How can changes in the dynamics of stock prices in different sectors at different times be explained from an economic point of view?

Project was submitted for my 'Tail Risks and Global Economic Policy' undergraduate course (ranked top 1 for the entire course)

Preface

I see this study primarily as an opportunity to better understand the trends of the American economy in various periods. Therefore, I will construct hypotheses, analyze the dynamics of stock prices, search for information that allows me to explain what happened, and make meaningful conclusions. Meanwhile, this research is unlikely to allow me to bring anything new to the academic community, since the American economy is very attractive to researchers, and it is studied by a lot of people. At the same time, I will be able to both better understand specific details about it and strengthen my understanding of how the economy as a whole works. Accordingly, this is the purpose of my work (to study and to do reasoning). It seems that it corresponds to the philosophy of the course.

Introduction and motivation

Many economic aspects are quite subjective. Edmund S. Phelps published a book in 1990 named Seven Schools of Macroeconomic Thought. As Oxford Academic states, 'The first four schools have in common that they regard monetary mechanisms as a key part of the engine determining the level of economic activity while the last three schools all adopt essentially non-monetary perspectives.' As we can see, theoretical reasoning about the same phenomena can vary quite a lot. Hence, it is necessary to study the various points of view, the arguments of the authors, and then come up with independent conclusions for oneself. At the same time, I would like to start my research with objective phenomena (the dynamics of stock prices). By conducting a quantitative analysis, it will be possible to identify quantitative trends in the US economy, and then to try to explain them using news and macroeconomic theory.

According to Statista, 'The New York Stock Exchange (NYSE) is the largest stock exchange in the world, with an equity market capitalization of over 25 trillion U.S. dollars as of December 2023. The following three exchanges were the NASDAQ, the Euronext, and the Shanghai Stock Exchange.' So, the US economy is undoubtedly the largest in the world. In addition, I did research by country and realized that it is easiest to collect a representative sample (a sufficient number of companies that trade for a sufficient amount of time) for various sectors in the US market.

In this study I will construct reasonable (from my point of view) hypotheses about what happened to different sectors at different time intervals (individually and in comparison with each other). After that, I will identify the true trends and figure out what I was right and what I was wrong about. Furthermore, based on various sources, I will try to understand what may be the explanation of the phenomena that occurred. Finally, I will summarize the whole research (what was done and what I learnt from it).

Data

Stock prices were taken from yahoo finance. I decided to look at stock prices from the beginning of 2014 to the current date (February 16, 2024). This interval is convenient due to several reasons. Firstly, data is clearly divisible (we can look at five separate time intervals, each lasting for two years). Secondly, while we have a sufficient time horizon, we do not consider old data (making our research up to date (roughly speaking)). In general, our period can be summarized as post Great Recession. So, we have following time intervals to consider:

Start of 2014 – end of 2015: The US economy kept recovering from Great Recession, showing steady GPD and employment rates growths. Hence, generally all stocks in all sectors were performing well.

Start of 2016 – end of 2017: The US economy continued to expand. So, it will be interesting to compare dynamics of this period with the previous one. If there were some changes, I will try to figure out why this was the case.

Start of 2018 – end of 2019: Economic growth began to moderate, and markets started to be more volatile according to the S&P 500 graph. According to one of the sources, 'Trade-related tensions between the United States and China, weakness in the tech sector, concerns about slowing global growth and jitters about the Federal Reserve marching toward higher interest rates have kept investors on their toes.' Hence, it is an interesting period to explore.

Start of 2020 – end of 2021: This period is extremely important for the economy. On the one hand, the COVID-19 pandemic has seriously affected the economy. On the other hand, this time gave rise to new trends (for example, online learning and distance work), and, as a result, provided new opportunities.

Start of 2022 – today: Seems like the influence of COVID-19 is over. However, this period can be associated with uncertainty due to several reasons:

- Inflation became a major concern.
- Geopolitical situation.
- A significant advancement in AI, which has not only resulted in remarkable inventions, but also raised concerns about the safety of society.

In terms of sectors and companies, I have chosen the following ones:

- IT (Microsoft, Apple, Google, NVDA, META, INTC, Adobe, Cisco, Oracle)

- FinTech (Discover Financial Services, Global Payments Inc., Capital One Financial Corporation, Fidelity National Information Services, Inc., Fiserv, Inc., American Express Company, JPMorgan Chase & Co., Mastercard Incorporated, Visa Inc.)

- Oil and gas (Exxon Mobil Corporation, Chevron Corporation, ConocoPhillips, Shell plc - NOT US, TotalEnergies SE - NOT US, BP p.l.c. - NOT US, Equinor ASA - NOT US, Enbridge Inc. - NOT US, Schlumberger Limited - NOT US)

- Retail (Walmart, Amazon, Costco, Home Depot, Lowe's Companies, TJX Companies, CVS Health, Pfizer, Dollar General)

- Real estate (Prologis, American Tower Corporation, Simon Property Group, Public Storage, Welltower, Crown Castle, Digital Realty, Realty Income, CoStar Group)

For each sector, I selected 9 companies that traded on the market throughout the whole considered period. I collected the data (the closing price for each day), and in total got about 2550 observations for each company. Thus, it seems to me that I got a sufficient sample to analyze and, therefore, obtain representative results. It is important to note that in the case of the Oil and gas sector, I had to collect data not only within the US market, since I could not find 9 large companies there. There were no problems with other segments of the economy.

