\$ 109.33	\$	114.78	\$	123.23	\$	106.82	\$	95.10	\$	96.93	\$ 85.16
Shares																										
Company A		417.01																								
Company B		308.83																								
Company C		19.48																								
Company D		75.80																								
Daily Value																										
Company A	\$ 1	0,000.00	\$ 10,425.35	\$	9,954.13	\$	10,271.06	\$	10,346.12	\$	10,000.00	\$	9,695.58	\$ 8,986.66	\$ 9,908.26	\$	9,991.66	\$	10,196.00	\$	9,979.15	\$	9,887.41	\$	10,016.68	\$ 9,457.88
Company B	\$ 1	0,000.00	\$ 9,697.34	\$	9,808.52	\$	10,132.80	\$	9,932.06	\$	9,592.34	\$	8,798.64	\$ 9,187.77	\$ 8,662.75	\$	9,163.06	\$	9,144.53	\$	9,172.33	\$	9,431.75	\$	9,700.43	\$ 8,755.40
Company C	\$ 1	0,000.00	\$ 9,793.12	\$	10,661.60	\$	9,960.46	\$	9,340.79	\$	8,540.15	\$	9,091.05	\$ 8,406.32	\$ 8,214.05	\$	9,086.57	\$	9,084.23	\$	8,933.26	\$	8,313.59	\$	8,501.19	\$ 7,774.96
Company D	\$ 1	0,000.00	\$ 8,423.41	\$	8,851.66	\$	9,719.55	\$	9,207.16	\$	9,207.16	\$	8,628.06	\$ 7,998.94	\$ 8,286.97	\$	8,700.07	\$	9,084.23	\$	8,096.72	\$	7,208.37	\$	7,347.08	\$ 6,454.94
Total Portfolio Value	\$ 4	0,000.00	38339.22442	3	9275.91687	40	0083.86054	38	826.12168	37	7339.64509	36	213.33189	34579.684	35072.0312	36	5941.3619	37	508.99567	3	6181.45645	348	841.11557	35	5565.37922	\$ 32,443.19
	0.14	42151675																								



#### **AMD Intro**

- American Multinational Semiconductor based in Santa Clara California
- Develops computer processors for both businesses and average consumers.
- AMD has grown in part to its acquisitions of smaller tech companies that produce tech that they do not currently manufacture



## **AMD Investments Recap**

- After an initial investment of \$10,000, we ended with a 38 % loss leaving me with \$6,400
- During the same period the S&P 500 performed relatively poorly (11% loss)
- AMD's competitor NVDA also experienced a loss (27.5%).
- Correlation Coefficient with S & P was 0.523584



#### AMD VS S&P 500





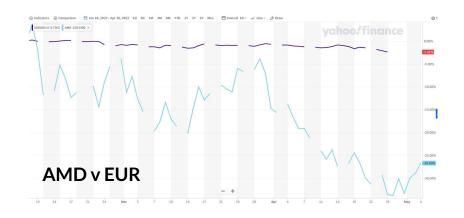
#### AMD VS NVDA

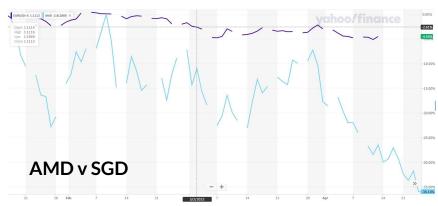




## Was AMD affected by foreign exchange rates?

- AMD does a great deal of business all around the globe (35 locations worldwide)
- It operates in over 20 countries, and deals with over 10 different currencies
- When compared to currencies that it does business in, there seems to be little to no correlation.
- This might be because it is well diversified in many different countries and currencies







## Why AMD did so poorly

- The domestic market in general showed similar, though less drastic decline within the given time period
- The massive chip shortage early in the year contributed greatly to the semiconductor chip industry's decline
- AMD has reportedly been investing heavily in research and development, which has made it less profitable in the short run.



