Stock Analysis on Axa S.A.(AXAHY), Citigroup Inc.(C), Mastercard Incorporated. (MA)

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Abstract. Since the pandemic, all sectors have been experiencing tremendous volatility including the financial services sector, with many companies losing market capitalization and even facing the risk of bankruptcy. This report analyzes three stocks selected from three representative sectors and concludes which companies are the most valuable to invest in at this time. The three companies analyzed in this report are Axa S.A. (AXAHY)€, Citigroup (C), and Mastercard (MA). The risk and return potential, profitability, investment turnover, and return on equity of these three companies are examined to compare the most optimal investment choices during the pandemic. The report analyzes that compared to other companies, these three companies do not have insider trading techniques, which means that they provide investors with a better and fairer investment environment by not playing the information gap. When a company's investment risk is high, the potential return is higher; when the company's profitability is high, the potential profit for investors is higher; when the company's capital turnover is high, the company's efficiency is higher and thus the potential profit is likely to be higher; when the company's stock return is high, the profit shared by the company with investors is greater.

Keywords: Stocks; Profitability; Risk Factor; Market Ratio.

1. Introduction

Year 2022 has marked a lot of changes across industries as industries still struggle to recover after the pandemic. As rules and regulations across world relaxes, we see the workings of industries change. All the three industries if insurance, investment banking and financial services had witnessed a setback during the pandemic as income of people reduced substantially and which led to a hit to all these three industries. But 2021-22 marks a prominent return as figures start to grow up and entire industry marks a fair return.

To study the prominent three industries of insurance, investment banking and financial services, we have considered 3 companies each belonging from one of the mentioned industries and their figures talking about the industry in which they belong, as a whole.

2. Comparison of data

On comparison with the data of the given companies it can be said that the stock prices of Property and Casualty Insurance swings more wildly, that is the industry stock prices had been more volatile in comparison to financial services and Investment banking industries. The pandemic had led to the downfall of Automobile industry for a span of time and this had directly hit the P&C Insurance market. Even the lockdown had ceased workings of a lot of firms which further hit the P&C Insurance, making its stock more volatile. This could be understood from the beta, as an increased beta means more stock volatility [1].

We know that capital intensive industries have a much higher debt ratio and this could be one of the reasons for Financial Services Industry having a much higher debt ratio than the other two. Financial Services are a lot dependent on capital availability and thus this industry uses a heavy leverage in terms of total debt to total assets. Even the pandemic had created a pressure on the Financial services with people using up their savings and taking loan for medical and other purposes like unemployment, etc.

The current ratio of Financial Services industry is better followed by that of Insurance and then Investment banking. Both Financial Services and Insurance has a fair amount of Current assets in compared to its Current Liabilities. Investment Banking had witnessed a greater current liability in comparison to its current asset as its strong, consistent cash flow had been hit by the pandemic and thus its ability to pay short term debts had reduced [2]

Profit margin of the Financial Services industry has shown the maximum increment from pre-pandemic period whereas all the three industries are showing signs of recovery with the Investment Banking following in second. Financial services encompass a variety of services and it is almost inevitable. Thus, this industry had been fast in recovering its profitability. Property and Casualty Insurance is showing lower profitability as lockdown had lowered transportation as a whole considerably, hence it is taking longer to get back to normal.

Usually, the Insurance Industry maintain a profitability margin of greater than 10%.

The Asset Turnover ratio of Insurance Industry is high showing that the industry's assets are efficient to generate revenues more in comparison to the other. Financial services industry is more capital based and does not have asset base much, hence it shows a lesser asset turnover ratio.

Debt to Equity ratio talks about the industry's financial leverage [3]and as per the data Investment Banking Industry shows a greater debt in compared to Insurance Industry.

Usually, a Return on Asset of 5% or more is considered good and it signifies the efficiency of the industry in generating profits using its assets. Both Insurance and investment banking has poor ROA as compared to Financial Services industries who have maintained a fairly good ROA.

Even for ROE, i.e. Return on equity, a figure of more than 15% is considered good and Financial Services industry has shown a good ROE average and as a reason had attracted good investments over a period of time [4].

Industry is basically impacted by a group of firms and not any one in particular and the business with a larger market share will have a greater impact on the industry as a whole [5].

3. Comparison on subsectors

The large data prediction model for the user's electricity consumption is implemented in the Clementine software.