Since I want to do an aggregate analysis of the sectors, I will not dive deep into explaining what happened to individual companies.

Initial hypotheses

Let's look at the behavior of S&P 500 within the given period:

We see that S&P 500 experienced a significant rise (by around 170%) from the beginning of 2014 until today (which I believe is a magnificent result, given that in general the inflation in the US is not high). Let's see the dynamics of IMOEX:

We see that IMOEX confidently showed a significant growth (it more than doubled). However, S&P 500 outperformed it.

Based on this data and on my prior knowledge and beliefs regarding US economy, I construct the following hypotheses (before even looking at the data regarding sectors and companies):

- Given that S&P 500 mostly consists of IT sector ('Five major tech companies — Facebook, Apple, Amazon, Netflix and Google — make up 11 percent of the S&P 500 index' – at least this was true by the end of 2018), I expect IT to grow at the fastest average rates during the whole period. At the same time, IT sector should be the most volatile at least starting from 2018, as we see an increase in the overall volatility from 2018.

- Retail should be steadily growing, but at the most insignificant rates. In other words, the least average return, but the least risk as well. The reason is that inflation in the US is generally not high. Hence, profits of the retail companies should not grow enormously. Therefore, traders are not likely to be attracted by retail. However, this is a defensive sector suitable for long-term investors, resulting in a low volatility.

- Oil and gas are generally considered as a cyclical sector. Therefore, we should see cycles more often than in all other sectors. Due to the increase in uncertainty, I expect Oil and gas to have the most total number of issues out of all considered segments from 2018 and until now.

- Real estate should have shocked people in 2008. Even though the American market is thinking fast enough, I believe that confidence in real estate did not return immediately. Therefore, from 2014 to 2018, I expect an accelerating upward trend (that is, the more time has passed since 2008, the more hope people have had).

- I assume FinTech to be the second fastest growing and second most volatile sector (after IT). It also seems to me that those two sectors are generally similar, as they are engaged in the introduction of innovations and modern technologies. Consequently, I think that FinTech correlates more strongly with IT (and, as a result, with the index) than other sectors.

Since I am not an expert, my hypotheses are likely to contain mistakes (both in terms of facts and reasoning). In fact, I am willing to be mistaken frequently, since it will provide me with opportunities to learn and discover more. All in all, we have five big hypotheses (and each of them can be decomposed), and the next step is to test them using the data.

Quantitative analysis

Since this part is not a priority within the framework of the study, I will try to focus less on its details. In this paragraph, I will write the main conclusions that were drawn based on the data, as well as how I came to them.

Firstly, I wanted to see the volatility between sectors (throughout the whole period). Since different companies trade at different prices, it is incorrect to compare the variances of the stock prices. Therefore, I chose an index of dispersion (variance over mean) as a metric. There are nine companies in each segment, so I decided that looking at the median value among companies at each one is a good representation of the volatility. It turned out that the most volatile sector was IT (median index of dispersion is 39.74), while the least one was Oil and gas (2.54). I depicted the median, as well as the minimum and maximum volatility by sector in the form of a table:

Sector	Median	Min	Max
FinTech	12.01	6.67	61.66
IT	39.74	2.72	159.97
Retail	29.22	1.26	84.26
Oil and gas	2.54	0.75	10.46
Real Estate	10.95	1.51	23.36

Retail turned out to be more volatile than I expected. On the other hand, FinTech showed a relatively small volatility to what I expected (my initial guess was that FinTech was not much less volatile than IT, while the actual difference is three times). Finally, the maximal volatility within Oil is less than the median within all other sectors.
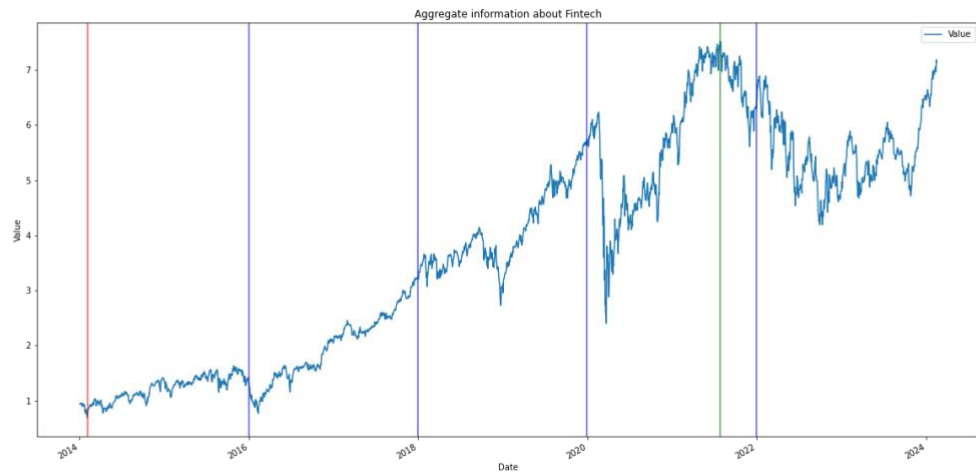
Next, I wanted to see the average daily rates of growth among different sectors. Again, I constructed a table (units are measured in percentage):

