Time on our hands

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In 1665, following the last outbreak of the bubonic plague to occur in England, Cambridge University was forced to close, obliging Isaac Newton to work from home at Woolsthorpe Manor. Whilst sitting in the garden there one day, he saw an apple fall from a tree. This inspired him to formulate his law of universal gravitation.

Whether in the spirit of Isaac Newton or Shakespeare (who allegedly wrote King Lear whilst WFH in an earlier outbreak of the plague), one might hope that with a large majority of the world working from home, the global economy is due a sharp bounce and some ground breaking innovations once disruption has subsided. Unfortunately, one downside of social distancing is the increased temptation for would-be long-term investors to watch the market far more than is healthy - particularly given the dramatic moves in recent weeks.

The speed of the drawdown in risk assets over the last month has been breath-taking – since their all-time high in mid-February, US equities have taken just 22 days to fall 30%, the fastest the market has achieved this level of drawdown in the last 100 years. As can be seen from Chart 2, few asset classes and strategies have been spared during the drawdown. Within equities, Emerging Markets (EM) initially led the decline but Developed Markets soon caught up and losses have since surpassed EM. Value stocks and small caps were the worst hit, with the intersection of the two (Small Cap Value) the worst performing area in global equities. Exposure outside of equities initially helped dampen portfolio volatility to varying degrees but as concerns over COVID-19 weighed heavier on equity markets in March, they eventually spread to other asset classes (with a helping hand from OPEC). Commodities, Investment Grade Bonds, High Yield, and Emerging Market Debt have not been spared. The traditional diversification of government bonds held up well in comparison, though heightened yield curve volatility has at the margin increased risk in these positions.

