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Written and researched by James Xu

$PYPL: A Fundamental, Quantitative, Technical, and Sentimental Analysis of PayPal Holdings Inc.'s Current Stock Valuation

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Abstract

Price at the time of analysis: $60.98.
Rating: Overweight

This paper explores the valuation and rating of PayPal Holdings, Inc. (NASDAQ: PYPL) stock in the current financial market. Despite its dominant position in the digital payment industry, PayPal's stock has been relatively underpriced by investors. This study employs a comprehensive analysis of key financial metrics, market dynamics, and growth prospects to shed light on its undervaluation.

PayPal has consistently grown its total annual revenue from 2018, with a very positive trend. From 2018 to 2019, revenue increased from $15.48B to $17.53B, $21.43B to $25.56B in 2020 and 2021 respectively, and $27.06B in 2022. As of Q2 2023, PayPal has had quarterly revenue of $7.25B with a growth of 3.81% from the previous quarter, or 8.2% Y/Y.

PayPal has also successfully adapted to changing market trends in the past, embracing innovations such as cryptocurrency integration, credit services, and Buy Now, Pay Later (BNPL) services. These initiatives can potentially drive substantial revenue growth in the near future, which is also reflected in the 37% increase in income generated from PayPal's other value-added services.

In Q3 2023, net revenue is guided to reach ~$7.4 billion based on current exchange rates, growing ~8%. By the end of FY 2023, GAAP earnings per diluted share are expected to be ~$3.49, compared to $2.09 in FY 2022. This would mean an estimated net revenue of 3.88B in FY 2023.

In addition to financial performance, this study delves into PayPal's competitive positioning. The company boasts a vast network of merchants and a strong brand presence, including its acquisition of Braintree/Venmo, making it a formidable player in the global payment ecosystem. As e-commerce continues to expand and digital payments become increasingly mainstream, PayPal is well-positioned to capitalize on these trends.

Furthermore, the research evaluates PayPal's valuation metrics, including price-to-earnings (P/E) ratios, price-to-sales (P/S) ratios, Enterprise Value/EBITA (EV/EBITA) ratios, comparable company analysis (CCA), and discounted cash flow (DCF) models. The analysis reveals that PayPal's stock is trading at a significant discount compared to its intrinsic value, indicating an undervalued state.

Discounted cash flow models project PayPal's fair value in the $79.05 - $149.61 range, which would be a 29.6% - 145.3% potential upside. EV/EBITA models show PayPal has a 14%-74% potential upside.

Overall market sentiment is neutral or possibly bullish in the longer future with a low short interest ratio, low short volume, and low put volume. Technical indicators show PayPal trading sideways or down in the near future,

with the price being positioned perfectly for explosive growth.

The risks of investing in PayPal include buying into a currently declining financial technology sector where investment funding and venture capital have decreased significantly. This can be mostly attributed to declining macroeconomic factors. Other risks include growing competition in the space and possible declining margins. PayPal is also highly volatile, with a Bollinger Band® analysis showing constant moves past two standard deviations both up and down. Comparing the stock price to news releases also shows extreme reactivity to news, earnings, and guidance.

Introduction

Currently #113 in the S&P 500 by market cap, PayPal Holdings Inc. is a financial technology company that operates an online payments system, serving as a digital alternative to traditional money transfer methods. PayPal is one of the world's largest internet payment companies. The company operates as a payment processor for online vendors, auction sites, and other commercial users, for which it charges a fee. Fundamental, technical, sentimental, and quantitative analysis of this stock can be performed to determine whether it is overweight or underweight, with particular emphasis placed on uncovering the potential undervaluation of PayPal. The fair value for PayPal will be evaluated by delving into various aspects of the company's financial health, competitive positioning, market sentiment, and quantitative indicators.

Fundamental Analysis

The main approach for valuing PayPal is doing a fundamental analysis of PayPal by looking at ratios, DCF, guidance, sector health, and comparing financials to similarly positioned companies.