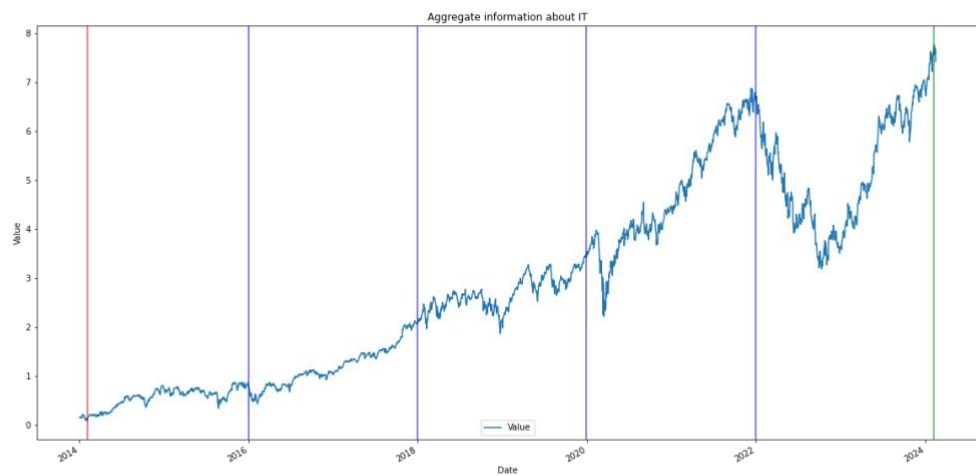| Sector	Median	Min	Max
FinTech	0.058	0.024	0.082
IT	0.1	0.042	0.25
Retail	0.058	0.008	0.11
Oil and gas	0.017	0.0058	0.047
Real Estate	0.042	0.028	0.079

The IT sector turned out to be the most attractive in terms of profitability (the median average daily growth is 0.1 percent). The Oil and gas sector was a strong outsider, showing a median growth of less than 0.02 percent per day (the other segments were at least twice as profitable). According to portfolio theory, investments in FinTech turned out to be more attractive compared to Retail (the same profitability but fewer risks).

Another step is to make a comparison of the sectors with each other. Assuming that all the companies are of the same importance, we can figure out the general dynamics of sectors by normalizing the stock prices of individual companies and adding them all up throughout each trading day. Thus, we can plot these values to identify the key trends. If the value at a particular time point is 0 – it means that all the companies experienced their local minimum. Meanwhile, if the metric is equal to 9 – all the companies reached their local maximum at this day (however, this point is almost certainly unattainable). The resulting graphs look like this (the blue lines separate different time intervals, the red line shows the local minimum of the sector dynamics, while the green line shows the local maximum):
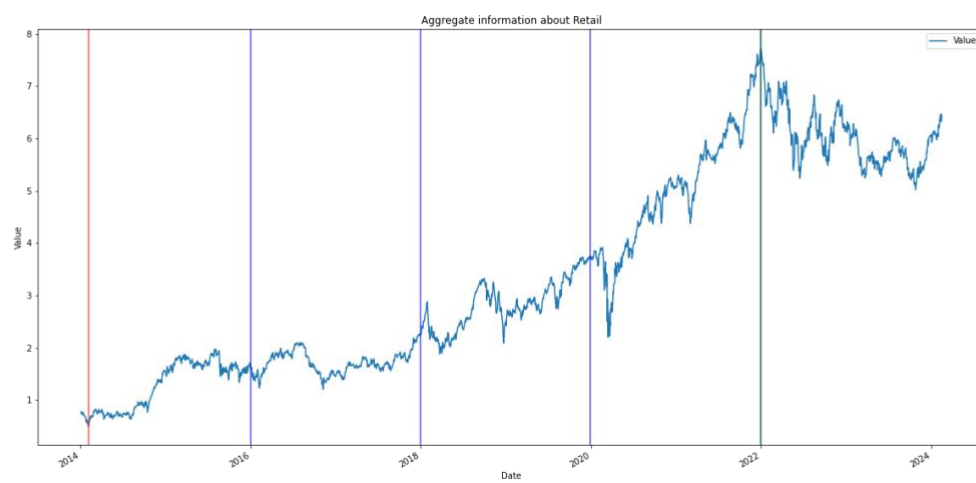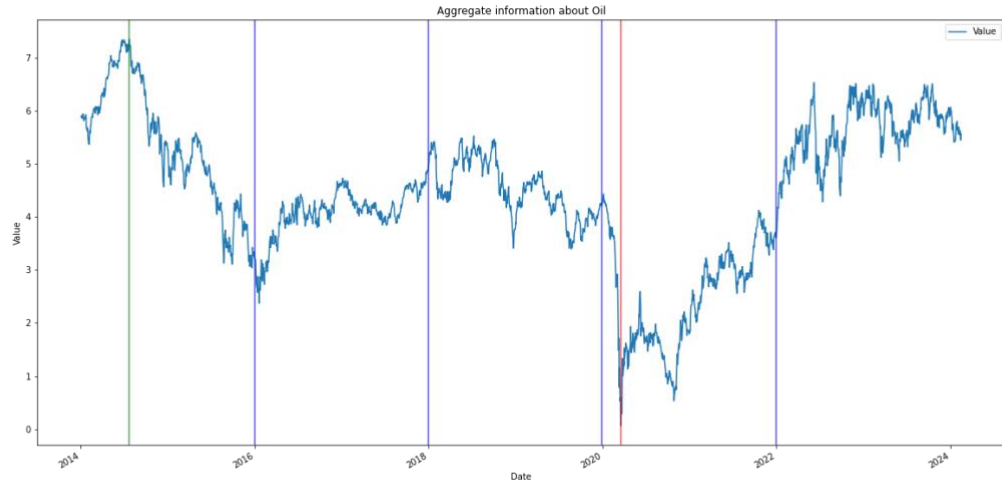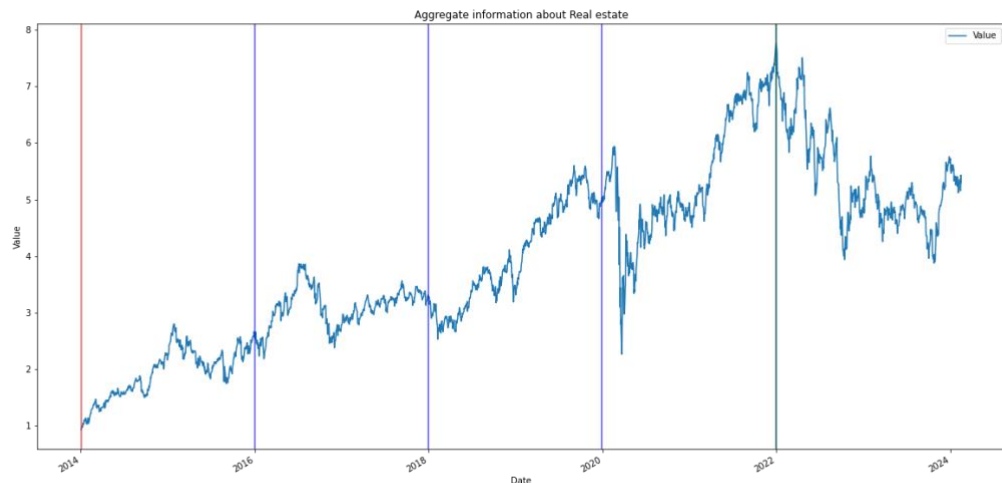
FinTech:

