

Examining Minimum Volatility in Volatile Regimes

Featuring:

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Mark Carver:

Hi, this is Mark Carver, Managing Director and Head of Equity Factors and Equity Portfolio Management at MSCI. We're having a discussion today around minimum volatility investing. We know that market volatility has risen significantly in 2022, that our clients and investors generally face a number of headwinds, including geopolitical conflicts, increasing interest rates, rising inflation, slowing economic growth; some of which is caused we know by the, the hangover or the continuing challenges with the COVID pandemic and some do to the trend toward deglobalization. So, against this backdrop, I've asked a couple of my colleagues from my research team to join me for discussion around markets and specifically around minimum volatility or low volatility investing. So first, I have Hitendra Varsani. Hitendra is our Managing Director and senior member of our Equity Research group. Secondly, my colleague Anil Rao, who's an Executive Director and a senior person in our Equity Solutions Research team. So, Anil, let me start with you. Many clients are asking us about minimum volatility investing against the backdrop that I mentioned at the beginning. One of the things that comes up a lot is the contrast between low volatility investing and minimum volatility investing. So, I think it's maybe good just to start there. Can you describe the difference between a low vol and a min vol approach?

Anil Rao:

Thanks Mark for the question. I first want to just start by acknowledging that there's a wide array of opportunities to defensively position, given the macro backdrop that you just described. For example, investors could hold dividend pairs, they could hold defensive sectors, they could choose to invest in just the highest quality companies. All of those could be considered defensive and each has its own merits. Low vol also defensively positions. But it also by holding just the lowest risk stocks. So, one simple method of doing that is a heuristic or a screen that just chooses the lowest risk stocks, regardless of say what sector or what country that they fall into. Minimum volatility investing is an evolution of that simpler approach. And that says, instead of just holding the lowest risk stocks, hold the lowest risk portfolio. And that has certain advantages. For example, that could take into account the relationship between stocks, the relationship between sectors or countries, that also allows importantly, that also allows to impose some guardrails to be put in. For example, we can impose guardrails that keep the country or the sector weights roughly the same or in line with what the broader universe is.

Mark Carver:

So, Anil, let's stay on that point around methodology here for a minute, because, obviously the index methodology does put on a set of constraints to the over and underweights at the sector level, country level for multi-country indexes. Talk a little bit about the work that your team has been doing, because you've been studying the impact of some of these constraints, not only the sector and country, but even putting weight limits on the stock level. So, can you talk a little bit about not just the rule, but actually the impact of that rule?

Anil Rao:

Yeah. I briefly mentioned some of those guard rails earlier sector, country, or even individual stock, as you just mentioned, Mark. So, let me start, I guess, with sector constraints, right? So, sector constraints keep the weights of the portfolio in line with that of the broad market. So that's important. What about the next thing that you mentioned, mark, which is stock concentration? So, one phenomenon, I think this has been widely talked about, is the weight of the largest stocks, whether they be the Fang stocks or the Fang, plus a few more, the weights of those 10 largest stocks in the US. So today those 10 largest stocks, the top 10, account 30% of the weight in the US broad market. Contrast that to a minimum volatility approach that imposes some constraints on individual stocks, where currently the top 10 names account for about 15% of the weight. So, we do reduce the influence of that top-heavy nature of the broad market.

Mark Carver:

So, I think the takeaway on these couple of sorts of dynamics that we're talking about here, Anil, is that with low-vol versus vol, low-vol strategies can give you side effects of heavy concentration into a group of industries or more broadly sectors. And with minimum volatility, you take out some of those side effects. And then you mentioned the specific constraints sector, country stock, it's all about diversification, right? So, you're diversifying the portfolio so that you don't have concentration across the range of choices that you make. Is that kind of the big conclusion?

Anil Rao:

That's right. We want to isolate the outcome of the portfolio, which is we want to reduce risk and provide some downside protection, particularly markets like we're seeing now, or the .com crash or post financial crisis. We want to isolate that portfolio to be low risk without taking on some of the unintended effects of a large sector or even individual. So, you're absolutely right. We want to just focus on the outcome of that portfolio.

Mark Carver:

So, let's turn to results for a minute. If we could, the minimum volatility indexes have, if we look at the range of choices, they've done relatively well this year on a relative basis meeting, they've given positive relative returns versus their parent index. Maybe talk a little bit about what we're seeing in that regard, but more importantly, there's this notion that comes up a lot with discussions we have with clients, which is that, vol will not go up as much as a standard cap weighted index in rising markets. But then conversely will go down less in periods of market weakness. We measure this through the up

down capture. So, can you maybe talk about two things? One is, I guess, how are the indexes doing now? And then what's the long-term record of the up down capture.

Anil Rao:

Yeah. I think there's a few things to unpack there. So, I just start by noting that there's no one single measure of outcomes for low volatile investing, whether it be tracking air or draw down or risk reduction or up down capture it, as you mentioned. I think they're all complimentary and they provide a different angle of what the portfolio is behaving like. What we have seen, what we have seen historically is that minimum volatility tends to reduce overall portfolio risk by around 25% versus the broad market. So that's important. It also historically, it's tended to capture around 70 to 80% the upside when the market rallies. So, during up months, and it captures around 60 to 70% of the downside when it falls. So that's also important because it loses some of the upside, but it avoids more of the downside losses. So historically that's meant, what that's resulted in, and let's just take the last few years, that minimum volatility, it trailed considerably throughout the COVID rally. So, 2020, 2021. Beginning late last year investor sentiment, valuations, and I guess market giddiness have started to turn at year end. And since then, it's outperformed the broad market let's take and develop markets. It's outperformed a broad market by around five to 6% here to date.