Before considering the state of PayPal, it has to be compared to the trends of the market as a whole.

PayPal's 5-year monthly beta value is 1.34, indicating a somewhat volatile stock that still correlates with the market as a whole. PayPal's volatility will be explored more in technical analysis. Currently, the S&P 500 is in a bull market, so in the long run, PayPal should still expect to be bullish and grow with the market.

PayPal has consistently grown its annual net income since 2018, with a very positive trend. From 2018 to 2019, revenue increased from 2.06B to 2.46B, to 4.2B in 2020, and 4.17B in 2021. Net income has decreased since then to 2.42B in 2022 but they are expected to reach 3.88B in 2023. This indicates that PayPal is a growing company, and is not stagnant. They can increase their revenue year over year, which is a good sign for the company overall. Although sales growth has decreased lately, it is likely a slowdown from the peaks of the pandemic where online purchases and payments surged an unusual amount. PayPal is a mature company that has just passed a large peak, and even with the downturn, PayPal is trending back toward its pandemic highs. They are recovering well from declining finances and have a lot of growth still occurring in the company. PayPal's net income has reduced significantly post-pandemic, but it has gone higher than pre-pandemic levels and is improving quarterly in 2023. Their operating expenses have remained stable throughout the years, which shows PayPal only needs to improve its overall income rather than cut expenses.

As of Q2 2023, PayPal has had quarterly revenue of $7.25B with a growth of 3.81% from the previous quarter, or 8.2% Y/Y.

The Enterprise Value/EBITDA ratio of PayPal is 11.53, which is lower than the industry median of 19.73. A lower EV/EBITDA ratio indicates that the company could potentially be undervalued. Using the industry median, PayPal should be valued at least 74% higher than they currently are.

PayPal's Price to Earnings (P/E) Ratio is at a low 17.04 compared to the industry average of 19.91. PayPal's P/E maximum was 109.36, with a minimum of 16.41 and an average of 53.58 over the past 5 years. The lower than industry average and 5-year average P/E ratio would generally mean a stock is priced low in comparison to its earnings.

In addition to P/E, PayPal's Price to Book (P/B) ratio is 3.521, with it being 8.694 on average over the last 5 years, with their median being 7.678. The highest PayPal's P/B ratio reached was 17.83, with a minimum of 3.273. Although PayPal is a software company with not many tangible assets, its P/B ratio is well below its average and median which also reveals a lower than normal valuation.

In summary, all of PayPal's ratios are on the undervalued side, meaning that their stock price is low in comparison to their financials.

PayPal's Guidance & Growth

During the Q2 2023 earnings call, management assured investors that the company is in the process of launching high-margin, value-added services, expanding internationally, and making significant progress with in-person payments.

Recently, PayPal has beaten most earnings estimates as well, even with low guidance. Q2 2023 earnings show continued momentum, especially with growth in other value-added services, which is up 37% year over year.

In Q3 2023, net revenue is guided to reach ~$7.4 billion based on current exchange rates, growing ~8%. By the end of FY 2023, GAAP earnings per diluted share are expected to be ~$3.49, compared to $2.09 in FY 2022.

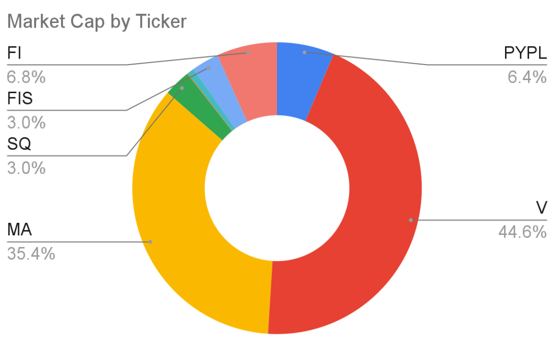
Discounted Cash Flow Analysis

With Discounted Cash Flow (DCF) analysis, insight can be made into the future price of PayPal versus its current valuation. This can be done by making estimates about future cash flows and the ending value of the investment and determining an appropriate discount rate for the DCF model. Using an Equity Discount Rate, we can estimate the discount rate in the 8.2% - 10.4% range. Using a conservative current growth rate of PayPal at 2.0% - 4.0% based on the past year's stagnant growth, a fair value can be estimated at $79.05 - $149.61, indicating a potential upside of 29.6% - 145.3%.

