The Damped Spring Report

"Shifts in growth, inflation, risk premium and positioning all lead to opportunities in markets"

3/30/2020

The Rebalance Report

The global portfolio is out of balance. Over the next few days automatic flows from index trackers, vol targeting funds, and even generic portfolios will rebalance their portfolios. This is a process that occurs continuously but the particular focus on the 3/31 closing price cannot be ignored.

Why is a date on the calendar important? There are mechanical reasons. Indices of all sorts rebalance automatically on month end. Investors who track indices and who's compensation depends on outperformance of these indices rebalance tactically to ensure that the closing price is advantageous to their investors and disadvantageous to indices performance. That means tactically investor strategies mark up the close when buying and mark it down when selling. To the extent that investors have bought before the mark up or sold before the mark down the manager generates outperformance. Sure, there are legitimate questions of ethics and legality for such tactics but without question it is done in size by many managers. The logic of buying before the close is also grounded in the fact that nowhere near enough volume will be available at the closing price. Hence many tactics exist and are tolerated by market participants and apparently regulators.

The mechanics of rebalancing are fairly simple. The 60/40 portfolio demonstrates the points well.

	Starting Weight	March MTD Return	Current Weight	Desired Weight	Net to buy/sell
Equity	60	-14.3%	51.4	55.6	4.1
Bond	40	3.0%	41.2	37.1	(4.1)
Total	100	-7.4%	92.6	92.6	-

The table indicates that for a single 60/40 portfolio to rebalance back to benchmark an investor would have to buy 4% of equity and sell 4% of bond holdings. The tricky part of this is to scale this to the macro level. If the total of all assets in the world were originally 60/40. The world portfolio would now need to rebalance. The question is from whom would they buy? No one wants to sell. All want to buy. Obviously, many investors are not passive and so they will offset the rebalance flows. However, the rebalance flows automatically linked to benchmarks are inelastic to price. The offsetting flows need incentive to act on a particular date. Hence the price impact of rebalancing flows can be somewhat extreme. Every month end is a rebalance. Why are we so focused on this rebalance? Big price movements mean large concentrated flows. There are virtually no rebalance flows that rival the flows we are likely to see (and we believe have been seeing all last week).

We are not alone in focusing on these flows. While it was not generally understood until a decade or so ago, over the last five years this topic has become broadly discussed. In fact, we recently saw a report by JPM that indicated 850BN of rebalance flows globally into stocks are necessary. The analysts at JPM recognized that most investors do not automatically rebalance on month end and scaled down their estimate to $150BN in net flows. This number is enormous. We predict the flows to be much more modest. Nonetheless absent any meaningful news we do believe the there is an opportunity to go long equities into the month end close and liquidate and go short the market as the market closes.

Why do we believe the flows will be large but much smaller than the Wall Street Analysts believe?

- The Analysts are ignoring the need for portfolio deleveraging overall which will require selling of both stocks and bonds.
- The Game Theory issues around guessing what the inelastic buyer of equities will do and how to position ahead of month end and on month end have resulted in meaningful positioning by tactical traders which will spread the impact through time diluting the market closing price on 3/31.

Portfolio Deleveraging

The big miss is the portfolio deleveraging flow. Some portfolios are managed by targeting an expected future volatility and asset asset correlations in order to manage portfolio risk. As our readers know from our work on risk premiums, we believe this is a crucial aspect of risk management which we believe should be used by all investors. However, some portion of investors nicknamed Vol Targeting funds do this in an automated fashion and use month end for a convenient high liquidity rebalance opportunity.

The mechanics of this process work as follows

	Expected Volatilty			Weighting		Expected
	Portfolio	Equity	Bond	Equity	Bond	Correlation
2/28/2020	6.9%	12.0%	4.0%	60.0%	40.0%	-30.0%
3/31/2020	9.2%	15.0%	5.0%	60.0%	40.0%	0.0%
Change in desired portfolio size	-25.3%					

Using incredibly conservative shifts in future expected asset volatility and bond/stock correlation in order to have a portfolio that is just as ex-anti risky as the portfolio one held a month ago one would need to cut risk by 25%.

	Expected Volatilty			Weighting		Expected
	Portfolio	Equity	Bond	Equity	Bond	Correlation
2/28/2020	6.9%	12.0%	4.0%	60.0%	40.0%	-30.0%
3/31/2020	18.6%	30.0%	12.0%	60.0%	40.0%	0.0%
Change in desired portfolio size	-63.0%					

Using current one-year implied volatilities risk would need to be cut by 63%

We will revisit this portfolio deleveraging concept again when discussing the likely strong headwind on asset prices that will last longer than the coronavirus and that the incredible liquidity injection that the global central banks have made and need to retain or increase well past the coronavirus burnout.

