Factor/Style Investing

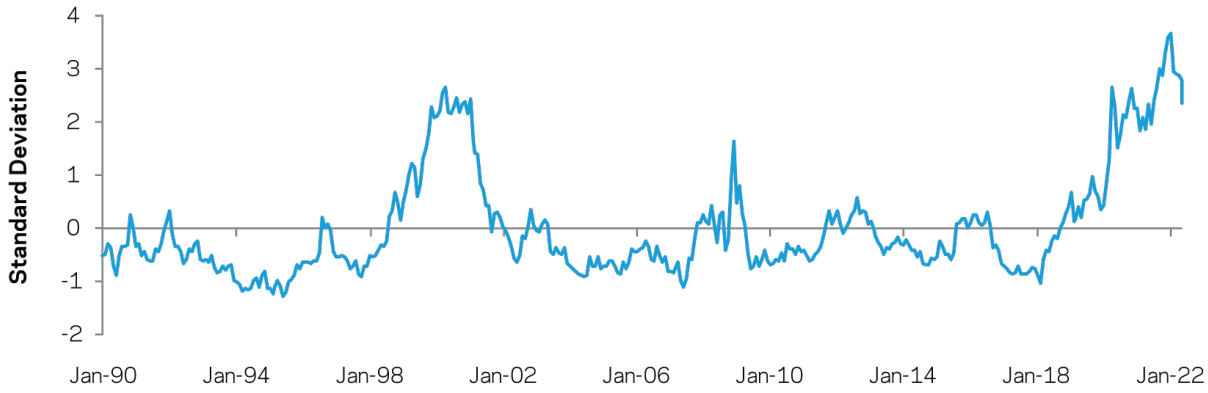
Value Investing Is Not All About Tech

May 27, 2022

In media and pundit accounts it often seems that value investing is either implicitly or explicitly all about the technology sector vs. everything else. Most value managers (or quants adding in a "value factor") are doing more than that (and some of us actually try to avoid taking industry/sector bets at all).

Below is a graphic quite familiar to my readers. It's the price-to-fundamentals of expensive stocks divided by the price-to-fundamentals of cheap stocks in the U.S.A.[1,2] It averages across five measures of valuation[3] and is constructed so it's comparing stocks within the same industry and not across industries.[4] Thus, it's a measure of how much more expensive the expensive stocks are than the cheap stocks *within each industry*, using a robust[5] set of valuation measures.

Hypothetical Within-Industry U.S.A. Value Spread[6]
January 1, 1990 – May 9, 2022

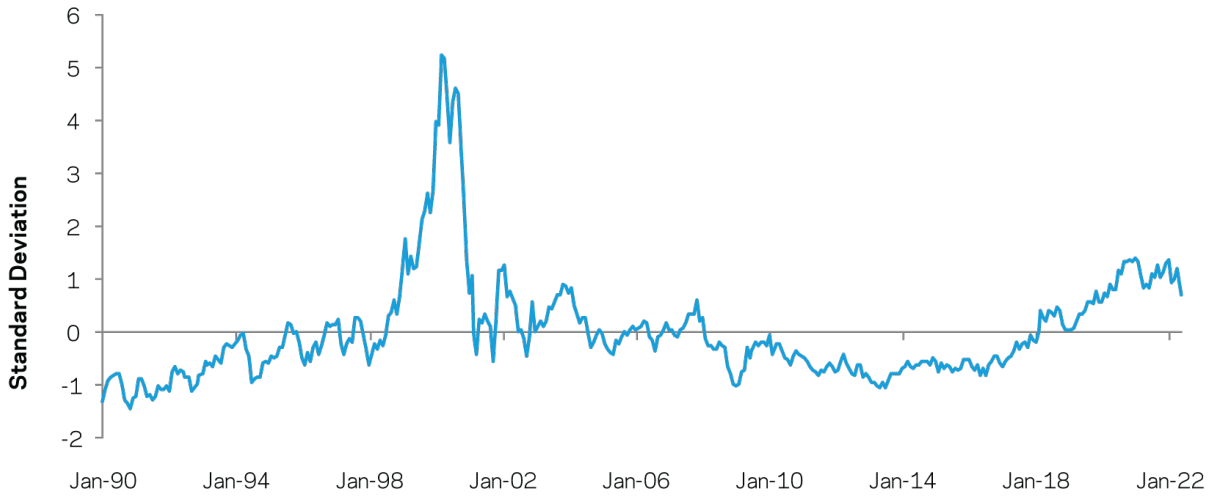


Source: AQR. January 1, 1990 - May 9, 2022.

