

Mind the Gap: Optimism vs. Pessimism in the Macro Investing World

AFTER SOME SPECTACULAR SUCCESSES AT THE HEIGHT OF THE FINANCIAL CRISIS, the macro hedge fund sector has muddled along for much of 2009 and 2010. Many managers have expressed pessimism about current macro opportunities, believing that today's fact set—highly correlated assets trading in apparently range-bound fashion—presents a target-poor climate in which to ply their trade. (Similarly negative views, and for similar reasons, are widely seen in other investing disciplines, including in long/short equities and credit.) We've been hearing a common macro view that might be stated along these lines: "We're operating in a world in which assets that used to move much more independently are currently driven in lockstep by short-term news or by whether investors are in 'risk-on' or 'risk-off' mode on a given day. Predicting things like regulatory announcements or changes in risk appetite among investors is very hard, and that's about all there is to bet on right now. Until these elevated correlations come down, it's going to be tough to make a buck."

On balance, we are very optimistic¹ about opportunities for macro, and feel that this environment is in fact one of the more compelling ones we've seen on the basis of its offering broad (if not always deep) liquidity, coupled with a large amount of pricing inefficiency. As a result, at a time when we understand many macro managers are running portfolios at reduced risk, we've been unusually active, while remaining mindful as always that markets we currently find attractive also embed a fair amount of risk. What accounts for this difference of opinion between our view of the risk-adjusted opportunity and the apparent consensus among the broader macro community? We outline our thoughts in this *Market Insights*.

¹ For purposes of this Market Insights, "optimism" and "pessimism" apply to the opportunity for macro traders to spot and profit from inefficiencies, and not to whether the global economy will prosper or deteriorate.

Different Macro Approaches, Different Macro Opportunities

It's our view that this macro opportunity perception gap is partly of a structural nature. In particular, we believe that our macro approach differs from that of a typical macro manager in several respects: first, we scan for trading opportunities across a wider range of asset classes; second, we rely less on "predicting the future" in our macro strategy, instead focusing on finding examples of the market saying inconsistent things about the future; and third, we tend to invest over longer horizons.

Looking Far Afield

Many macro practitioners focus largely (and in some cases exclusively) on the sovereign fixed income and currency markets, given those asset classes' explicit linkage with macroeconomic policy choices and data releases. We invest extensively in these markets too, but we're much more active in commodities, equities, corporate credit, and various forms of volatility than we think is typical of macro managers.

Why is as much as 70 percent of our discretionary macro strategy (in risk terms) often invested in products other than fixed income or currencies? Among other things, we think that by casting a wider net across asset classes, we end up seeing a whole array of apparent mispricings across asset groupings to an extent literally not possible for a macro team (or, as is often the case, a relatively autonomous trading "silo" at a larger macro outfit) focused narrowly on one asset class. In fact, we think this kind of market segmentation is directly responsible for some very interesting profit opportunities.

For this discussion, we can isolate commodities as one asset class that we think highly of as a hunting ground that is often not a large focus of macro traders. The commodities complex presents an unusually appealing blend of features: it's large, reasonably liquid, and has many subsectors (energies, metals, ags, to name a few) with their own idiosyncrasies. Many large commodities market participants are motivated by considerations other than maximizing near-term trading profits, and the alpha seekers focused on commodities are often operating in extremely narrow niches that may lever their expertise, but at the expense of understanding broader relationships of their domain to other

assets. Right now, the commodities space accounts for roughly 45 percent of our discretionary macro portfolio's risk.

No Crystal Ball

Macro investing often involves a manager's making some forecast about the future, about global growth or upcoming central bank moves, for example. People seem to agree that, for various reasons—regulatory uncertainty, heightened geopolitical risk, continued fallout from a financial crisis not seen in most lifetimes—this is really hard to do right now.

