

The Road Ahead Of Rocks And Hard Places

6th July 2023 / Issue #19 Time to read: 11 minutes

The Road Ahead is a series of short comments on investment strategy by Henry Neville.

"In that direction," the Cat said, waving its right paw round, "lives a Hatter: and in that direction," waving the other paw, "lives a March Hare. Visit either you like: they're both mad."

"But I don't want to go among mad people," Alice remarked.

"Oh, you can't help that," said the Cat: "we're all mad here. I'm mad. You're mad."

"How do you know I'm mad?" said Alice.

"You must be," said the Cat, "or you wouldn't have come here."

Alice in Wonderland - Lewis Carroll (1865)

Parish notice: this edition of *The Road Ahead* is co-authored with Graham Robertson, Head of Client Portfolio Management at Man AHL, deeply knowledgeable in all things Trend and portfolio construction, and a stand-up fellow to boot. And now onward.

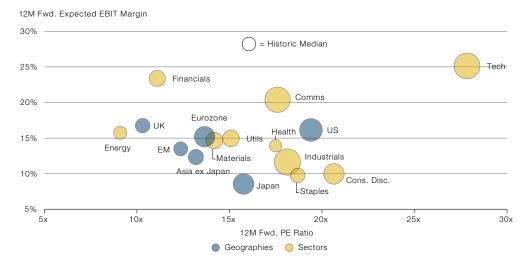
Long-only investors at an unappealing crossroads

Long-only beta investors are at an unappealing crossroads. Stocks expensive. Bonds admittedly cheaper, but neither expected to generate enough return, on a 10-year view, to meet most institutional requirements. As an asset allocator, it's enough to make yourself ask why you bother getting up in the morning. Perhaps even to empathise with the Cheshire Cat. You must be mad, or you wouldn't have come here.

In one direction live equities. The US forward price/earnings ratio (PE) at the time of writing is 19x. That's 89th percentile versus history. The Street expects US companies to deliver an operating margin of 16%. That's 75th percentile versus history. Stocks are expensive, with room to disappoint on fundamentals.

In Figure 1 we show a scatter of equity regions (blue) and sectors (yellow), plotting their forward PE against the Street's expectation for operating margin over the next 12 months. The size of each of the points denotes valuation and profitability expectations for each segment relative to its own history. Thus the US, given the 89th and 75th percentiles discussed above, averages at 82/100. 50th percentile would be the same size as the 'Historic Median' denoted in the legend at the top of the chart. While the Technology sector stands out, the plot shows that it is not alone. Indeed, the only areas of good value left (i.e. where the circle is the same size or smaller than the historic median) are the UK and Emerging Markets from a geographic perspective, and Energy and Healthcare in terms of sectors.

Figure 1. Equity Forward Multiples and Forward Margins



Source: Bloomberg, Man Group calculations as at 31 May 2023. All indices are from MSCI, sectors are for MSCI World.

It is true that, as was the case in 1998/99 or 2020/21, a market's valuation can go from very expensive to very, very expensive. That is a possibility, with Al being the mooted touchpaper, but in our view, and as discussed in the last **Road Ahead**, the probabilistic risk/reward skew is slanted in one direction, and it ain't up. And we don't think you have to have a particularly bearish economic outlook to think this. We don't.

In the other directions live bonds. Here the short-term picture is more nuanced. At the time of writing the yield on the 10-year US Treasury is 3.8%. The theoretical fair-value yield for the same is 4.4% (calculated by trend real growth + inflation expectations + the 10-year term premium). That spread of 60 basis points (bps) is the lowest in over 20 years (joint with the spread in September 2022, to be precise). Given that, we don't think an overweight bond position is indefensible in the short term. But, given a bond's yield is a good proxy for its expected return, and 4% is going to be shy of the return many investors require, it is still not a wildly appealing option.

Three simple solutions

Here are three solutions for anyone who feels themselves facing a similar Hobson's choice. These are by no means rocket science, but the simple things often bear reemphasis, including to ourselves.