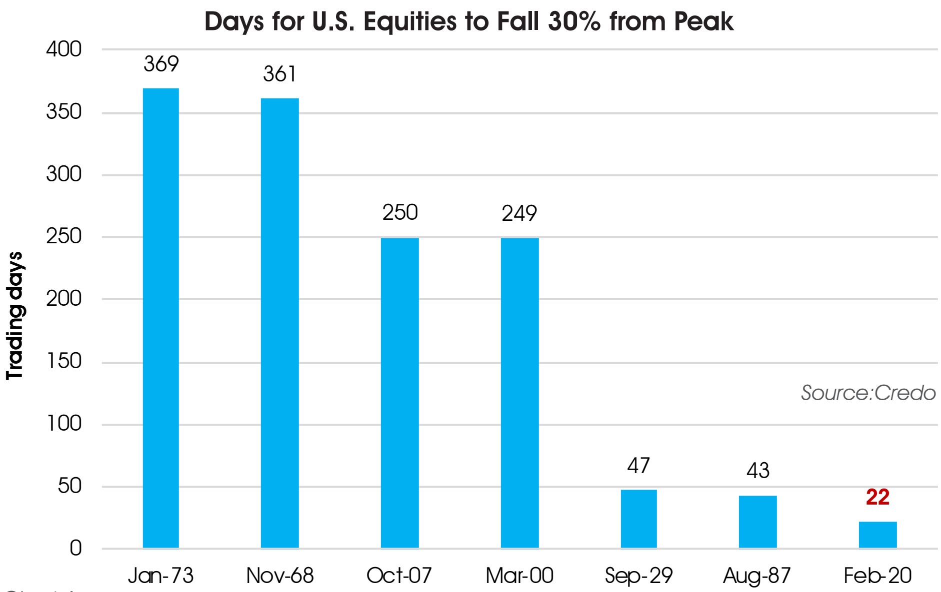

Chart 1

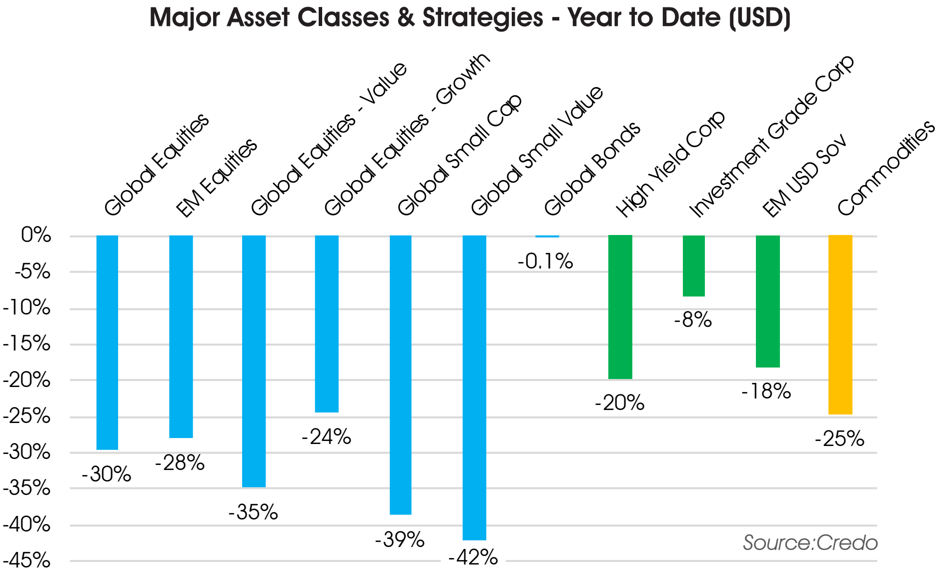

Chart 2

Managed Futures has been the main beacon of positive return over the last month (and year to date), as can be seen in Table 1. It has had the most negative correlation to equities and the nonlinear positioning of the strategy is such that it will become increasingly profitable should the same trends continue further.

However, despite the unprecedented real-world events that have occurred over the last month, it is ultimately still an incredible short time to appraise investment performance over.

Undoubtedly, the prospect of being locked down over the coming weeks and months will only make time go more slowly.

What a year these few weeks have been

Some suggest that COVID-19 is similar to a compression of time - it exposes us to a year's worth of mortality risk over the course of two weeks. The equity market tends to agree. The VIX index (a measure of implied volatility) averaged 15 last year (in line with long term levels of equity volatility), indicating daily moves of less than 1%. In March the index has spiked and remained above 50, a level more consistent with over 3% daily moves for the S&P 500. This makes implementing portfolio changes that depend on precise price levels particularly challenging as the picture is changing rapidly. Yet the daily numbers themselves mask some wild intraday (and overnight) whipsaws, with the US market having circuit breakers triggered 4 times this month. To illustrate, in Chart 3 we break down the moves in the S&P 500 into 5-minute intervals and show that just 32 periods of trading could cancel out the entire month's drawdown. In other words, **avoiding the worst 160 minutes of trading since the all-time high in February would have left an investor flat for the month.** One may indeed have more time locked down in their home but anyone looking to make discretionary market timing decisions in this environment can't afford to leave their screen even for 5 minutes - not a sustainable investment process even if you knew the 5 minute periods to avoid in advance.

Investors with a long time horizon who have correctly calibrated their equity allocation based on their risk capacity & risk tolerance should refrain from making short term decisions based on market sentiment. However, risk tolerance is behavioural in nature and can change over time (it is not unusual for investors to overestimate their attitude to risk).

YTD	Volatility	Returns	Correlation to Global Equities
Global Equities	42.6%	-29.6%	1.000
EM Equities	32.1%	-28.0%	0.710
Global Equity Value	43.8%	-34.9%	0.996
Global Equity Growth	41.8%	-24.4%	0.996
Global Small Cap	43.7%	-38.7%	0.955
Global Small Value	42.0%	-42.2%	0.941
Global Bonds	5.7%	-0.1%	-0.201
Global High Yield	16.1%	-19.7%	0.629
Global IG Corporate	10.2%	-8.2%	0.056
EM Bonds	21.8%	-18.1%	0.622
Commodities	22.4%	-24.7%	0.570
AQR Managed Futures	10.8%	1.6%	-0.470