In our case, we spend less time trying to make predictions about the economic future and more time trying to find different areas of the market that are implying different predictions about the economic future. We then try to understand some of the supply/demand factors that might explain those apparently incompatible market statements. The truth is that it's really hard to add consistent macro value by finding the market flat out "wrong." Of course, it's not easy to invest in relative mispricings either, but we find that seeking and analyzing these types of anomalies tends to result in higher conviction trading views for us. Moreover, given the firm's experience in evaluating certain aspects of these views (like correlations and crash risks), we think we are unusually practiced in determining both which views are worth expressing in our portfolio and in what size.

One prime example of the market saying interestingly different things relates to everyone's favorite subject, the great inflation vs. deflation debate. Predictions about the overall course global inflation will chart are, in our view, difficult to make, given the dependency of that path on political factors. But it's interesting to see how inflationary fears express themselves (or don't) in such remarkably varied ways, depending on whether one is looking at gold volatility, inflation-linked bonds, interest-rate volatility, stocks in inflation-sensitive industries, and so on. And it's often clear that differences in these asset classes' apparent apprehension of inflation are rooted in how actively inflation-fearful people use those instruments to hedge their inflation risk. For instance, gold options are an easy (if not necessarily very efficient) way for investors to hedge against the possibility of very high future inflation. On the other hand, picking out inflation-sensitive versus non-inflation-sensitive stocks is complicated and difficult to implement as a hedge. We think the pricing of those assets reflects this in certain respects.

It's Also About the Timing

There are naturally exceptions, but our macro strategy's sweet spot is for investments with expected horizons of from several weeks to several months, rather than the much shorter horizon of a few days to a few weeks typical of some macro traders. We think this may account for some of the difference between our and others' views of the macro opportunity. Two instruments that a few years ago might have demonstrated meaningful—but far from perfect—correlation might these days move in lock-step fashion in response to a news item like a potential regulatory change. Someone operating on a one-week horizon, perhaps enforced by rigid stop-loss rules, could justifiably find this sort of phenomenon really frustrating, but we've seen that, over the intermediate to long term, assets that may still exhibit unusually high (by historical standards) correlations may nonetheless drift away from each other in ways that we believe may allow for profitable trading.

Correlation: Friend or Foe?

We think the crucial difference between the optimistic and pessimistic macro worldview hinges on the answer to this question: do the current correlation dynamics kill or create investment opportunities? We'll give our answer in a moment, but let's first try to account for the unusual correlation properties of today's markets.

Imagine two assets, A and B, that have historically been somewhat correlated. Yet these days, the prices of A and B move together in a much more synchronous fashion. What sort of event causes their short-term moves together? Maybe markets have broadly sold off on a given day due to yet another sharp reversal in investor risk appetite, causing A and B to trade down with them. Or maybe there's regulatory news causing all instruments remotely like A and B to trade up or down in virtually identical fashion. The point is that, in both examples, today's market participants often trade A and B together a bit indiscriminately, with insufficient reflection on the actual exposures of A and B to the global economy or the latest government initiative.

Risk On/Risk Off

Put another way, in the current environment of shallow liquidity and heightened risk aversion, technical forces are having an unusually strong effect on the market, driving

many individual assets away from prices that are fundamentally justifiable. What are these technical forces? There are a number of them, but they can be reduced in some sense to an exceptionally persistent "risk-on/risk-off" tendency among investors since 2008. Investors are understandably unsettled by the financial crisis and its aftermath and are thus much more inclined to react abruptly to new information. This can take a general form, as investors quickly head to cash or hurriedly ramp up across a variety of asset classes on the basis of short-term global economic pessimism or optimism. Alternatively, this risk-on/risk-off mentality can take a narrower form, with investors reacting to news in a given sector by treating all assets in that sector the same, even if those assets actually have important distinguishing features relative to each other.

Opportunity through Relative Price Drift

Now let's get back to our question of whether this correlation phenomenon is a positive or negative in terms of the macro trading opportunity set. We believe these correlations signal a lot of opportunity for certain macro investors, even after factoring in elevated risk levels in the market.

The macro trader focused on relatively short-term opportunities, or looking only at a narrow asset class band, or worried about getting stopped out of a trade due to hard-to-predict fluctuations in global risk tolerance, might find this climate understandably exasperating. But we believe that not only are there some very interesting trading opportunities over a multi-month horizon, but that these sorts of heightened correlations are directly responsible for producing them.