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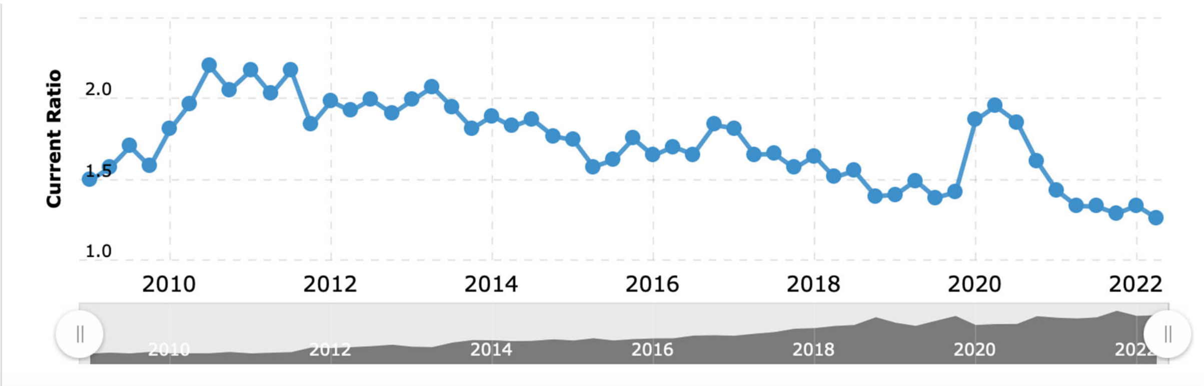
4. Comparisons between pre and post Covid-19

4.1 Comparison on risk factor

Covid-19 pandemic is recognized as the most concerned international event in 2020 and it is included as a unpredictable factor that harmed the stock market rapidly and stupendously. As a chart that was analyzed by Bank of St. Louis. All of the stock sectors were influenced by the pandemic. Basically, the severe drop in February and June are making the whole stock into an unprecedented predicament. One of the data that is valuable for investors is the current ratio.

Current ratio is indicating the ability of firm to overcome the financial obligation. Take Mastercard Incorporated as a stock market's example, its current ratio that was recorded by macrotrends showed an interesting reflection. The statistics from macrotrends showed an obvious drop of current ratio from June 2020 to the end of 2021. Compared to other years in the graph, the Covid-19 current ratio change is the most obvious and severe one in the most recent decade. The current ratio increased almost 1.0 in three months, which is equal to the different between 2012's current ratio and 2018's current ratio.



Source: MA. Adapted from "micretrends.net" by G. A. Black, 2006, *Strong Online*. Retrieved September 16, 2022, from https://www.macrotrends.net/stocks/charts/MA/mastercard/current-ratio.

Fig. 1 Mastercard Current Ratio 2010-2022

The change of current ratio from 1.95 to 1.29 is reflecting the lack of strategies and abilities of Mastercard to afford the financial crisis that caused by pandemic [6]. Since the calculation of current ratio is composed by the rate between the assets and liabilities. Nevertheless 2021's current ratio for this firm is still decent, the 2020's current is indicating the company has two times assets to cover their debts. For company itself, pandemic is increasing a firm's vulnerability to encounter larger crisis. For investors, a large gap between two years' current ratio change cause them to concern the company's volatility might be a important risk. In that case, special events like pandemic will eventually influence the decision from investors and firm's returns.

4.2 Comparison on profitability

The risk factor has shown a trace of descending implication toward the stock market based on the investor's preference and firm's database. At the same time, several firms' returns and revenues data are also declining compared to their performance during previous years. An article "COVID 19 and Bank Profitability in Low Income Countries: The case of Uganda" illustrated the obvious drop of profitability that occurred in Uganda which is recognized as a low-income country [7].

Table 1. Comparison of power load forecasting of 403 line

Year	Number of Banks	Total Assets (UGX Trillions)	ROA (%)	ROE (%)	NPL Ratio (%)
1999	20	1.352	1.02	24.5	26
2005	15	3.689	3.4	28.6	2.3
2018	24	28.1	2.5	14.4	3.4
2019	26	32.8	2.5	13.8	4.9
2020	25	38.3	1.8	10.3	5.3

Data source: Katusiime, L. (2021).

As we are able to perceive from the chart, Uganda has a slow but stable growth trend during 2005 to 2020 because it has opened 10 more bank during a decade. Uganda has a comparatively plain increase in their assets and pandemic didn't affect the reserved assets. However, the country has shown a decrease in both of ROA and ROE. While their total assets are growing in three consecutive years, a rapid drop in ROA ratio is implying the company is not generating the revenue from assets as it could with a normal pace.

5. Discussion

The financial services industry has experienced high levels of volatility since the onset of the covid 19 pandemic. As a result, most companies in the financial industry are losing their large market capitalization while others are gaining the same.

5.1 Overall Industry

In these three Industry, the insurance industry provides a higher potential to survive in the future because it has the highest momentum, dividend yield, turnover ratio, and Beta value. However, each investor can make differing investment options from another depending on individual needs and preferences.