Aggregate information about Fintech

IT:

Aggregate information about IT

Retail:

Aggregate information about Retail

Oil and gas:

Aggregate information about Oil

Real estate:

Aggregate information about Real estate

As we see, all the sectors except for Gas and oil started at their local minimum. Gas and oil, on the other hand, turned out to be the most problematic. It reached its peak slightly before 2015. Before 2020, there was a moderate negative trend, followed by a sharp decline. Fortunately, starting from approximately 2021, the dynamics are positive. Seems like soon companies will update their local maximum.

While Gas and oil is a clear outsider, the IT sector turned out to be the strongest. It is the only sector that is currently on its local (and I believe global) peaks.

Regarding other sectors, the beginning of 2022 is an important period, since all segments (except for Gas and oil) started to fall, and three out of four of them still have not recovered. Geopolitics clearly might be an explanation. However, I will not discuss it, and will try to figure out, whether there were other reasons.

While Oil and gas is the only exception to systematic decrease in stock prices at the beginning of 2022, the beginning of 2020 (start of Covid-19) injured all the companies. The final interesting observation is a strong correlation between the dynamics of all sectors except for Gas and oil,

which follows his own path. That is why in the following sections I will try to understand why this sector is so unique in terms of behavior of stocks.

Finally, I want to provide a short analysis of each sector. For the convenience of analysis, I normalized the stock prices of companies (transformed them to a range from 0 to 1). Having looked at each company within each sector, I can make the following conclusions:

FinTech: Six out of nine companies started at their bottoms. In other cases, local minima were reached during the start of COVID-19. 2014-2020 period is associated with steady growth, while during 2020-2024 there was an increased volatility.

IT: All companies were at their local bottom (or extremely close to it) at the beginning of 2014. By 2022, seven out of nine companies were growing at an increasing rate. After that, most of them seriously declined. Nevertheless, companies have mostly managed to start growing again, updating local (possibly historical) highs. The other two companies experienced increased volatility and grew at less impressive rates.

Retail: On average, the growth of companies until 2020 was moderate. After the drawdown related to COVID-19, companies began to grow at an accelerated rate. Hence, it will be interesting to find an explanation for this phenomenon in the sources.

Gas and oil: All the companies started relatively good. However, in 2020-2021 all of them dropped to their local minima. Long-term investments in those companies were an inferior strategy compared to risk-free treasuries. At the same time, it was a good idea to purchase them at their bottoms. Even though companies were going through hard times, the sector does not correlate with others (as can be seen from the aggregated graphs). Therefore, it probably makes sense to keep them to diversify the portfolio at least in a small amount, and the coronavirus period was an excellent entry point.

Real estate: Seven out of nine companies started at their bottoms. Three companies were fluctuating through the whole period. Four companies experienced growth at an increasing rate until 2022, after which they fell (three of them have not yet recovered). The last two companies grew at a more moderate and at the same time volatile pace and did not recover after the fall. Almost all companies peaked in late 2021 or early 2022.