The life cycle of these trades is straightforward. First, the prices of assets A and B move together in the short term due to readily observable technical pressures that are otherwise contrary to the fundamentals of at least one of those instruments. Next, the prices of A and B end up drifting gradually apart in meaningful ways as fundamentals slowly reassert themselves, even as the two instruments remain, by historical standards, quite highly correlated on a day-to-day basis. Traders focused only on very short-term effects remain understandably frustrated by that high observed correlation, but, because we're operating over a longer horizon and are trying to diversify across a broad number of asset classes and trade themes, we feel well positioned to attempt to take advantage of these anomalies.

Let's make this more concrete with a couple of examples, one relating to the relationship of sovereign bonds and CDS, and one from the wonderful world of mortgages.

Swap Curve vs. Sovereign CDS

An example of an asset pairing that has recently exhibited unusually high correlation is the relationship between credit risk and the shape of the swap curve at the long end. If one looks, for example, at the relationship between sovereign CDS spreads and the euro-denominated 10s30s spread,² it has recently been as negatively correlated as -0.70, even though historically there has been no persistent correlation. (See Figure 1 below.)

There are a few possible interpretations of this. A trader could despair that, at least for a while, swap curve shape and credit risk appear to be more or less the same thing, and thus uninteresting as an alpha matter. For the reasons mentioned earlier, we think this is not the right way to view it. Instead, we see this strong relationship as a signal that there may be an interesting and exploitable market inefficiency here.

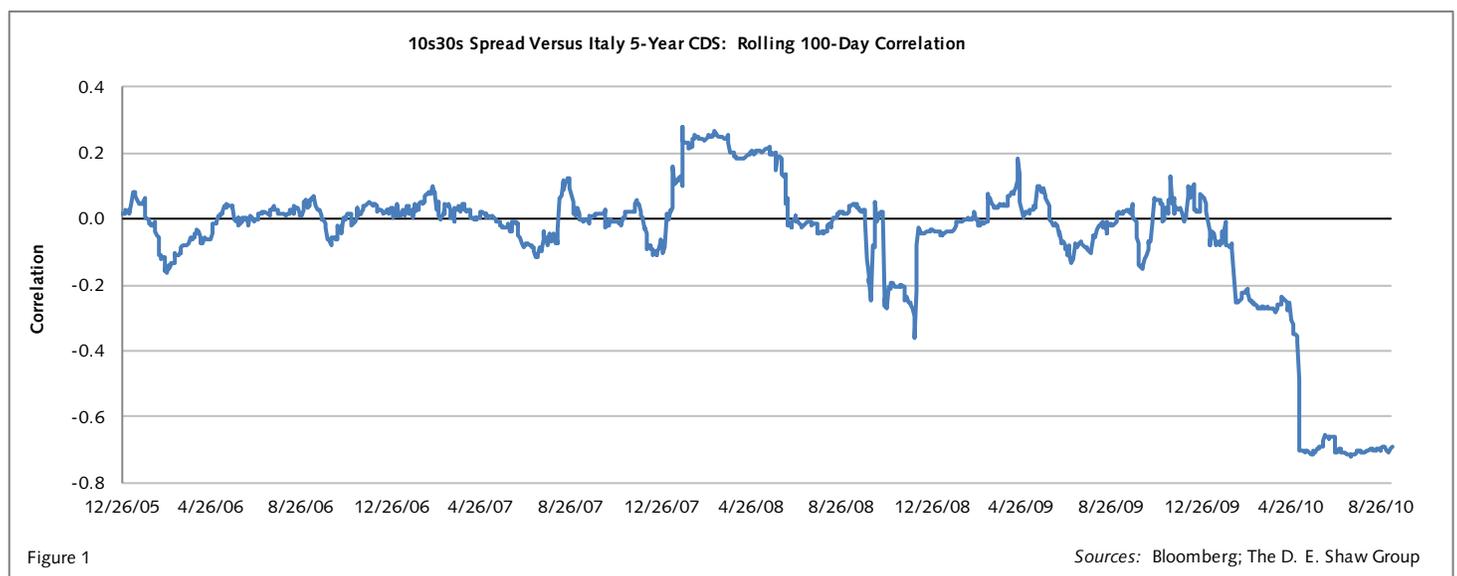
The long maturity end of the swap curve is typically affected by many technical forces. For example, corporate issuers of fixed-rate bonds often use swaps to hedge their interest-rate exposure, which in practical terms means they are "receiving fixed" and "paying floating" rates on swaps. Pensions often use swaps similarly, as they receive fixed in order to protect their plans from becoming underfunded if