5.2 Stock Analysis

5.2.1 comparison of risk factors

In terms of Stock Analysis, Axa S. A. is an insurance company, Citigroup Inc., an investment bank, and MasterCard Incorporated (MA), a financial services company. All three companies strived to survive during COVID- on the 19 onsets, giving potential investors the worry about which industry to invest stocks in. The analysis below is helpful for potential investors.

Concerning the risk of investment with regard to return potential (Beta), Axa S. A has the highest Beta at 1.56, followed by MasterCard Incorporated (MA) at 1.03, and then Citigroup Inc. at 0.62. A Higher Beta value above 1 means that the company's stock is more volatile than the market. Higher volatility translates to higher risk and higher return potential. Axa S. A has the highest beta stock, meaning it is riskier but provides a higher return potential.

5.2.2 comparison of Profitability

On Profitability, MasterCard Incorporated (MA) is more profitable than the other companies because its profit margin stands at 46.48%, Axa S. A. at 18.9%, and Citigroup Inc. at 5.97%. The higher the profit margin, the higher the potential profits investors are likely to earn. MasterCard Inc. is highly profitable because it manages its sales costs well and provides its goods and services at higher prices than the production cost. According to Asmaul Husna, process automation helped MasterCard Inc. to increase its net income by maximizing sustainable profits by reducing operational expenses and increasing its net income [8].

All three companies have no insider buying and selling, meaning that the internal staff is not allowed to buy or sell securities among themselves. Insider buying and selling is an unfair practice because it puts the general public at a great disadvantage regarding holding stock because they lack equal access to information compared to insiders, hence causing inequality. Therefore, investing in any of the three companies is fair because they all have no insider buying and selling.

Asset turnover is another important factor that investors need to know. Asset turnover indicates the efficiency of an industry or company with regard to its ability to generate revenue from its existing assets [9]. A higher asset turnover value indicates higher efficiency, meaning that the company is able to generate more revenue from its existing assets. Axa S.A. has the highest asset turnover ratio of 12.00%, meaning that it is more efficient to invest in compared to the other two companies, whereby Citigroup Inc. stands at 3% and MasterCard Inc. at 0.57%.

On investor returns, MasterCard Incorporated (MA) has the highest returns on equity of 142.50%, followed by Axa. S.A. at 9.92%, and Citigroup Inc. at 7.84%. Return on equity (ROE) incentivizes potential investors to commit to the companies' investment portfolios because they feel as though they are being sufficiently compensated for the risk inherent in them [10]. Higher ROE means that the investors should share more profits due to higher returns on investment by the company; hence investing in companies with higher ROE is wise because it provides more profits to stockholders.

The momentum of an industry is important because it shows the company's future direction regarding profitability and returns on investment. Axa S.A. shows a higher momentum of 2.62 compared to Citigroup, which is on a decreasing momentum, making it riskier to invest in the latter company. In addition, Axa S.A. has a higher dividend yield of 5.92%, compared to Citigroup Inc, which is at 3.93%, and MasterCard at 1.58%S.

5.2.3 Comparison of Market Ratio

The price-earnings ratio of the three companies stands at 6.517 for Axa and 5.9 for Citigroup Inc. A higher price-earnings ratio is an indication of positive future performance. In addition, the Price/Earnings to Growth ratio is 25.065 for Axa, 1.26 for Citigroup Inc., and 1.58 for MA. It shows that Axa, the insurance company has a higher potential for higher future growth ad performance compared to Citigroup and MA.

6. Conclusions

This research paper shows a stock analysis of three industries; Axa S. A. (insurance company), Citigroup Inc. (investment bank), and MasterCard Incorporated (MA) (financial services company), to help investors make informed decisions on which industry to invest in, during the COVID-19 pandemic. The results show that the insurance industry has a higher potential to survive in the future because it has the highest momentum (2.62), highest dividend yield (5.92%, compared to Citigroup Inc.'s 3.93%, and MasterCard's1.58%.), highest turnover ratio of 12.00% (compared with Citigroup Inc.'s 3% and MasterCard Inc.'s 0.57%.), and the highest Beta value of 1.56 (compared with MA's 1.03, and Citigroup Inc.'s 0.62). Having the highest momentum means that the industry will be highly profitable, giving the shareholders a higher dividend yield. A high turnover ratio indicates that the industry is more efficient in revenue generation, and the higher Beta value indicates that the industry's security price is more volatile in the market compared to the other investment options available. However, each investor can make differing investment options from another depending on individual needs and preferences. For instance, MasterCard Incorporated (MA) is more profitable than the other companies because its profit margin stands at 46.48%, whereas Axa S. A. stands at 18.9%, and Citigroup Inc. at 5.97%. This research paper, therefore, implies that the insurance industry is the most viable investment option during the COVID- 19 pandemic because it provides the highest shareholder returns compared with investment banks and financial services industries.

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