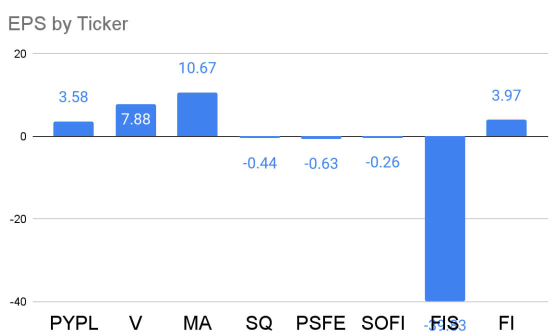
Comparable Financials

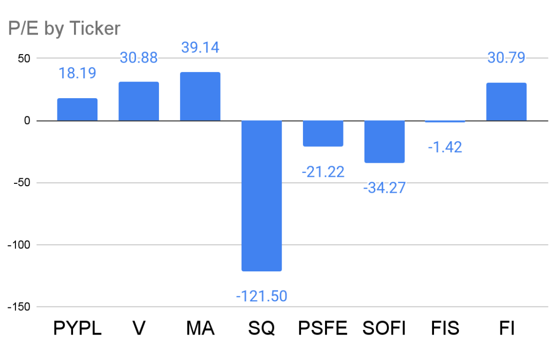
Fiserv Inc. (NYSE: FI) is also a fintech company with a comparable market cap to PayPal (74.13B vs. $66.96B). In 2022, their annual revenue was 17.74B, with a 9.31% Y/Y growth, compared to PayPal's 27.06B revenue with a 5.85% Y/Y growth. PayPal's current market cap is lower than Fiserv's, having comparable annual revenue and net income ($2.42B vs. $2.53B) but a lower EPS (2.1 vs. 3.94). For FY 2023, PayPal is expected to have an EPS of 3.49-3.70, with Fiserv expecting an EPS of 7.42. The EV/EBITDA ratio of PayPal is 11.53, compared to Fiserv's 13.22. The sector median for both companies is 19.73. PayPal has generally healthier financials, with a lower debt-to-equity ratio and debt-to-income ratio. The lower than sector median EV/EBITDA ratio also indicates an undervaluation. If PayPal was to trade at the EV/EBITDA ratio of Fiserv, they would have a stock price of ~$69.91 compared to their current value of $60.98.

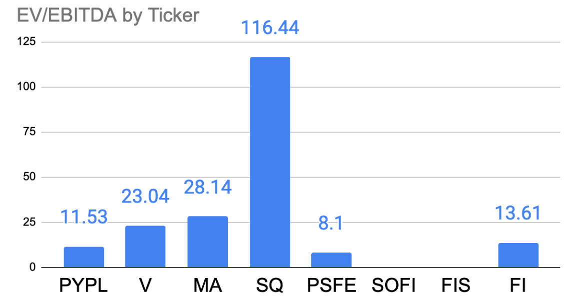
We can do a similar comparison with a few other financial technology companies, namely Visa (NASDAQ:V), Mastercard (NYSE:MA), Block Inc./Square (NYSE:SQ), Paysafe (NYSE:PSFE), Sofi (NASDAQ:SOFI), and Fidelity National Information Services (NYSE:FIS).