## **BP Intro (Beyond Petroleum)**

- British oil and gas company
- One of the world's super major oil and gas industry
- Also involved with renewable energy
- Take care of the whole supply chain
- BP Is a company based off from London, England so the main currency used is the Pound sterling

The graph on top is the comparison of the BP stock and the FTSE stock exchange, which is a share index in the London Stock Exchange. The calculation correlation for the FTSE stock exchange and BP is 0.54, relatively strong.

The graph below is the comparison between the S&P 500 and the BP stock.

As clearly shown, the BP stock is heavily correlated with both of these nation's stock exchange, especially with the down trends. The calculation correlation for S&P and BP is 0.87, strong.







## Foreign stock comparison

As shown next, this is the comparison of the GBP/USD currency exchange to the BP stock price. It can be concluded that they are negatively correlated with each other, more recently the GBP/USD has been on a rise and BP has been diminishing.

The calculation correspondence -0.659 which analyzes they are strongly not dependent on each other.





## **BP Investment Recap**

- Initial investment of 10,000 dollars on January 18th would lead to \$1,244.66 loss on April 26th
- Estimation of 14.2% loss, 3rd largest of the group
- Main cause of downtrend was exit of Russian trades with oil and gas



## Why did BP lose profit?

BP had a strong start at the beginning of the year by beating 50% of the revenue from 2020, by having over 150 billion dollars. Unfortunately throughout the year, USA got into very deepening conflicts with Russia that led with the cuts of oil and gas. This heavily impacted companies such as BP, it is also widely known that Great Britain and England are very close allies with the United States.



#### **Conclusion for BP**

BP has had a rough couple months more to because of the oil and trade conflicts that America has been having with Russia. Even though BP is originated and based in London, England, it is shown that it is more strongly correlated with the US currencies and stock exchanges. It is because since the USA is such a large supplier and customer, Beyond Petroleum is more solely based off of America than Great Britain and England.





#### **Canon Intro**

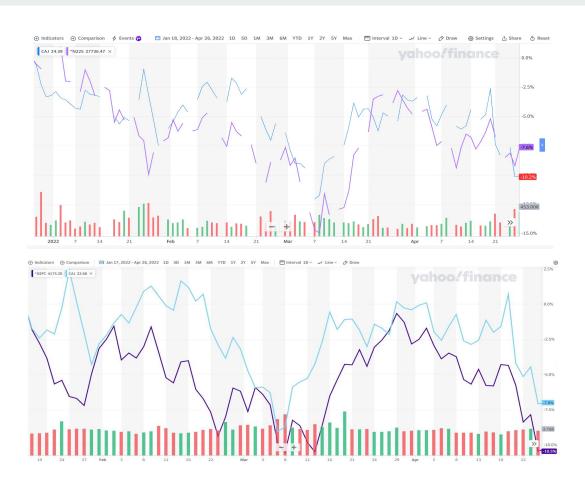
- Develop, manufacture, and sell
- Office multifunction devices (MFDs)
- Canon is a company known for their copying machines, printers, cameras, and steppers
- Headquarters is Tokyo, Japan

In the top graph there is a comparison between CAJ and N225 which is the Tokyo market where CAJ is based. The calculation of correlation coefficient being 0.56.

In the bottom graph we see the comparison between CAJ and S&P 500. The calculation of correlation coefficient here being 0.65.

Looking at both graphs, the CAJ stock overperformed both S&P 500 and N225 market.







## **CAJ Foreign Stock Comparison**

In this graph we see the comparison between JPY/USD currency exchange to the CAJ stock price. They have a negative correlation, especially during april when JPY is seen to be rising and CAJ is declining. Hence, the calculation of the coefficient correlation is -0.22.





#### **Canon Investments**

Jan 18-April 26 price percentage change- 5.42%

Ended up with- \$9,457.88, so we lost \$542.12

Cause of slight downtrade is supply-chain disruption

# Why did Canon lose profit?

Canon has been losing some profit due to the covid 19 pandemic effects. The industry is now facing some supply chain disruption, suffering from inflation, and heightened price competition. Also, due to just the macro-economic slowdown.