Table 1

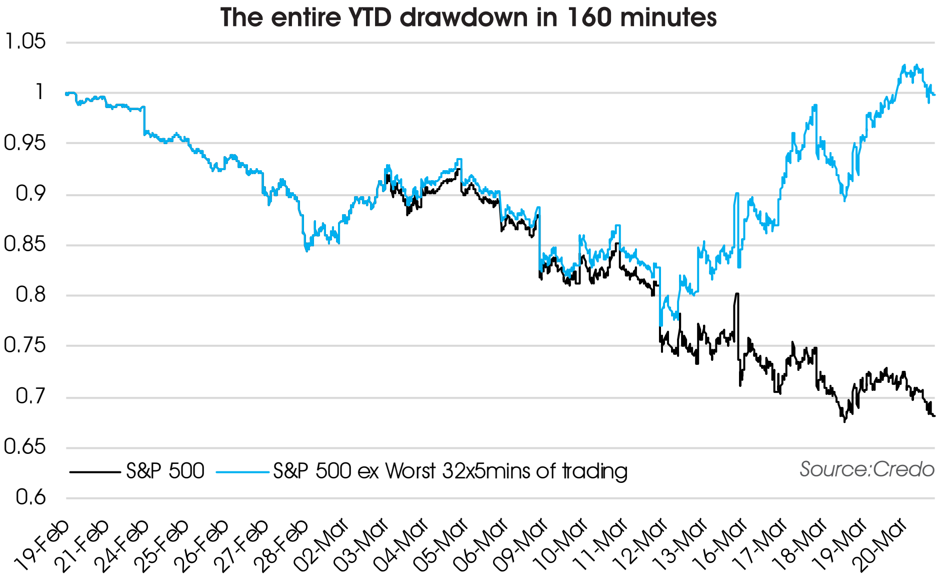

Chart 3

"If I ask you in a questionnaire whether you are afraid of snakes, you might say no. If I throw a live snake in your lap and then ask if you're afraid of snakes, you'll probably say yes - if you ever talk to me again."
- Jason Zweig

If the speed of the decline has helped an investor discover that they in fact have a lower tolerance for risk than they originally thought (during a period of calmer markets) then lowering their equity allocation now might be a better outcome than leaving them exposed to potentially panic selling should markets continue to draw down in the coming weeks and months.

On the other extreme, there may be greedier investors who smell the proverbial "blood on the streets" and are looking at an opportunistic time to increase risk. As we have highlighted above, market timing is difficult at the best of times, even when the market isn't moving several percentage points between the time you check the price and when you've managed to decide to buy. Table 2 shows the hit rate for US equities over different measurement frequencies.

Measurement Frequency	% Positive	% Negative
5 minutes	51%	49%
Hourly	51%	49%
Daily	55%	45%
Weekly	58%	42%
Monthly	63%	37%
Quarterly	67%	33%
Annually	74%	26%
5 years	87%	13%
10 years	96%	4%

Table 2

The reality is that even before transaction costs, market timing on intraday horizons boils down to guessing a coin toss. However as one expands their investment horizon, it becomes increasingly clear that when it comes to the equity market, having a longer-term perspective dramatically improves the odds of success. Thus, a more practical solution for investors with itchy fingers is to engage in an ad hoc rebalance to replenish allocations to risk assets which may have fallen below your target allocation, comfortable with the knowledge that over the long term the probabilities of a favourable outcome are high.

Conclusion

Stepping back from the current state of global panic, it is important to remember the purpose of an investment portfolio. Investing is the function of transporting consumption from today to some point in the future. If you're reading this then the assumption is that you plan to consume your wealth later on and are living as if life on Earth will survive to enable you to do so. Then you need to ask yourself **- in 1, 3, or 5 years' time when you are looking to cash in your investments, how does the future (both the world itself and investors' sentiment of it) look compared to this precise moment? BETTER or WORSE?** Over the long expanse of history, including times far darker than today, 100% of drawdowns in a diversified equity portfolio have gone on to make new all-time highs. For those with time on their hands, the answer to the above question has always been BETTER.