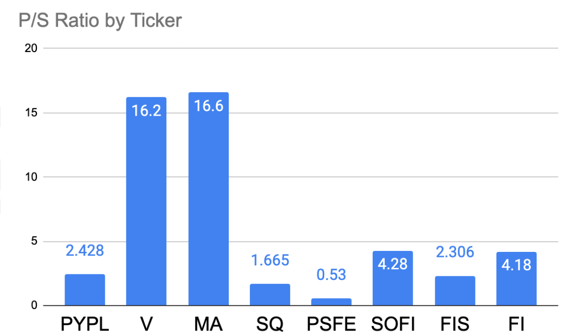
Unlabeled slices: PSFE (orange), SOFI (turquoise)







Sofi and Fidelity National Information Services do not have positive earnings and thus have no EV/EBITDA ratio.



PayPal's financials are very healthy, even in comparison with similar companies, especially when looking at EV/EBITDA. Within the finance and financial technology sector, PayPal has a very healthy EV/EBITDA ratio, with Paysafe also having a low ratio. In contrast to Paysafe, PayPal has very solid fundamentals everywhere else.

When ratios are compared to direct competitors such as Block Inc. and Paysafe, PayPal is faring much better. Visa and Mastercard are also transaction processing companies, but they are much larger companies with different goals and development compared to PayPal.

Sector Health

The fintech (financial technology) sector has been prime for innovation and disruption in the past twenty years. Fintech companies have been at the forefront of technological innovation within the financial services industry, introducing disruptive solutions across various sub-sectors, including digital payments, lending, wealth management, insurance, and blockchain. These innovations have improved efficiency, reduced costs, and enhanced customer experiences. There is a lot of investment flowing through fintech, with unicorn companies such as Stripe attracting a lot of support. The fintech sector currently holds a 2% share of the $12.5 trillion in global financial services revenue. It is estimated to grow up to 7% by 2030. Banking fintechs are expected to constitute almost 25% of all banking valuations worldwide by 2030.

Despite the excitement about the prevalence of fintech, S&P Global recently reported that funding into global fintech companies dove 49% year over year, to $23 billion during the first half of 2023. Round values declined, on average, 12% for seed firms and 14% for early-stage firms in 2022, and round values for growth-stage and mature startups were even lower, 43% and 66%, respectively. The decrease in venture funding is also prevalent in all of tech. In the first quarter of 2023, global VC funding was $76 billion, a 53% decline from the same period in 2022. This decline was driven by larger macroeconomic forces like higher interest rates and the failure of Silicon Valley Bank reducing investor appetite.

Sentimental Analysis

Currently, PayPal has faced a large bearish trend in the past two years. Despite this, investors are optimistic about the future of PayPal's stock.

Options Spread

When investigating options volume, the majority of options volume for PayPal is in the $61-$70 strike price range, with spikes at $61 (current price), $65, and $70. This indicates that there is a lot of bullish sentiment towards the stock, with many people buying calls at the current price and at $65 and $70. The distribution of puts is also not correlated with the calls, with most puts distributed between the current price and the $72.5 strike price.

Total call volume: 101.54k
Total put volume: 66.22k

Short Interest and Volume

Short percent of float has remained steady between 1.5%-2.2%. It is currently at 1.59%, with the short interest ratio at 1.27 days to cover. PayPal is not a very heavily shorted stock, with not a lot of short interest and a very low short interest ratio. In comparison to other companies in the sector, Fiserv, Inc (NYSE:FI) has a short interest ratio of 2.56, Block Inc. (NYSE:SQ) has a short interest ratio of 2.36, and Mastercard Inc. (NYSE:MA) has a short interest ratio of 2.34. A lower short interest ratio signals a more bullish stock or a stock that is not thought to decrease heavily, presenting it as a lower risk, higher upside security.

Analyst Ratings and Forecasts

Out of 45 expert analysts from firms such as Bank of America and J.P. Morgan Chase, PayPal is rated as a Buy, with 27 rating it as a Strong Buy, 4 as a Buy, 13 as Hold, and 1 as Strong Sell. Another source of analyst ratings has PayPal at a moderate buy, with 20 analysts rating it as a Buy and 10 analysts rating it as a hold. The consensus analyst price target varied between sources, but it was generally between $86 and $110. These ratings have remained stable for the last 3 months since the large downturn after 2021.