Questions I want to answer as a result of data analysis

Given hypotheses we tested, as well as information I got from data analysis, I want to find an answer to these questions:

- Why Oil and gas sector was problematic and in general did not correlate with other sectors? (Q. 1)
- Which factors can explain the volatility of the Retail sector, and how companies benefitted from COVID-19? (Q. 2)
- Was the drop in 2022 caused merely by geopolitics, or there is another explanation? (Q. 3)
- Why FinTech (although showing impressive results) was not even close to IT in terms of both expected returns and volatility? (Q. 4)

Possible explanation of unusual phenomena

I want to remind a reader once again that this is not a scientific work, but my little research. My goal is to find answers to questions to which the only correct answer may not exist, as well as to learn new things. Therefore, here I will refer to open sources on the Internet. While I will try to choose good sources, some information may be inaccurate or even mistaken. At the same time, it is my responsibility to process the information correctly and draw the right conclusions.

Q. 3:

First, I want to answer a question about the reasons for the market downturn in 2022. According to CNBC, Wall Street wrapped up its worst year since 2008. It can be clearly observed by looking at their graph (all three major indices experienced a major drop).

Major U.S. indexes post their worst year since 2008

— Dow Jones — S&P 500 — Nasdaq
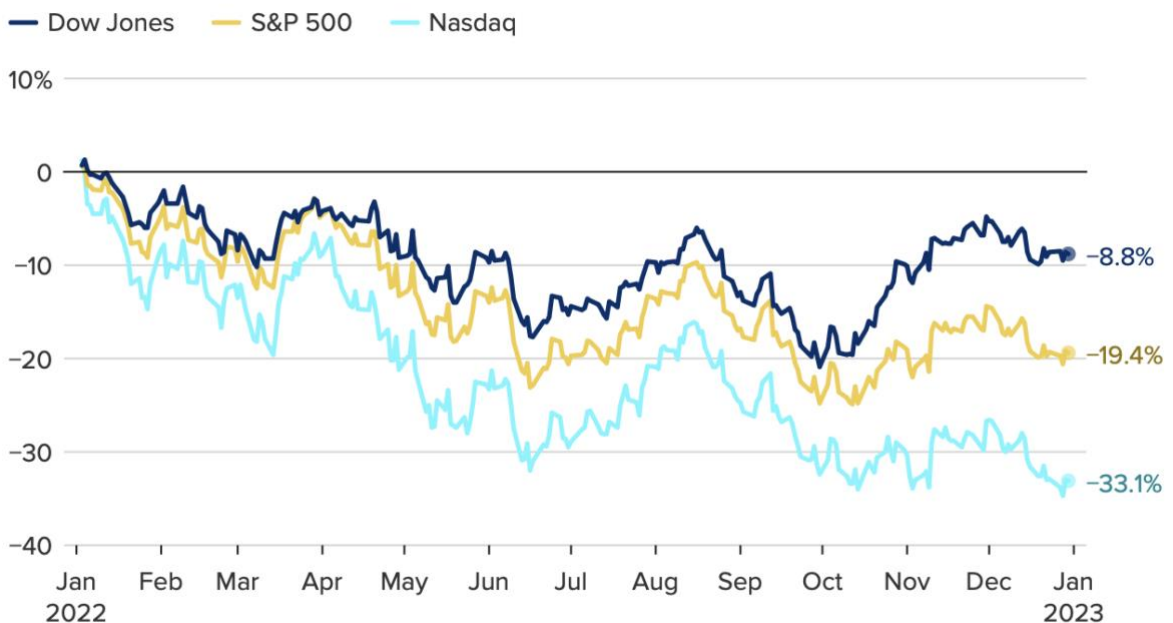
Note: As of market close Dec. 30, 2022
Chart: Gabriel Cortes / CNBC
Source: FactSet

According to Wikipedia, geopolitics is merely an escalation of the market issues. Wikipedia also states that the reason for the recession was the consideration of the consequences of the coronavirus on long-term economic development, which moderated actions on the part of investors. I do not find this argument plausible. According to two more sources, the reason was the monetary policy. The fact is that the period after a short bear market due to the coronavirus was a good way to make easy money. During this time, inflation has increased significantly, and the Fed has begun to fight it hard by raising the key rate. Accordingly, the fall in stock prices is a market reaction. This theory has a place to be. On the one hand, there was (and still is) high inflation in the United States, which we discussed during our course. On the other hand, the graphs we have built show that there really was easy money, as stocks rose strongly after the effects of the COVID-19 were mitigated. Therefore, high inflation could well appear. Hence, geopolitics is a reason for the decline in the market (however, it might add fuel to the fire). One of the sources states: 'The most-watched measure of inflation, the Consumer Price Index, peaked at 9.1% for the 12 months ending in June 2022, but has since dropped to 3.1% for the 12 months ending in January 2024. The Fed raised the fed funds target rate 11 times, from near 0% in early 2022 to a range of 5.25% to 5.50% in July 2023.' We know that the situation with a high

inflation and a high key rate is not over, and we are looking forward to seeing what happens next.

