# **MPLIFYME**

# SIMULATION RESEARCH



www.amplifyme.com

#### **HEDGE FUND: BUY-SIDE OBJECTIVES**

- Return on Investment: Navigate through the price volatility and make as much profit as you can by going long or short single stocks
- Best Execution: Execute your trades at the best prices possible by using the market makers' quote board and/or obtaining quotes for large block trades via direct communication with the market makers
- Arbitrage Strategies: Understand the price correlation between the FAANG ETF and single stock share prices. Exploit and profit from the temporary divergence in this correlation following large price spikes in the underlying stocks triggered by significant breaking news
- Investment Constraints: You will start with \$20million in cash. The aim is to invest as much of your client's cash across the 5 stocks as possible. A diversified portfolio spreads the risk. However, do not break your max single-trade stop loss limit of -\$500k.

#### MARKET MAKER: SELL-SIDE OBJECTIVES

- **Competitive Prices:** Provide tight bid/offer spreads for clients via your electronic quote board as well as bespoke quotes via the chat.
  - **Effective Hedging:** Hedge any risk exposure you have to the underlying five tech stocks by taking up the opposite position in the correlated FAANG ETF
  - Maximise Profit: When in a position of risk, skew your bid/offer spreads to maximise the potential for clients to trade on your skewed prices and in so doing enabling you to exit your position of risk and profit from the spread
  - Manage Market Impact: When managing your hedged position by buying and selling the ETF through the exchange, break trade volumes up into smaller execution sizes to avoid PnL losses through market impact.

#### MACRO OVERVIEW

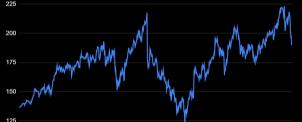
The global economic system is entering into an unprecedented period of uncertainty as one of the worst health crises in history begins to fully unfold. Governments around the planet are hastily drawing up containment strategies where we expect consumers to be forced into lockdown. Volatility in Global markets has aggressively spiked in recent weeks with high street retail, hospitality and travel sectors being severely hit

Analysts are monitoring closely how Governments and central banks may act in the coming months to balance the virus containment strategy with the resulting economic impact. Question marks remain over whether there is any room for further government stimulus spending with borrowing levels already at record highs. There are also uncertainties as to what more central banks can do to boost economic activity with many banks having cut interest rates close to zero already

#### Facebook (FB)

Facebook: An American social media <sup>225</sup> conglomerate that includes the Facebook, WhatsApp and Instagram platforms. In 2019 <sup>200</sup> approx 98.5% of Facebook's global revenue was generated from advertising

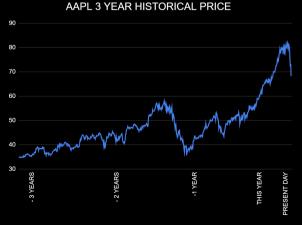
In the last few months the Facebook share price has climbed to briefly set an all time high above \$220. However, the major 125 negative market sentiment seen in the last few weeks has triggered a pullback below 100 \$200



FB 3 YEAR HISTORICAL PRICE



### Apple (AAPL)



Apple: an American multinational tech company that designs, develops and sells consumer electronics, computer software and online services. In 2019 54.7% of revenues came from iPhone sales, the company's services segment made up 17.7% of revenue, Mac sales 9.8% and wearables 9.4%

In the last 12 months the Apple share price has trended strongly higher to set new all time highs before being pegged back below \$70 in recent weeks

## Amazon (AMZN)



Amazon: Multinational technology company focused on e-commerce, cloud computing, digital streaming and artificial intelligence

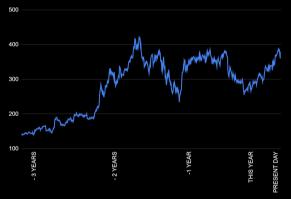
18 months ago the Amazon share price briefly broke the \$2000 barrier, but ultimately this proved to be a key resistance and a subsequent volatile consolidation phase below this level has followed. However, just 3 weeks ago the \$2000 barrier was breached and the share price printed a new all time high before then correcting back lower in what has been a volatile period for stocks

#### **Netflix (NFLX)**

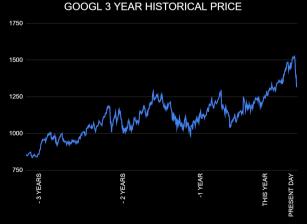
Netflix: American technology and media services provider founded in 1997.

The Netflix share price peaked above \$400 just over two years ago. Question marks over their ability to maintain their rapid user growth momentum globally, as well as increasing competition, has meant that the movie streaming service's share price has failed to move back above \$400 since. The onset of the global pandemic has not resulted in a Netflix share price pullback like we have seen in other FAANG stocks

#### NFLX 3 YEAR HISTORICAL PRICE



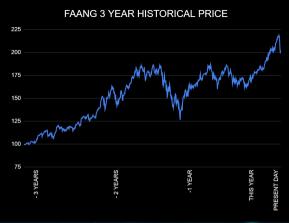
# Google (GOOGL)



Google: Multinational tech company specialising in internet-related services and products. In 2019 over 83% of revenues came from advertising with just 6% generated from their second biggest segment Google Cloud.

\$1250 has been a notable resistance level for the Google share price in the last two years with several break out attempts ultimately failing. However, the last six months has seen this barrier breached with a resultant strong climb to test \$1500. The pandemic developments of the last two weeks has created a sharp pullback

#### **FAANG ETF**



FAANG is a popularised acronym that groups together the first letters of 5 multinational US tech stocks Facebook, Apple, Amazon, Netflix and Google.

Given the highly correlated nature by which these 5 share prices move and behave, it has become a very popular trade for global investors to buy and sell these 5 stocks at the same time. A result of this has been the creation of a FAANG ETF, which makes it easier for investors to get exposure or to hedge against these 5 stocks in the click of a button

The FAANG ETF is constructed by combining the 5 underlying stocks in an equally weighting index. Buying this ETF will equate to putting the same amount of money into each of the five stocks regardless of the fact that these companies are of different sizes.