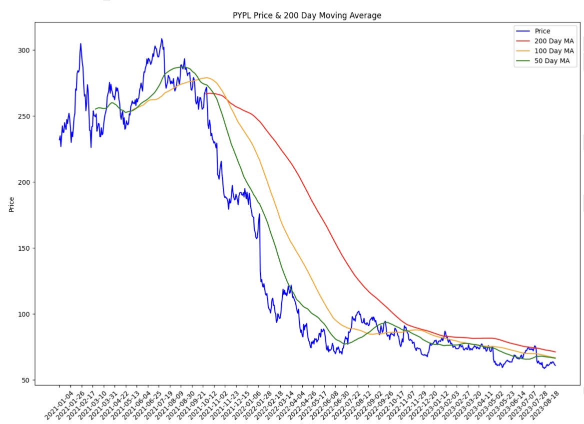
Technical Sentiment

Currently, PayPal's short-term market sentiment is neutral, which will be explained more in the Technical Analysis section. Current trends are not too bullish or bearish, but the overall trend is still bearish.

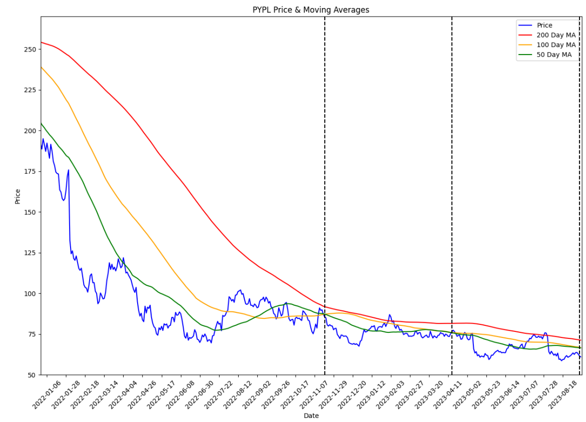
Technical Analysis

<u>All the data in this section goes up to 9/8/2023.</u>

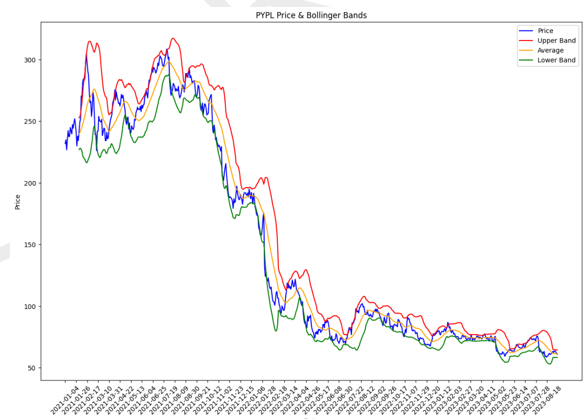
The technical analysis of PayPal in the short term points at a bearish trend. Indicators such as Price Cross Moving Average point towards a downward trend but with a short-term gain. Other indicators also corroborate this claim. Currently, PYPL is trading near the bottom of its 52-week range and below its 200-day simple moving average. The stock has been in a downtrend since the start of 2021 and has been trading somewhat sideways since the start of Q3 2023. PayPal's stock price has been hovering between \$60-\$70 with many days having reactive performances.