Q. 2:

The next question is about the Retail sector. According to Deloitte, 'Since 2010, volatility in the retail industry has increased 250 percent, resulting in $200 billion more of retail sales being "traded" among competitors.' The fact is that competition in the market is growing, and small and medium-sized companies are gradually taking market shares from large corporations. Therefore, in the current competitive environment, companies need to focus on innovation, attracting and retaining customers. While this is undoubtedly good for customers, it causes volatility. This argument seems valid to me. Thus, my hypothesis that Retail is a stable and defensive industry is rejected. CNBC provides explanations on how the coronavirus affected stocks of Retail sector. Firstly, the pandemic accelerated the e-commerce trends:
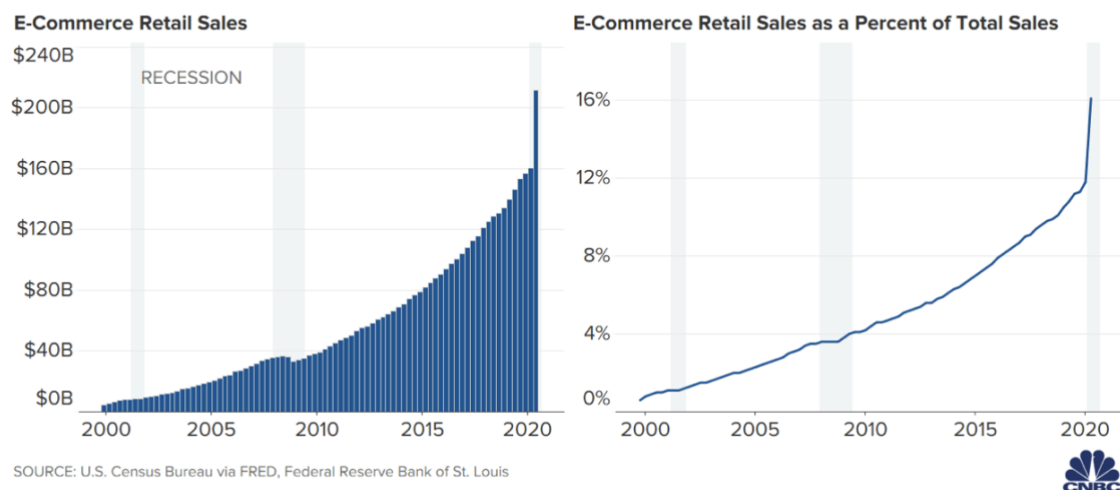
In combination with a 'Touch-free shopping' trend, this is obviously good for increasing long-term profits, as it provides both businesses and customers with more opportunities (which we already experience).

Other arguments are related to the fact that, firstly, large companies were in a winning position, as stores with the concept 'everything stores' (a consumer can purchase many different things at once) were gaining popularity. Secondly, as the source states, 'As the rich splurge online, and the poor flock to budget-friendly shops, it's players in the middle such as department stores and specialty retailers that are struggling the most.'

It seems that this means that large companies can increase their market shares, which contradicts the earlier arguments. I think the Deloitte study happened before the coronavirus pandemic, so the paradigm could have changed. Nevertheless, the explanation of the increased volatility still makes sense, since even the big companies have to compete seriously with each other. At the same time, the transition to e-commerce, in my opinion, is the main argument about the benefits of COVID-19 for companies in the Retail sector.

Q. 4:

My next question was about why the IT sector is so far ahead of FinTech. I have not found a direct answer to this question, so I will try to draw conclusions by analyzing FinTech sector alone.

According to 'eTrade for all', the main reason FinTech companies grow fast is an increased demand for those types of services.

FIGURE 3 | Rate of customer growth 2020-2021 and 2021-2022 – by business model
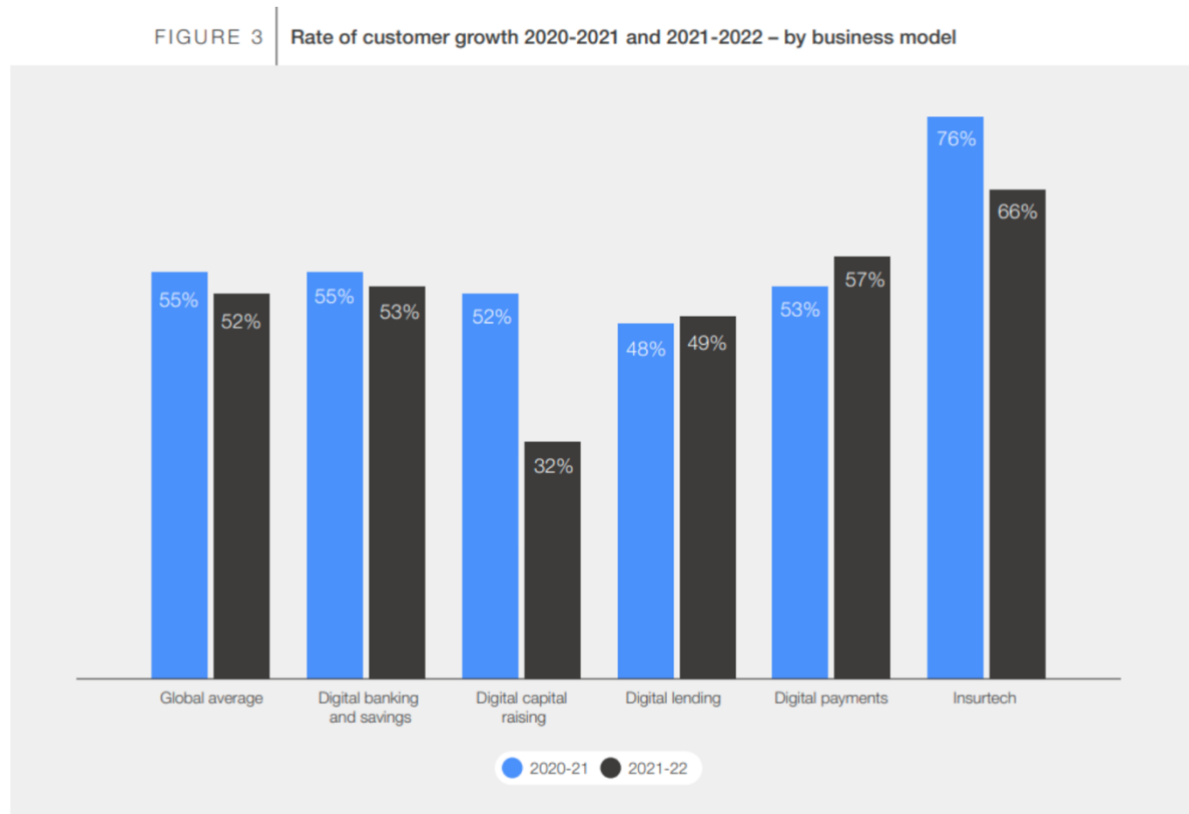
Customer demand is a key driver of fintech growth across business verticals. Image: The Future of Global Fintech report, 2024