Back to month end. As many vol targeting funds are levered and margin calls have been made on days, when all assets including gold and inflation linked bonds fall with stocks and nominal bond prices, some of the unwind has been done. Furthermore, while it is completely sensible for all investors to delever it is also true that automatic vol targeting funds are a small fraction of automatic asset rebalance funds. However, if the remaining vol targeting unwind is only 10% of the remaining asset rebalance flows the need to delever by 25% or more will shift the rebalance flows meaningfully

	Starting Weight	March MTD Return	Current Weight	Desired Weight	Desired Portfolio after risk reduction	Net to buy/sell
Equity	60	-14.3%	51.4	55.6	54.2	2.7
Bond	40	3.0%	41.2	37.1	36.1	(5.1)
Total	100	-7.4%	92.6	92.6	Cash	2.3

This chart indicates that the size of bond flows will be negative and more than expected and the equity flows will be less than expected.

Game Theory

Honestly who knows. As you know we predicted and so far, have been correct that multiple assets have made their highs and lows for the year already. We also believe that this is due to the interference caused by the massively disruptive coronavirus negative growth wave being fully offset by the massively supportive fiscal and monetary wave unleashed on the world in the last week.

- Part of the rally last week was fundamental
- Part of the rally was actual rebalancing flows described above partly offset by portfolio deleveraging flows.

- Lastly some of the buying was month end players running ahead of a widely reported huge flow

The initial fundamental benefit from the fiscal and monetary stimulus has some legs in our opinion and while we don't think volatility will be as high as it has been we do expect equities to drift up and bonds to drift down in price over the next two weeks. Given the size of the rebalance which is undeniably large despite the contra portfolio deleveraging flow we expect significant inflows into equity and out of bonds not only at month end but through the days to follow. The inflows have been overestimated and widely telegraphed but the devastation in most hedge fund and unlevered portfolios does not indicate large risk appetite to front run the flows.

When we add this up, we believe a continued rally in equities with no huge actionable 3/31 closing print trade but higher levels by next Friday makes the most sense. **As for bonds the underestimate of the selling (due to the vol targeting amplifying flow), the weak short-term fundamentals, and current pricing is more interesting.** While we make no formal shift to our portfolio those interested in discussing timing around shorting bonds tomorrow and buying them on the close on Tuesday can contact us via email.

Current Model Portfolio performance and Recommendations

Expirations are only change

Assumed Portfolio size	100,000,000			
LTD P/L	11,453,025			
Total Return	11.45%			
Today's Date	3/29/2020		Portfolio Created	4/15/2019

Date	Position	Entry Price	Amount	Worst case loss	MTM	P/L	Open/Closed
2/26/2020	TY Apr 132.5/133.5 Call Spread	0.484375	-1939	1,000,000	1	(1,000,000)	Closed
1/15/2020	GBP 131/129 Put Spread 4/15/20209	0.5	(66,666,667)	1,000,000	2	(1,000,000)	Open
3/10/2020	SPX April 2500/2400 Put Spread	25.5	-67	500,000	34	(57,047)	Open
3/10/2020	SPX April 2900/3000 Call Spread	44	-134	750,000	7.2	492,857	Open
2/26/2020	GCJ April 1625/1575 Put Spread	13.7	-275	1,000,000	0	377,410	Closed
3/10/2020	GCJ April 1700/1750 Call Spread	8	-119	500,000	0	95,238	Closed
3/10/2020	TY June 136/135 Put Spread	0.390625	-821	500,000	0.140625	205,128	Open
3/10/2020	TY June 140/141 Call Spread	0.390625	-821	500,000	0.1875	166,667	Open
3/16/2020	SPX April 2500/2400 Put Spread	43	-88	500,000	34	78,947	Open
3/16/2020	GCJ April 1500/1450 Put Spread	20	-333	1,000,000	0	666,667	Closed
3/16/2020	GCJ May 1650/1700 Call Spread	14	-278	1,000,000	19	(138,889)	Open
3/16/2020	TY June 140/141 Call Spread	0.203125	-627	500,000	0.140625	39,216	Open
3/16/2020	TY June 136/135 Put Spread	0.4375	-889	500,000	0.1875	222,222	Open