#### **CAJ** conclusion

Overall CAJ is a great competitor in its industry and is always looking for ways to stay afloat. Canon started off strong and was making some money and over performing some markets, but has currently had a loss due to pandemic effects. However, Canon will continue to grow due to the growth in demand for online learning and working from home.

## **CAJ** and **BP** comparison

Canon and Beyond Petroleum are the two foreign stocks that are involved in this project. Canon based off in Japan and BP in England.

Even though they trade off of different home countries, they are strongly correlated and it would partake because off strong trades between the USA. The calculation of the coefficient correlation is 0.60 which analyzes is at as a strong correlation and bond.





#### Adobe Inc. Intro

- The company was founded in 1982
- Digital publishing industry
- Translating text and images making them "come to life"
- Some of Adobe's popular products are Illustrator and Photoshop



## Adobe (ADBE)

How does it compare to SP 500?

- Adobe has underperformed the S&P 500
- A constant fluctuating trend; spiking up and down constantly



## Adobe vs. S&P 500 Comparison Graph



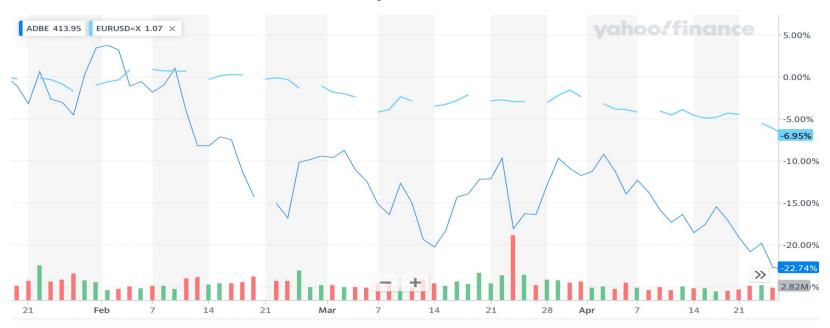


## Adobe Vs. NVDA Comparison Graph



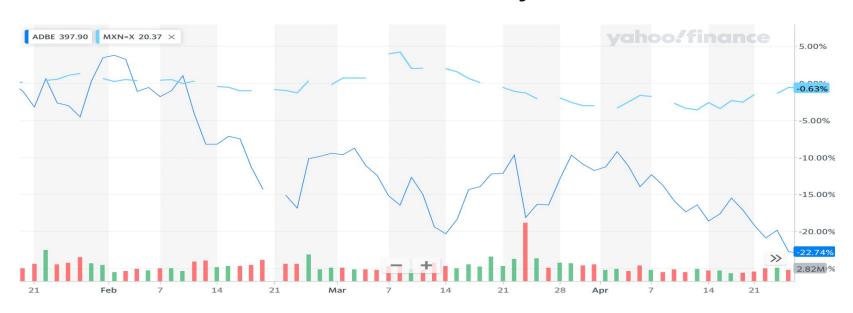


## Adobe VS. Euro Currency





## Adobe VS. Mexican Peso Currency





## Adobe against foreign exchange rates

- Adobe conducts business world wide, with different countries and with 30 + different currencies
- Foreign exchange rates have fluctuated vastly over few years for adobe and this pattern has recently continued for Adobe
- Fluctuating currency exchange rates, resulting to increasing prices on Adobe products
- Adobe's economic situation and fundamentals factor into the exchange rate



#### Correlation

- The correlation is that of a moderately positive one
- The correlation coefficient of S&P 500 and Adobe is 0.66, positive correlation
- The correlation coefficient of NVDA and Adobe is 0.56, a relatively positive correlation
- The correlation coefficient of Euro and Adobe is 0.79, clearly pretty strong positive correlation
- The correlation coefficient of Mexican Pesos and Adobe is 0.11, a weak correlation

### **Conclusions**

Overall, all four of my selected stocks experienced a net loss

A big reason is because our economy went through several conflicts and issues for the past several months and long term interest rates were ascending.