interest rates fall.

Going the other direction, some governments use long-dated swaps to pay fixed and receive floating in order to protect themselves from a rise in rates, which would otherwise increase the cost of their future debt issuance.

The impact of technicals associated with the sovereign positions seems to have been especially dominant recently. In particular, risk managers at banks that are exposed to sovereign counterparties on swaps drive the correlation between sovereign CDS spreads and the 10s30s spread negative as they work to hedge their profits and risk. As interest rates fall, for example, swap trades with sovereigns become more profitable from the banks' perspective. Because many sovereigns do not post variation margin under their swap agreements, the banks stand to lose their unrealized profits if their sovereign counterparty were to default. The banks thus need to go out and buy more sovereign CDS as a hedge, driving the correlation negative.

The same result can be observed when sovereign CDS spreads move. When sovereign CDS spreads rise, for example, bank risk managers recognize that there is a higher chance of a counterparty default. The banks therefore have to put on more of the same receive-fixed position with another counterparty as a precaution. Since sovereigns tend to be more active at the thirty-year point than at the ten-year point, this again drives the correlation between sovereign CDS and the 10s30s spread negative.



² "10s30s" is a shorthand notation referring to the spread between 30-year swaps and 10-year swaps.

So this is a case of an unusually high (in this case negative) correlation being a sign of some interesting technicals at play that we believe may present some trading opportunities. If bank risk desks are motivated to transact more by their short-term hedging program than by considerations of fundamental worth, then this could lead to some compelling trades for a market participant with an eye towards a profit over the slightly longer term.

Fannie and Ginnie: Kissing Cousins

On February 10 of this year, government-sponsored mortgage giants Fannie Mae and Freddie Mac announced their intent to buy back from their mortgage-backed securities pools a large portion of the underlying delinquent mortgages. Under new accounting rules requiring guaranteed securitized assets to be held on balance sheet, the cost to Fannie and Freddie of loan guarantee payments to the MBS holders had become greater than the cost to the GSE of itself acquiring and holding the relevant nonperforming underlying loans. The substantive effect of this buyout was a massive prepayment to these GSEs' MBS holders. Since most of these MBSs were trading at a significant premium to par, this effective prepayment was a negative event for security holders. On the other hand, Ginnie Mae has historically incorporated such buyouts into its standard operating procedure, so in theory delinquency buybacks would be priced into Ginnie Mae securities.

Figure 2 (below) shows the relationship of the Fannie Mae 6% MBS with the analogous Ginnie Mae MBS. It's easy to

see that the prices of both Fannie and Ginnie securities reacted negatively to the Fannie and Freddie buyback news, even though the news didn't actually apply to Ginnie Mae. Investors responded to the news of the Fannie and Freddie buybacks by selling all mortgage securities trading at a premium, even those with no actual fundamental exposure to the event in question. Because of this investor reaction and the resulting price action, one didn't have to take a "crystal ball" style directional view on whether the mortgage market as a whole had overreacted or underreacted to the announcement. Instead, one could have focused on the *relative* overreaction of Ginnie Mae prices based on a very clear technical force (panicky selling of premium mortgages). Note that, even as correlations remained extremely high between these two instruments throughout the period in question, the two gradually (and we believe correctly) drifted apart over a period of a few months as the market implicitly recognized the two MBS' different fundamental exposures to buyout risk.

