

# Airlines

US Airline stocks represent a great opportunity for the investment. Recently, their value has sharply dropped due to restrictions on the air travel. Once the hold on air travel will be removed, I expect an increase in their values. I identified 10 companies of my interest and did some projections:

Symbol	Equity
HA	HAWAIIAN HOLDINGS INC
DAL	DELTA AIR LINES INC
ATSG	AIR TRANSPORT SERVICES GROUP
CPA	COPA HOLDINGS SA
LUV	SOUTHWEST AIRLINES
SKYW	SKYWEST INC
ALGT	ALLEGiant TRAVEL CO
AAL	AMERICAN AIRLINES GROUP INC
JBLU	JETBLUE AIRWAYS CORP
ALK	ALASKA AIR GROUP INC

Symbol	Price before March	Price in April	Price in 1 year (optimistic)	Return (optimistic)	9 months Call Options	Return (calls)	Return (leverage)
HA	30	12	21	75%	3.5	29%	257%
DAL	60	22	41	86%	6.3	29%	302%
ATSG	25	18	21.5	19%	2	11%	175%
CPA	110	50	80	60%	8.29	17%	362%
LUV	58	30	44	47%	7.21	24%	194%
SKYW	63	25	44	76%	7.8	31%	244%
ALGT	173	72	122.5	70%	17.5	24%	289%
AAL	30	11	20.5	86%	4.18	38%	227%
JBLU	20	8	14	75%	2.7	34%	222%
ALK	70	28	49	75%	8.4	30%	250%
Average:				67%		27%	252%

**Optimistic forecast** for the airline companies will be that within a year they will recover only the half of their capacity, that they had before the crisis, which will imply that companies should trade at half of their 'before crisis' price. The column 'Return (optimistic)' shows expected return.

**Expected market return** based on the call options: if we look at 9 months ATM call options we can observe what the market is expecting the companies to be worth in 9 months. If we take it as a market forecast of the expected future prices then the column 'Return (calls)' shows the return.

**Leveraged position:** the column 'Return (leverage)' shows what we would earn if instead of buying stocks we would invest in call options and would expect the price to grow as described in column 'Price in 1 year (optimistic)'.

The optimal mix of investing that reduces risk-taking will be as following: the companies with high call to price ratio are perceived by the market as winners and it's better to invest in stocks rather than the call options due to high premium on it. Stocks with low call to price ratio are treated by the market as not-sure-if-it-will-grow investment. In this case it is better to enter a call option as it has a low premium and we have a strong believe that the airline companies will gain in value after the crisis is over.

Plane producers are subject to the similar analysis. Stocks like AirBus and Boeing also experienced huge reduction in their prices.

## Hotels

Similar approach can be applied to Hotel stocks:

MAR	<b>Marriott International, Inc</b>
PK	<b>Park Hotels &amp; Resorts</b>
H	<b>Hyatt Hotels Corporation</b>
IHG	<b>InterContinental Hotels Group PLC (IHG)</b>

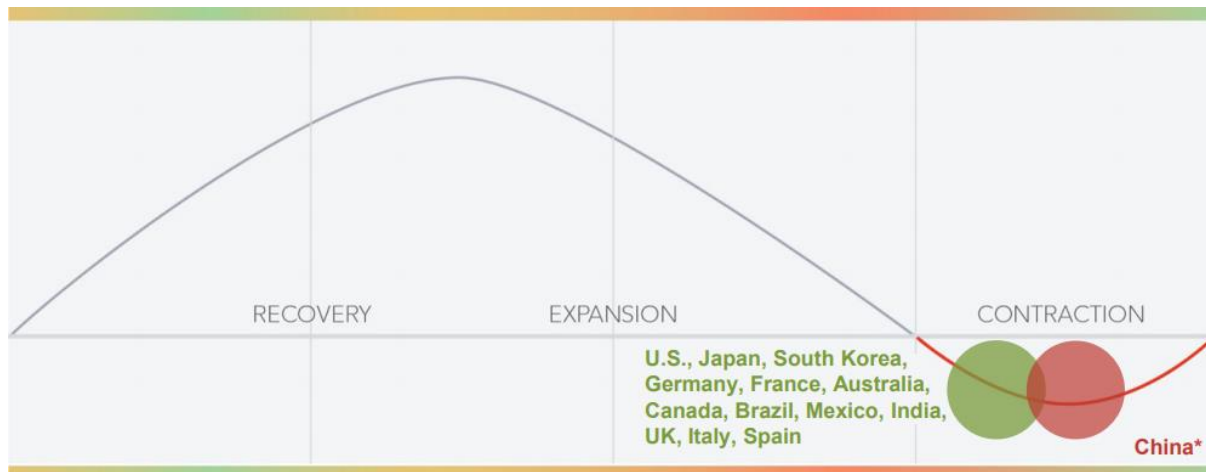
Symbol	Price before March	Price in April	Price in 1 year (optimistic)	Return (optimistic)	9 months Call Options	Return (calls)	Return (leverage)
MAR	150	80	115	44%	19.35	24%	181%
PK	23	7	15	114%	2.85	41%	281%
H	91	55	73	33%	11.2	20%	161%
IHG	65	42	53.5	27%			
Average:				55%		28%	207%

## Entertainment



There are 5 companies in Entertainment industry of a particular interest. On the graph above you can see the recent performance of 5 giant companies of Entertainment industry. For example, there are some rumors and talks about AMC going to resume its activity during summer. Other companies are also expecting to resume their activity in the near future. I am expecting that their prices will sky rocket to the previous levels within 6 to 12 months.

## Hedging and Industry Mean Reversion Strategy



According to Fidelity reports, US is in the contraction phase. To keep the unhedged position in Travel, Hospitality and Entertainment industries is not wise. Therefore, it makes sense to hedge with the stocks from the sector that performs well during contraction phase and have low or negative correlation with the sectors we invest in.

Sector	Early	Mid	Late	Recession
Financials	+			
Real Estate	++			--
Consumer Discretionary	++	-	--	
Info. Tech	+	+	--	--
Industrials	++			--
Materials	+	--	++	
Consumer Staples			++	++
Health Care	--		++	++
Energy	--		++	
Communication Services		+		-
Utilities	--	-	+	++

++ Consistently Overperform    -- Consistently Underperform    □ No Clear Pattern  
 + Overperform    - Underperform

During Recession the following industries serve as a good hedge: Consumer Staples, Health Care and Utilities. How to pick up the stocks within the industry? The answer is a mean reversion strategy.

Firstly, we find the mean return within the industry. Secondly, we identify the companies that lie well below the industry mean (the lower decile of stocks that performed the worst so far compared to other stocks in the industry). By investing in them we expect that all stocks should converge to the industry averages and those at the bottom will rise the most. The same approach applies to stocks that outperformed the industry averages and we would expect them to converge to the industry average.

This is a quantitative approach to hedging that requires monthly rebalancing. In addition, It is possible to allocate some portion of portfolio, for example 10%, that will concentrate on intraday trading. That brings more volatility into the portfolio and bigger upside potential. Forex and commodities would be a great choice as they have low correlation with our main portfolio holding. The strategy that employs Support and Resistance level in addition with Moving Averages can work pretty well in the current market environment. Moving Averages are good for trend trading that I expect to take place when the market will start recovering. Support and Resistance level strategy is good for uncertain and volatile markets.