Website states that 'Digital banking and financial services are proving transformative, both in developed economies and also in regions where billions of people have previously struggled to access banking services.' Even though the authors of the article did not have a goal to find problems in the sector, I found two ideas that need to be kept in mind. Firstly, this demand generates a large supply among small and medium-sized businesses, which makes the environment competitive. Secondly, the risks of fraud and scam generate regulation of the FinTech sector. While this is good for consumers, it can cause problems for businesses.
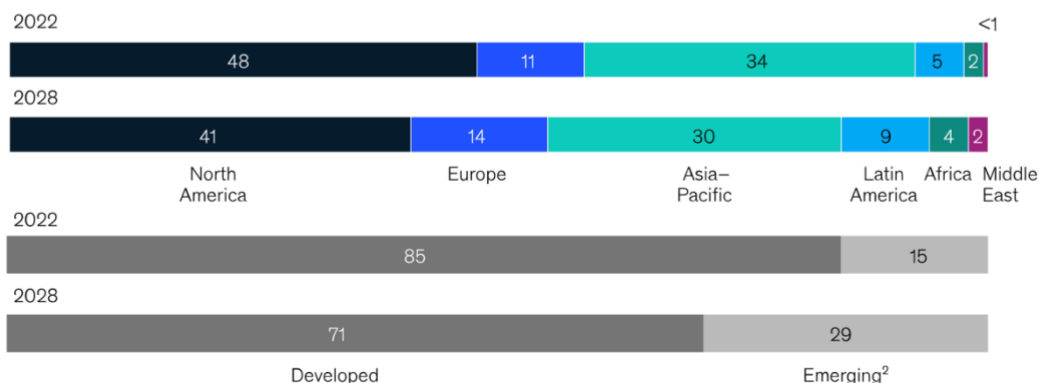
The McKinsey study offers other arguments. According to the research, 'In 2022, a market correction triggered a slowdown in this explosive growth momentum. The impact continues to be felt today. Funding and deal activity have declined across the board, and there are fewer IPOs and SPAC (special purpose acquisition company) listings, as well as a decline in new unicorn creation. The macro environment also remains challenging and uncertain. In such a scenario, fintechs are entering a new era of value creation. The last era was all about firms being experimental—taking risks and pursuing growth at all costs. In the new era, a challenged funding environment means fintechs can no longer afford to sprint. To remain competitive, they must run at a slower and steadier pace.'

Fintech net revenues by region,[1] $ billion

2022–28, CAGR, %

North America

130–190
70–100
(+12)

2022 | 2028

Europe

40–70
15–25
(+18)

2022 | 2028

Asia–Pacific

110–130
55–65
(+12)

2022 | 2028

Global

325–463
150–205
(+15)

2022 | 2028

Latin America

(+27)
25–45
6–10

2022 | 2028

Africa

(+30)
15–20
3–4

2022 | 2028

Middle East

(+35)
5–8
<1

2022 | 2028

Global fintech net revenue share by region, level of development, %

2022					<1
48	11	34	5	2	

2028					
41	14	30	9	4	2

North America | Europe | Asia–Pacific | Latin America | Africa | Middle East

2022	
85	15

2028	
71	29

Developed | Emerging[2]

According to the graphs and the text of the study, the sector is in great demand and will continue to grow at a high pace. Meanwhile, due to the growing uncertainty, we cannot observe extremely high growth rates.

I have studied several sources that show why tech companies (classic IT) are growing faster than others. One of them states the following reasons: Scalable Business Model, Low Overhead Costs, Flexibility, Global Presence, Easy Access to Capital and Funding. While this is true, most of these arguments are applicable to FinTech as well (except for global presence and such huge amounts of scalability, I guess). Hence, I do not find them plausible. Therefore, I will offer my own arguments based, among other things, on the shortcomings of FinTech that I have found:

- Large IT companies (such as Apple, NVIDIA, Microsoft, and so on) have an impeccable and well-deserved long-term reputation. Therefore, these businesses continuously attract a huge number of investors, and have strong support in case of crises. FinTech companies are often newer and less well-known.
- IT companies are more international businesses than FinTech. So, this provides those companies with additional liquidity.
- Charlie Munger said that it is worth investing only in companies that even a fool can manage. Warren Buffett said that it is worth investing only in companies which business models are fully understood by an investor. The business of the largest IT giants should

be more understandable and inspire greater confidence among investors, as more people use their products (including around the world).
- It is more difficult to compete with the largest companies in the IT sector than in the FinTech sector. For example, it is hard to imagine a competitor to Apple, Facebook, or NVIDIA appearing out of nowhere.
- There are probably less regulations compared to FinTech.