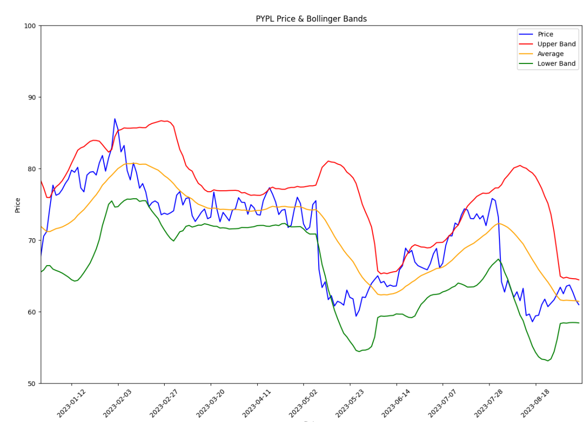


When the price crosses the 200-day Moving Average, it generally indicates a downward trend. The downward crossing of the 50-day moving average with the 100-day moving average also indicates a downward trend. Currently, PayPal is prime for another cycle of rise and fall, with the 50-day moving average and 100-day moving average just about intersecting up again which means PayPal should be rising in the short term. If the 50-day moving average falls back down to cross down with the 100-day moving average, PayPal should be expected to fall some more.

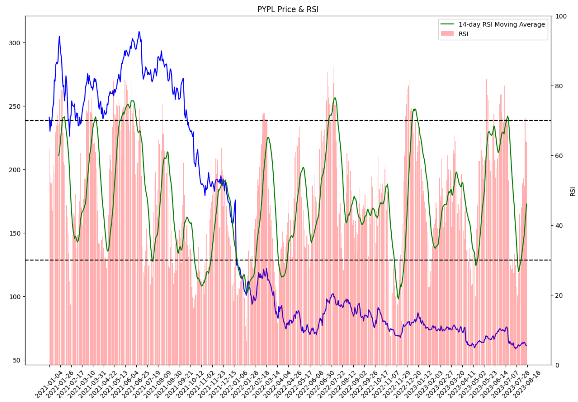


A 20-day Bollinger Band® analysis shows a trend of PayPal often being highly overbought and oversold in the last two years. PayPal has been trading sideways in a large timeframe, but when looking at a smaller frame, PayPal has been extremely volatile and reactive to news or earnings reports.

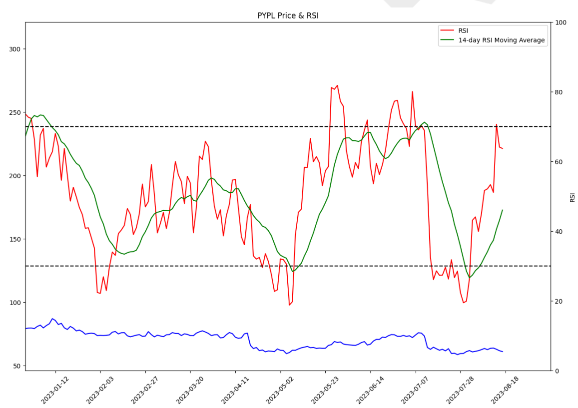




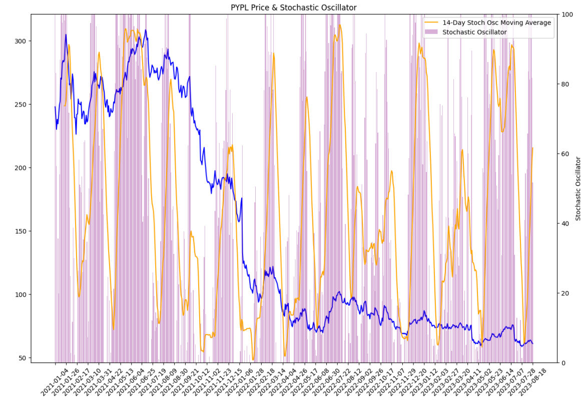
RSI analysis shows that PayPal is cyclically overbought and oversold which corroborates with the Bollinger Band® analysis. Using threshold lines at 30 and 70 proves effective at identifying overbought and oversold trends.