First, we recognise that, as the most liquid asset classes in the world, public equities and bonds are always going to represent the majority of any portfolio of serious size. The trick is not to kick against these goads, but instead to think of better ways of combining them. Perhaps most rudimentary is to amalgamate not on any fixed weighting, but to equalise volatility. Given bonds are less volatile this is going to lead to structurally higher weights than would be the case for the classic 60/40 split. This is of particular benefit today given the relative valuation story already discussed, but has structural advantages over much longer periods.

In Figure 2 we plot two portfolios. In yellow is a 60/40 equity/bond portfolio with static percentage allocations, rebalanced monthly. In blue is a risk parity combination of the same. The weight of each element is determined monthly, based on scaling to 10% volatility on a 3-year lookback. For each we show the relationship between the valuation (defined according to the Shiller PE and the US 10-year Treasury yield, see source note for details) and the subsequent 10-year compound annual growth rate (CAGR) that each portfolio generates.

For both we see a similar pattern; where valuation is richer forward returns are lower, and the relationship is convex. For both, current valuations are higher than average over history. For 60/40 the current valuation, as indicated by the black circle, is 76th percentile, consistent with a 5.5% nominal CAGR over the next decade. For risk parity, the current valuation is 61st percentile, consistent with a 4.4% return. While the return from the former is greater in the absolute sense, the explanatory power of the latter is superior. As indicated, the r-squared of the risk parity trend line is 0.73, versus 0.41 for 60/40. At similar valuation points in the past, forward returns for 60/40 have been as low as 2% and as high as 10%. The equivalent range for risk parity is between 2.5% and 7%. This greater level of certainty, we believe, will be helpful to many allocators.

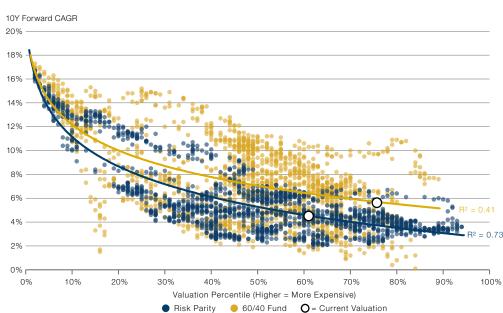


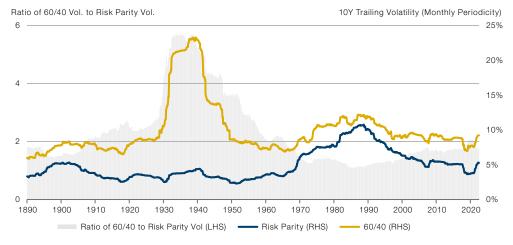
Figure 2. Valuation And Forward Return For Equity/Bond 60/40 And Risk Parity

Source: US equity returns from Shiller, bond returns from GFD. Valuation calculated as a percentile of the US 10-year yield and the Shiller CAPE ratio. Weighting for 60/40 is static (i.e. 60% x Shiller Cyclically Adjusted PE Ratio percentile + 40% x US 10-year Treasury yield percentile). Weightings for risk parity are determined using the volatility equalising weights based on a 3-year lookback, monthly periodicity.

But let's not beat around the bush. Neither 4.4% nor 5.5% is likely to be enough for many institutional entities. Take the classic endowment target of inflation + 5%. Average US inflation in the last cycle, call it 2009-19, was 1.5%. Through the 1970s it was 7%. The next decade, in the context of the capex super-cycle we have discussed in previous notes (see for instance www.man.com/maninstitute/coming-capex-supercycle), we think it could be 4%. That would mean a required return target of 9% nominal, leaving either of the approaches in Figure 2 well short.

In this context, a second solution is leverage. A dirty word for many, and often rightly so. But in the right hands – with the appropriate infrastructure and risk controls in place – we believe it is part of the answer. This is particularly powerful in the risk-parity context. In Figure 3 we show the 10-year trailing volatility of the same portfolios we showed in Figure 2, in the same colours. The grey bars on the second vertical axis show the multiple of the volatility of the former, relative to the latter. On average the ratio is a little over 2x, suggesting that we could double the risk-parity returns in Figure 2, while maintaining a similar experience of volatility relative to 60/40. We get it, leverage feels scary. But the reality is more nuanced. As this **recent article** from our colleague Tarek Abou Zeid pointed out, leverage and risk are different things.