Mark Carver:

So, let me turn to you, Hitendra. Thank you for that, Anil. Obviously, one thing that we know that clients worry about or potential drawback of minimum volatility investing is the level of rate sensitivity. And in that regard, today's, market's kind of a paradox, in that we have rising volatility, which investors sometimes would want to become more defensive in their equity portfolio. But we also have the combination with that rising volatility of rising interest rates and rising inflation. So maybe we broaden the question a little bit and say how a factor index is generally done in periods of rising rates, specifically looking obviously at min vol. And then the second part of that is, what do we know about periods of rising inflation?

Hitendra Varsani:

So, allocations to minimum volatility are often motivated by investors who are looking to down their risk for remaining invested in equities. And if you look back over the last 20 years or so, the outcome has been improved risk adjusted returns, whether you're looking at global indexes or regional indexes. So, over the last 20 years that has improved risk adjusted returns across various global and regional equities as measured by our indexes. Now, while some commentators may relate this outperformance to the secular decline in interest rates over that period, there's more to it. And our studies have looked at the performance of factor indexes across growth, inflation and interest rate environments, going back up to 45 years. Now during periods of stagnant growth and high inflation high dividend yield and minimum volatility are outperformed. Ad these are two factor indexes that have had relatively stronger performance this year, 2022.

Now in contrast, in periods of high growth and high inflation, value has outperformed. So, what about interest rates? Our research from January earlier this year, are your equity styles ahead of the curve. We found that minimum volatility outperformed the broad market when rates were rising, but growth was stagnant. And that similar pattern to what we've seen earlier this year. But I think the key takeaway here is irrespective of whether rates are rising or falling or inflation is high or low, or where

growth is going, Minimum volatility has consistently delivered lower realized volatility than its core and index over a reasonable timeframe.

Mark Carver:

Let me stay with you, Hitendra, about this notion of dispersion. And we have talked in fact. You and I have done a couple of client events together where we've talked about the change in, in fact, the increasing dispersion we're seeing across markets, our research team, and you've been involved directly in this has also talked about the global explosion, right? We've been a 50-year period where economies, policies have really been in a transition toward globalization. Now that's moving away toward deglobalization, maybe regionalization. And a possible impact of this is that markets will continue to decouple. This potentially could enable investors to diversify in ways we haven't seen. But in your research, do you see any evidence of dispersion across factor indexes? And maybe in, I guess in that regard, I'm talking about the various factor indexes? And maybe there's a component of this where we look at the same index, but across regions. So, let's say you around dispersion.

Hitendra Varsani:

Yes. So deglobalization has clearly been at the top of their agenda across many asset owners that we speak to. Since the 1970s, the correlations between major economic blocks has been rising all the way up until 2015. Now, since then, whether it was trade wars or Brexit or COVID, or more recently the geopolitical tensions we've seen correlations declining in recent years. Now at the same time, style factors have actually become a more dominant driver of risk in markets. And this year we've seen a strong rotation from high risk growth stocks to value and yield stocks across various markets. But your question is, is there dispersion in the factor returns themselves? Now, the overall picture is, while the direction of many factors are fairly the same, the magnitude of the differences between the returns are actually very significant.

So if we take, for example in the first quarter of this year, high dividend yield indexes delivered an active return above 9% in within the international equity space, in this year, World ex USA. And if we look at similar high dividend yield indexes applied to different regions, let's say USA, the active performance is much lower 3.7, and in emerging markets it's been as low as almost 2%. So for yield investors, it actually mattered where they were overlaying their yield selection across a region or country index. And likewise, we've seen a very challenging market environment for emerging markets. Emerging markets have underperformed developed markets. and the app performance of minimum volatility that Anil spoke about this year, has actually been much greater in EM then and across many regional developed market logs.

Mark Carver:

I think first of all, this is been a really interesting discussion. Thank you to both you Hitendra and Anil. But as I sort of reflect on what I think I heard from both of you, beginning with the approaches to sort of defensive equity investing, obviously there are various approaches, but contrasting low vault to vol, is really about the way your philosophy building a portfolio, right? And low volatility has a simple approach, but has substantial side effects, where minimum volatility looks at the portfolio and saying, how do you build the minimum risk exposure to a universe, and in so, you have wider considerations and less side effects, because you're controlling for that. I think that's one big takeaway I had from you, Anil. And then Hitendra, I think with you mentioned the dispersion of markets and what this

means is that investors could become in, this is another theme that you and I have talked about a few times, a bit more specific in their geographic diversification. With dispersion comes opportunity to diversify, but also the opportunity to diversify, not just in the market itself, but in the way, you take the exposure to the market because we're seeing the differences in return. So that's an important takeaway.

But something you said that I think was quite interesting pulling it apart a little bit is the economic state, right? This notion that yes, we have increasing volatility today, but we have changing geopolitical and really global dynamics. And that in particular means that when we look at the impact of inflation, it's not the same across every region or every country, but instead we will have some markets where we have rising growth and rising inflation, what you term, a heating up economy. That's good for a certain set of factor indexes, historically looking at our deep history, purely value. Whereas in periods of rising inflation and lower growth, i.e., stagflationary markets that actually has been better historically looking at deep history of minimum volatility. So, I think those are the big conclusions that, methodologies are not always the same, it's good to look under the hood, that dispersion leads to opportunity, and then the opportunity to really look at the economy in and of itself. And so, with that, let me say again, thank you, Anil and Hitendra. And thank you to all of you for listening. On behalf of all of us at MCI, we certainly look forward to having continued conversations about this topic and others. Thank you.

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