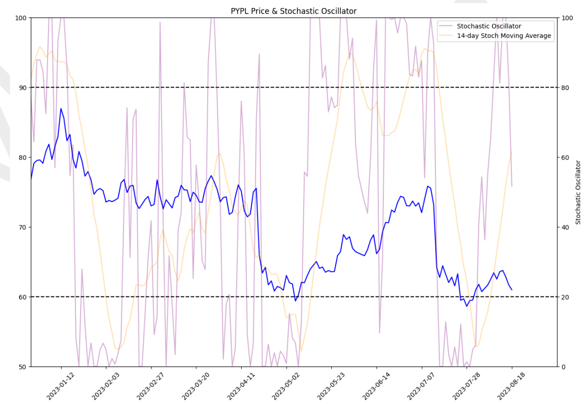
Zooming in on the most recent 100 days, RSI has been very cyclical and correlative with the price direction of PayPal. It currently shows similar upward momentum as before, so PayPal would be expected to grow above the lowest low or trade even at a steady rate for 2-3 months before falling again.



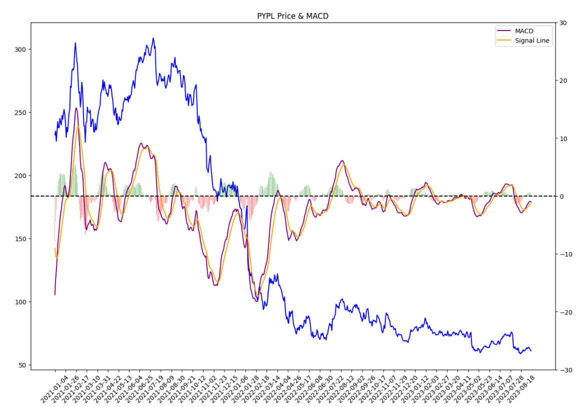
Stochastic oscillator analysis shows PayPal is currently in a neutral position but currently the 14-day moving average shows a trend towards PayPal being bought more.



The recent trend shows PayPal as being more reactive than before, so high volatility is expected.



MACD shows consistently strong reactions to PayPal price action.



The short-term MACD shows a rising bullish trend in the last month.

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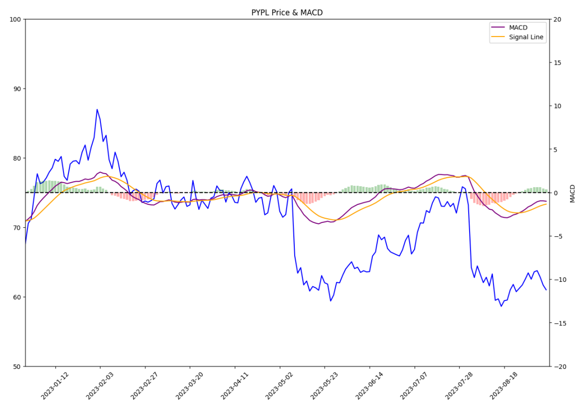
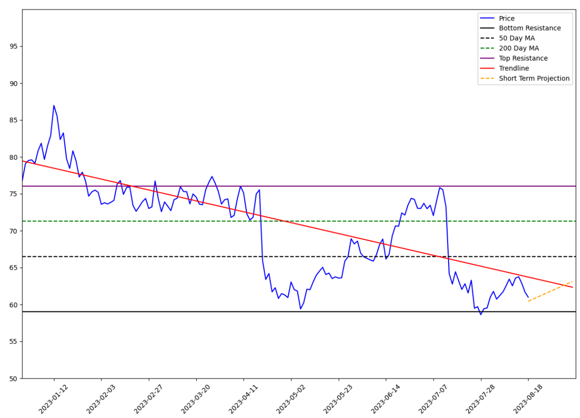
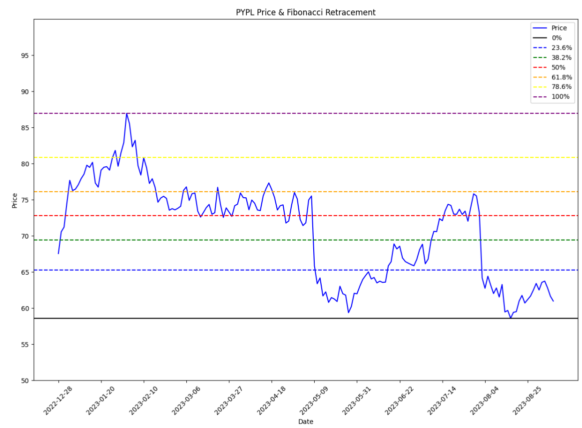