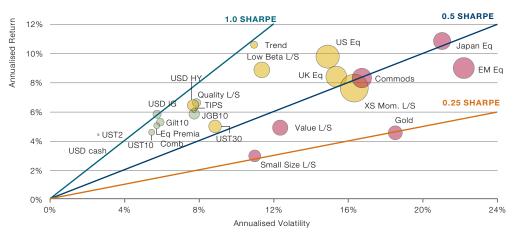
Figure 3. Trailing 10-year Volatility of 60/40 and Risk Parity



Source: Portfolios defined as per Figure 2.

Our third and final solution is to remind you that while long equities and bonds will form the majority of the portfolio, there are many options for the side orders, so to speak. In Figure 4 we show the Tetlockian base rate for the character of various asset classes. Take Trend, for instance. To the man with a hammer, etc. But humour us a moment. On the framework of Figure 4 it would seem to have much to recommend it. Over the very long term it has delivered a Sharpe ratio of just under 1. Its maximum drawdown is smaller (indicated by the smaller bubble) than other assets in a similar position on the chart, and its persistence of drawdown is also moderate (per the bubble's colour).

Figure 4. Performance Statistics for Major Asset Classes Since 1900



SIZE OF BUBBLE = SIZE OF MAXIMUM DRAWDOWN COLOUR OF BUBBLE: RED = > 20% MTHS < -5% YOY, AMBER = >

Source: All asset returns are from 1900 or earliest available. US, UK and Japanese equities all from GFD with data starting respectively in 1900, 1900 and 1921. EM equities data from MSCI, starting in 1988. US Treasury data from Shiller stating in 1900 for 10 year, 1941 for 2 year and 1919 for 30 year. US Dollar cash also from Shiller, starting in 1900. Gilts data from Bank of England, starting in 1900. JGBs from GFD, starting in 1900. Investment grade and high yield indices start in 1925 and are constructed by Man Group using data from Morgan Stanley. TIPS data from Bloomberg back to 1997, prior to which we rely on a backcast model from Goldman Sachs. Size and Value Long/Short from Eugene Fama, starting in 1926. XS Mom L/S from the same source starting in 1927. Quality and Low Beta from AQR starting in 1957 and 1930 respectively. Eq. Premia Comb. is a volatility-scaled portfolio of the equity L/S factors as they appear, thus starting in 1926. We then apply a haircut worth 50% of the average excess return. Trend is a proprietary historic backcast built by Man AHL going back to 1900 - again we have applied a performance haircut of 50% of the average excess return. Gold uses Man AHL's historic futures database and is a result of rolling the front-end contract, data back to 1975. For Commodities we are rolling an equal-weight basket of front-end futures contracts from across the commodity spectrum (albeit in the early part of the series this is purely agricultural). Data is from Man AHL back to 1946, and from AQR before that, through to 1900.

None of this is a surprise, of course. Trend-following's properties, particularly relative to equities, are well known. Figure 4 shows that the strategy is attractive on a standalone basis, but we ignore its correlation properties here. Because trend-following trades multiple asset classes, from both the long and short side, there is an intuitive low correlation to pretty much everything else in the long term. In the short term, however, this correlation is highly dynamic and offers the additional (highly attractive) feature of being negatively correlated to risk assets in crisis periods. The tech bubble bust of 2000-3 and Global Financial Crisis (GFC) in 2008-9 were the poster children for this characteristic, but nothing hammers things home more than recent events. 2022's inflationary burst, with corresponding falls in both equities and bonds, revealed the Achilles' heels of both 60/40 and risk parity portfolios. Trend-following got short both asset classes in 2022 and, broadly, profited as much as traditional portfolios lost - see, for example www.man.com/maninstitute/trend-following-what-not-to-like.