Let me remind a reader that we are comparing the largest companies from these sectors (which have been trading since at least 2014). I think my arguments can at least partially explain why IT giants are growing faster than FinTech giants. At the same time, I admit the possible inaccuracy and incompleteness of my reasoning.

Q. 1:

Unfortunately, I could not find sources that explain why Oil and gas companies are not correlated with other segments in terms of stock prices. Most likely, the fact is that the factors that affect oil companies often do not coincide with the factors that affect other companies. For example, politics (which I do not plan to focus on) plays a big role in the oil business.

From the point of view of stocks, it seems that different events took place in different periods, and many of them had a negative impact on the prices of the Oil and gas sector in one way or another. According to the New York Times, 'Fossil fuel companies are facing increasing competition from clean energy.' Therefore, the demand for fossil fuel is either decreasing or becoming more uncertain. However, 'there were other, more direct, hits to their profits. In the early 2010s, the shale revolution allowed companies to extract oil and gas much more cheaply, sharply reducing prices and, with them, oil profits. Then, just as the industry was stabilizing, the pandemic struck, shattering demand for oil as billions of people across the world locked themselves inside for months.' Currently, according to NASDAQ, 'There is a supply glut in global oil markets'. Moreover, 'A slowing global economy is among the major risks for oil prices, as energy demand is interlinked with GDP growth.' Finally, high interest rates also moderate the increase in oil stocks. At the same time, JPMorgan analysts do not deny that at the stages of falling, stocks of oil companies can be added to the portfolio - the only question is timing.

Thus, Oil and gas companies have faced many adverse events over at least the last ten years, which made it difficult for them to grow. The events include both economic and political news. From this point of view, this sector is the most difficult to analyze. At the same time, it is questionable – whether this analysis is worth it, or not.

Conclusion

I want to do a summary in the format of why this work is a valuable mini-study for me. Recent developments in the field of Economics are quite difficult to study due to the huge amount of unstructured information in open sources. Moreover, these sources often contradict each other. Therefore, based on objective data (stock dynamics), I wanted to find out the topics and questions that interest me. After that, I wanted to find out the answers to them. In my opinion, I have successfully completed the task. During the research, I was not only able to test my hypotheses, but also learned a lot of new things on the go and studied a large number of sources. In my opinion, I improved my knowledge in Economics. Unfortunately, I was limited only to the American markets (due to problems in finding data from other countries). At the same time, this market is filled with a lot of information and events, so this experience can definitely be called valuable.

References

https://www.statista.com/statistics/270126/largest-stock-exchange-operators-by-market-capitalization-of-listed-companies/#:~:text=The%20New%20York%20Stock%20Exchange,What%20is%20a%20stock%20exchange%3F – about biggest stock exchanges

https://academic.oup.com/book/2854 - about seven schools of Macroeconomic thought

https://finance.yahoo.com – source of the data

https://www.reuters.com/article/idUSKBN1OD2H4/ - possible explanations of volatility in 2018

https://www.pbs.org/newshour/economy/making-sense/6-factors-that-fueled-the-stock-market-dive-in-2018 - possible explanations of volatility in 2018

https://www.cnbc.com/2018/04/11/stocks-havent-seen-this-much-volatility-since-the-financial-crisis.html - possible explanations of volatility in 2018

https://ru.investing.com/indices/us-spx-500 - S&P 500 graph

https://ru.investing.com/indices/mcx - IMOEX graph

https://www.slickcharts.com/sp500 - weights of different stocks in S&P 500

https://www.cnbc.com/2022/12/29/stock-market-futures-open-to-close-news.html - how the indices were affected in 2022

https://en.wikipedia.org/wiki/2022_stock_market_decline - geopolitics is merely an escalation, not the cause

https://www.washingtonpost.com/business/interactive/2022/stock-market-sp500-down-this-year/ - why the bear market in 2022 emerged

https://www.cnbc.com/2020/09/29/how-coronavirus-pandemic-forever-altered-retail.html - effects of COVID-19 on retail

https://www.usbank.com/investing/financial-perspectives/market-news/is-a-market-correction-coming.html#:~:text=Much%20of%20the%20stock%20market%27s,to%20a%20sudden%20inflationary%20surge. - why the bear market in 2022 emerged

https://www2.deloitte.com/us/en/pages/consumer-business/articles/beyond-trends-retail-volatility-index.html - volatility in Retail

https://deloitte.wsj.com/cmo/competing-in-the-highly-volatile-retail-market-1478059350 - volatility in Retail

https://etradeforall.org/news/fintech-is-growing-fast-here-are-3-reasons-why-thats-a-good-thing/ - growth in FinTech

https://www.mckinsey.com/industries/financial-services/our-insights/fintechs-a-new-paradigm-of-growth - changes in FinTech growth strategies

https://hydnews.net/2023/08/why-do-tech-companies-grow-faster-than-other-companies/ - why tech companies grow faster

https://www.nytimes.com/2024/02/22/climate/oil-companies-trends-stocks.html - why Oil and gas stocks were not growing

https://www.nasdaq.com/articles/will-oil-stocks-go-up-in-2024-warren-buffett-doesnt-seem-to-think-so. – why Oil stocks are currently going down