This price action chart also correlates with the short-term MACD trend, fits in the stochastic trend, the RSI trend, and the upward crossing of the 50-day and 100-day moving averages.



A Fibonacci retracement analysis of PayPal's falling wedge price consolidation since March 2022 reveals a constant price reversal from 61.8%. This may also coincide with PayPal's next Q3 earnings, which would have the possibility of making PayPal break out and explode. There is a lot of resistance at the $69-$70 level that has been rejected a lot and is likely to get rejected again in the near future, but with real momentum, PayPal could easily break $100.



Risk Analysis

Currently, PayPal is positioned for short-term gain, medium-term loss, and long-term gain. PayPal has been very volatile and reactive to news, which should be considered before investing. The solid fundamentals behind PayPal would indicate a strong company that should not falter too much, and PayPal's history of releasing new products, acquisitions, and innovation has been solid. The largest risks PayPal faces are potential competition, stagnant growth, and the constantly shifting sector they are positioned in. Overall investor sentiment says that PayPal is not a risky investment and at worst would stay stagnant for a longer time. This is supported by the low short interest and mature fundamentals. Comparing the stock price to news releases also shows extreme reactivity to news, earnings, and guidance

PayPal's net income and guidance have been the biggest investor fears, but taking into account their stable operating expenses alongside historic growth and innovation presents PayPal as a company that is bound to improve.

Some of PayPal's competitors include Apple (NASDAQ:AAPL), Stripe, Google/Alphabet Inc., (NASDAQ:GOOGL), Block Inc. (NYSE:SQ), Fiserv Inc. (NYSE:FI), Mastercard (NYSE:MA), Paysafe (NYSE:PSFE) and Visa

(NASDAQ:V). Although these companies all operate in financial technology or have products in financial technology,

Most investors would find benefit in holding PayPal over other securities because it would be reasonable to conclude that PayPal faces a favorable risk-to-reward ratio.

Technical analysis also shows PayPal as having a potential short-term to medium-term downturn, which could mean holding for a longer timeframe or waiting until the end of Q3 or Q4 2023.

Conclusion

PayPal is poised for a strong return, based on their volatile tendencies and price consolidation. Better guidance in the future from the company and proof of growth and outgrowing competition is needed for investors to gain more confidence, but PayPal is likely able to achieve this. Technical analysis in combination with fundamental analysis points at PayPal as a long-term hold, with the short term (by Q3-Q4 2023) being possibly bearish, but PayPal is very ready for a large increase once investors see improvement in fundamentals and guidance. The stabilization of price, a trend of high volatility, and solid fundamentals all point towards a future PayPal explosion. PayPal also has a lower risk because of its solid fundamentals in combination with a history of innovation and growth. Ratios and financials all say PayPal is undervalued with high potential upsides. PayPal should maintain an overweight rating in comparison to its counterparts in the S&P 500 based on all of these factors.

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A lot of data and methods in this paper were retrieved and researched from the following sources:
Alpha Vantage
Charles Schwab
CNN Business
Google Finance
Investopedia
MarketWatch
Seeking Alpha
TradingView
Yahoo Finance

All writing, code, visualizations, and research were created and performed by the sole author of this paper, James Xu. Analysis, rating, and valuation information contained in this paper does not constitute financial advice. Consult a licensed professional investment advisor before making any investment decisions.