As a further illustration of this dynamic, in Figure 5 we plot the trailing 10-year correlation between the risk-parity portfolio of Figures 2 and 3, and an all-asset Trend strategy, the details for which can be found in the source note. The light blue dashed line shows the average correlation across the whole period, slightly negative and of small magnitude, as mentioned. As discussed, we also see sharp falls in the correlation going into the DotCom bust, the GFC and 2022. Moreover, we see a sharp fall in the correlation in the late 1960s, with the level staying negative throughout the 1970s. This was the last inflationary decade and a relatively poor environment for risk parity. We believe the 2020s will end up having echoes of this even if not to the same extremes. Some will disagree with this economic outlook, but most would admit that the probability has risen somewhat given the last 18 months. In that context, we think a permanent Trend allocation makes sense at the current juncture.

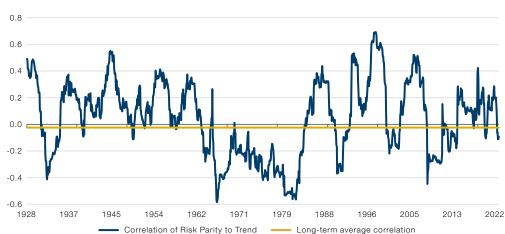


Figure 5. Trailing 10-year Correlation Between Equity-Bond Risk Parity and All-Asset Trend

Source: Risk-parity defined per source note for Figure 2. All-asset Trend defined per source note of Figure 4. Correlation is calculated using monthly periodicity.

Conclusion

It is said that the definition of insanity is doing the same thing over and over and expecting different results. Alice was faced with two choices, each of which felt insane. The current crossroads for equities and bonds is not that extreme - the former are expensive but not yet DotCom expensive and the latter, arguably, cheap - but it remains a junction where you'd say, like the apocryphal Irishman, 'I probably wouldn't want to start from here.' At least in terms of reaching your targeted return end point. New solutions are needed. This is the voice of one crying in the wilderness. Change is coming.

Source for all market data quoted, unless otherwise indicated, is Bloomberg.

Authors

Henry Neville, CFA

Portfolio Manager, Man Solutions



Henry Neville is a multi-asset portfolio manager at Man Solutions. Prior to joining Man Group in 2016, Henry completed the graduate program at Hoares Bank. Henry writes *The Road Ahead*, a regular series of macroeconomic commentary, published on Man Institute. He is also the co-author *The Best Strategies for Inflationary*

Times, winner of the prestigious 2022 Bernstein Fabozzi/Jacobs Levy Best Article Award. Henry studied History and Economics at St. Andrew's University. He is also a CFA charterholder.

Graham Robertson, DPhil

Head of Client Portfolio Management, Man AHL



Graham Robertson is a partner and Head of Client Portfolio Management at Man AHL and is a member of the investment and management committees. He has overall responsibility for client communication across Man AHL's range of quantitative strategies. Prior to joining Man AHL in 2011, Graham developed

capital structure arbitrage strategies at KBC Alternative Investment Management and equity derivative relative value models for Vicis Capital. He started his career at Credit Suisse in fixed income before moving to Commerzbank, where he established the relative value team and subsequently became Head of Credit Strategy. Graham holds a DPhil from the University of Oxford in Seismology and a BSc in Geophysics from the University of Edinburgh.

Important Information

This information is communicated and/or distributed by the relevant Man entity identified below (collectively the 'Company') subject to the following conditions and restriction in their respective jurisdictions.

Opinions expressed are those of the author and may not be shared by all personnel of Man Group plc ('Man'). These opinions are subject to change without notice, are for information purposes only and do not constitute an offer or invitation to make an investment in any financial instrument or in any product to which the Company and/or its affiliates provides investment advisory or any other financial services. Any organisations, financial instrument or products described in this material are mentioned for reference purposes only which should not be considered a recommendation for their purchase or sale. Neither the Company nor the authors shall be liable to any person for any action taken on the basis of the information provided. Some statements contained in this material concerning goals, strategies, outlook or other non-historical matters may be forward-looking statements and are based on current indicators and expectations. These forward-looking statements speak only as of the date on which they are made, and the Company undertakes no obligation to update or revise any forward-looking statements. These forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those contained in the statements. The Company and/or its affiliates may or may not have a position in any financial instrument mentioned and may or may not be actively trading in any such securities. Past performance is not indicative of future results.