So, given we've traded value[7] as industry-neutral[8] since Bill Clinton's first term, you can see how I find the public commentary on value a little frustrating when it is all about how "tech" is doing!

So what about tech itself? Below is another graph of a different value spread. This one isn't long and short within the same industries. Nope, quite the opposite. This one compares the tech sector[9] to the whole S&P 500. It uses the same five valuation measures we used above,[10] and when it's high the tech sector is relatively expensive versus the broader market as compared to history (and thus, if you assume tech is the expensive/growth side of the trade and the S&P 500 is the value side, it is comparable with the first graph above).[11]

Hypothetical IT Sector vs. S&P 500 Value Spread[12]
January 1, 1990 – May 9, 2022



Source: AQR. January 1, 1990 - May 9, 2022.

These two value spreads (our within-industry one and this tech vs. the S&P 500 one) are 0.66 correlated in the level and 0.41 correlated in their overlapping annual changes. Their correlation, while high, is greatly reduced by the rather crazy heights hit by tech vs. the S&P 500 in the 1999-2000 tech bubble (apparently an apt name). If you cap/floor both of these series at +/-3 standard deviations, the correlation of the levels goes to 0.89 and of the changes to 0.76.

So, our first sort of interesting (though probably kind of obvious) observation is that even though we construct these two series in a reasonably "orthogonal" way (meaning independent, where one is a pure industry bet and the other tries to only bet *within* industries) they are still strongly related. Perhaps not surprising, when investors are willing to pay a relative ton for the "hot" industries, they are also in the mood to pay a relative ton for the "hot" companies within each industry.

Less obvious before the fact, and I hope still kind of interesting, is that the two can be pretty different. The within-industry value spread (far closer to what we actually trade) is currently 95th percentile versus its own history and still 90% of the way up from median to its tech bubble peak (the prior peak before the crazy COVID driven 2020-2021 peak). The expensiveness of tech vs. the S&P 500 is 84th percentile versus its own history (so still on the high side but not the stratosphere) but only 17% of the way up from median toward its tech bubble peak.

While both bets have done well lately (since the 10/31/2020 low, the within-industry value returns are huge and the S&P 500 vs. tech returns are good, though not nearly as good) the within-industry spreads are still pretty darn egregious[13] while the "tech vs. everything else" spreads, while on the high side of normal, are nowhere near their crazy tech bubble peak.[14, 15]

What this all means is that if you hear other people say "tech may be getting near fair value and ready to bottom,'[16] but also hear me saying "our value bet is still priced at really crazy levels," they are not necessarily wildly inconsistent statements. In the short run these bets are probably pretty correlated. That is, if tech falls (relative to the market) further, our best short-run guess would be for additional positive returns to within-industry value, and vice versa – if a big bounce occurred (relatively) in tech we'd expect within-industry value to get hit. But that's the short run when correlated animal spirts rule the day (OK, maybe the quarter).[17] At the medium term (say at least a few years out) it's entirely possible to see tech be OK (given it's not starting today at as crazy a level as our within-industry value spreads) *and* within-industry value returns continue to shine.[18, 19]

This logic also extends to a lot of discussion of value investing that begins with a macro view. E.g., "We think in light of inflation you should favor these sectors…" or "With growth hard to come by in a slowdown, perhaps investors are right to pay more for these industries…" While we'd generally caution against being highly confident about such forecasts, it's particularly important to make sure you're not betting on something 0.50 correlated with your real forecast. That is, if you think inflation is going to soar (or crash down) then go short (or long) a bond, don't go long the broad market versus technology because you think that's correlated to the inflation story. If you do, you have to be right twice to win (right about your macro forecast and then right about the link of that forecast to the bet you actually made). Anyway, we believe another advantage of trying to bet long and short within industries is that this bet should be far less sensitive to big macro events/trends, especially over anything but the short run (over which who knows!?).

In other words, there are many different kinds of strategies and bets that are often labeled "value." Tech versus the market is clearly one of them, perhaps the major one – though one we try not to bet on. The one we do bet on is long and short extremely diversified portfolios of global stocks with a serious attempt not to bet on industries (like tech). We like our way a lot better strategically (i.e., over the very long term) and that's why we structure our value bet this way. But, today, we also like our way a lot more tactically. A single industry that's priced high (84th percentile) versus the broad market, but way under the peaks we've seen, outperforming medium-term is plausible. A very very

diversified portfolio (by names and industries) of expensive stocks outperforming their far cheaper counterparts, when the spread in valuations between these portfolios is still within sight of all-time records[20] is a fair amount less plausible.