Looking for Gradual Drift is Not the Same as Shorting Correlation

We should make one thing clear. While a reasonable argument might be made that correlations are absolutely too high, we don't know whether and when the market will come to that same conclusion. We are thus not asserting that we want to short correlation. An express short correlation bet is potentially quite dangerous, as it is less a wager on the relationship of two instruments and more a

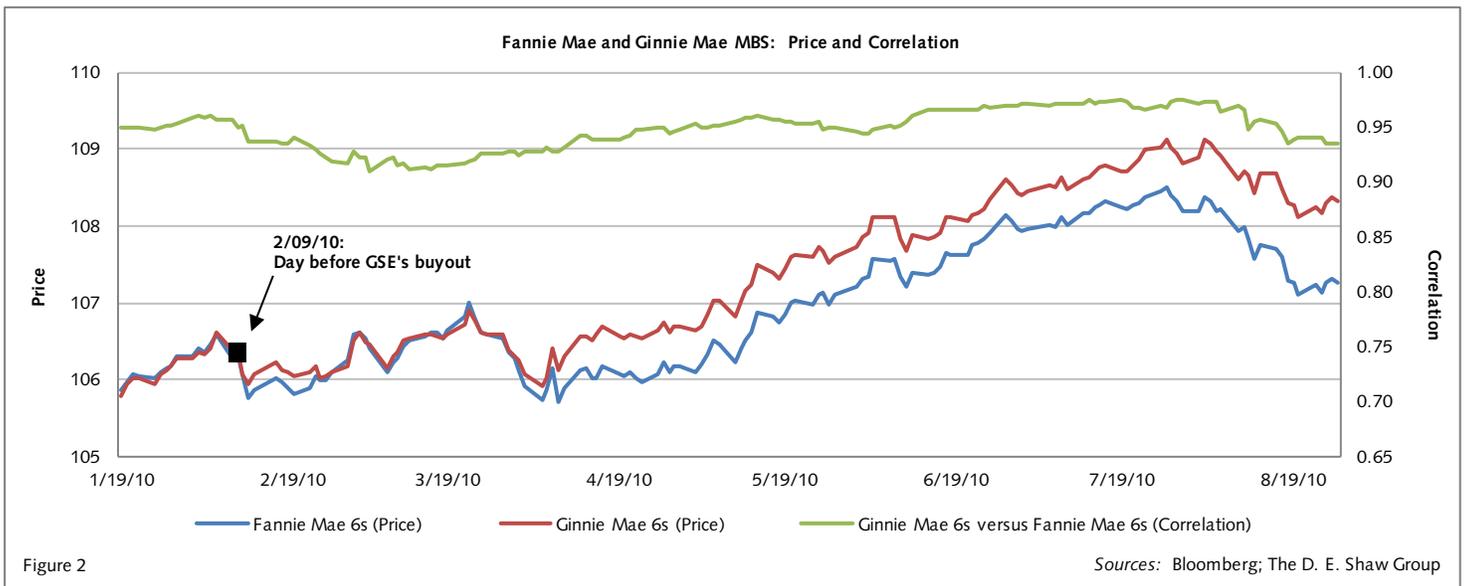


Figure 2

Sources: Bloomberg; The D. E. Shaw Group

wager that the world has collectively decided to get off its current “risk-on,” “risk-off” seesaw. That is an altogether different sort of prediction, and one that’s hard to make, difficult to diversify, and apt to feel very uncomfortable should the world enter another full-on financial crisis mode.

The potential alpha in trades like those we illustrate above comes not from a secular fall in correlation, but instead from a money manager’s ultimately being right that one instrument moved too much relative to another instrument.

Conclusion

We are upbeat about current macro opportunities given our focus on a wide range of assets, the relatively longer horizon of our typical macro investment, and our emphasis on understanding both the fundamental and technical drivers of an asset’s pricing. The world certainly presents its share of investment risks, but we also believe it presents an unusual volume of interesting inefficiencies for the investor willing and able to take a longer view.

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