Unless stated otherwise this information is communicated by the relevant entity listed below.

Australia: To the extent this material is distributed in Australia it is communicated by Man Investments Australia Limited ABN 47 002 747 480 AFSL 240581, which is regulated by the Australian Securities & Investments Commission (ASIC). This information has been prepared without taking into account anyone's objectives, financial situation or needs.

Austria/Germany/Liechtenstein: To the extent this material is distributed in Austria, Germany and/or Liechtenstein it is communicated by Man (Europe) AG, which is authorised and regulated by the Liechtenstein Financial Market Authority (FMA). Man (Europe) AG is registered in the Principality of Liechtenstein no. FL-0002.420.371-2. Man (Europe) AG is an associated participant in the investor compensation scheme, which is operated by the Deposit Guarantee and Investor Compensation Foundation PCC (FL-0002.039.614-1) and corresponds with EU law. Further information is available on the Foundation's website under www.eas-liechtenstein.li. This material is of a promotional nature.

European Economic Area: Unless indicated otherwise this material is communicated in the European Economic Area by Man Asset Management (Ireland) Limited ('MAMIL') which is registered in Ireland under company number 250493 and has its registered office at 70 Sir John Rogerson's Quay, Grand Canal Dock, Dublin 2, Ireland. MAMIL is authorised and regulated by the Central Bank of Ireland under number C22513.

Hong Kong SAR: To the extent this material is distributed in Hong Kong SAR, this material is communicated by Man Investments (Hong Kong) Limited and has not been reviewed by the Securities and Futures Commission in Hong Kong. This material can only be communicated to intermediaries, and professional clients who are within one of the professional investors exemptions contained in the Securities and Futures Ordinance and must not be relied upon by any other person(s).

Japan: To the extent this material is distributed in Japan it is communicated by Man Group Japan Limited, Financial Instruments Business Operator, Director of Kanto Local Finance Bureau (Financial instruments firms) No. 624 for the purpose of providing information on investment strategies, investment services, etc. provided by Man Group, and is not a disclosure document based on laws and regulations. This material can only be communicated only to professional investors (i.e. specific investors or institutional investors as defined under Financial Instruments Exchange Law) who may have sufficient knowledge and experience of related risks.

Switzerland: To the extent the material is distributed in Switzerland the communicating entity is: To the extent the material is made available in Switzerland the communicating entity is:

- For Clients (as such term is defined in the Swiss Financial Services Act): Man Investments (CH) AG, Huobstrasse 3, 8808 Pfäffikon SZ, Switzerland.
 Man Investment (CH) AG is regulated by the Swiss Financial Market Supervisory Authority ('FINMA'); and
- For Financial Service Providers (as defined in Art. 3 d. of FINSA, which are not Clients): Man Investments AG, Huobstrasse 3, 8808 Pfäffikon SZ, Switzerland, which is regulated by FINMA.

United Kingdom: Unless indicated otherwise this material is communicated in the United Kingdom by Man Solutions Limited ('MSL') which is a private limited company registered in England and Wales under number 3385362. MSL is authorised and regulated by the UK Financial Conduct Authority (the 'FCA') under number 185637 and has its registered office at Riverbank House, 2 Swan Lane, London, EC4R 3AD, United Kingdom.

United States: To the extent this material is distributed in the United States, it is communicated and distributed by Man Investments, Inc. ('Man Investments'). Man Investments is registered as a broker-dealer with the SEC and is a member of the Financial Industry Regulatory Authority ('FINRA'). Man Investments is also a member of the Securities Investor Protection Corporation ('SIPC'). Man Investments is a wholly owned subsidiary of Man Group plc. The registration and memberships described above in no way imply a certain level of skill or expertise or that the SEC, FINRA or the SIPC have endorsed Man Investments. Man Investments, 1345 Avenue of the Americas, 21st floor, New York, NY 10105.

This material is proprietary information and may not be reproduced or otherwise disseminated in whole or in part without prior written consent. Any data services and information available from public sources used in the creation of this material are believed to be reliable. However accuracy is not warranted or guaranteed. ©Man 2023.

MKT008488/ST/GL/W