More succinctly: our value bet is not tech vs. the world, and we are very happy about that.[21]

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[1] This one is just the U.S.A., where in my last few blogs I used global spreads. Doesn't matter.

[2] Spreads are constructed using a hypothetical value composite that includes five value measures: book-to-price, earnings-to-price, forecast earnings-to-price, sales-to-enterprise value, and free cash flow-to-enterprise value (the latter two are enterprise value, not stock price, as the fundamental being measured is pre-interest payments and thus should be compared to the whole capital structure). Spreads are measured based on ratios and are adjusted to be dollar-neutral, but not necessarily beta-neutral through time. To construct industry-neutrality, the value spreads are constructed by comparing the value measures within each industry. The risk models used are proprietary equity risk models. Hypothetical data has inherent limitations, some of which are listed in the Disclosures. For illustrative purposes only and not representative of an actual portfolio AQR currently manages. Please read the Disclosures for important information.

[3] Five is enough to make sure that it's not one crazy measure driving things (e.g., if everyone's favorite whipping boy, book-to-price, was driving the bus—which it's not).

[4] Something we have been doing for a loooong time, though I should mention that it's always an approximation. Industry classifications aren't objective or perfect. But we do think using them removes a lot of "apples-to-oranges" comparisons. Also, while it should be crystal clear by now (this being my Nth blog on the topic) that the vast majority of our value exposure is industry-neutral, we do take some valuation-based industry bets here and there (e.g., in long-only, beat-the-benchmark, no-shorting-allowed portfolios, as this bet is useful to get active risk as it's more volatile per dollar). But it's tiny relative to our within-industry value bets.

[5] The industry adjustment itself can make valuation measures more robust (if some measures, e.g., book-to-price, are really not very comparable across industries but are comparable within them).

[6] Spreads are constructed using a hypothetical value composite that includes five value measures: book-to-price, earnings-to-price, forecast earnings-to-price, sales-to-enterprise value, and free cash flow-to-enterprise value (the latter two are enterprise value, not stock price, as the fundamental being measured is pre-interest payments and thus should be compared to the whole capital structure). Spreads are measured based on ratios and are adjusted to be dollar-neutral, but not necessarily beta-neutral through time. To construct industry-neutrality, the value spreads are constructed by comparing the value measures within each industry. The risk models used are proprietary equity risk models. Hypothetical data has inherent limitations, some of which are listed in the Disclosures. For illustrative purposes only and not representative of an actual portfolio AQR currently manages. Please read the Disclosures for important information.

[7] And most other factors, with momentum being a notable exception.

[8] To the best of our ability. Again, defining industries is never as simple an exercise as it seems.

[9] We first calculate the five value multiples (book-to-price, earnings-to-price, forecast earnings-to-price, sales-to-enterprise value, and cash flow-to-enterprise value) for the S&P 500 Index and a hypothetical IT Sector portfolio (market capitalization-weighted portfolio of names in the GICS Information Technology Sector). Spreads are measured as the ratio of S&P 500 Index multiple and hypothetical IT Sector portfolio multiple, averaged across the five measures and standardized relative to their full history. We also tested equal-weight versions of this spread and got a very similar picture.

[10] You could tweak these for industries, placing more weight on measures you think compare better *across* rather than *within* industries (e.g., sales-to-price might not be a great one to compare across industries with radically different margins). I didn't want to do a subjective, perhaps data-mined exercise, and I did want the two graphs to be directly comparable, so I kept them the same here. Also, it doesn't really matter as, as far as I can tell, these results are robust to any reasonable combinations of reasonable valuation factors.

[11] These graphs use daily data through 5/9/2022 (which isn't special, it's just when I started writing this piece).

[12] Spreads are constructed using a hypothetical value composite that includes five value measures: book-to-price, earnings-to-price, forecast earnings-to-price, sales-to-enterprise value, and free cash flow-to-enterprise value (the latter two are enterprise value, not stock price, as the fundamental being measured is pre-interest payments and thus should be compared to the whole capital structure). Spreads are measured based on ratios and are adjusted to be dollar-neutral, but not necessarily beta-neutral through time. The risk models used are proprietary equity risk models. Hypothetical data has inherent limitations, some of which are listed in the Disclosures. For illustrative purposes only and not representative of an actual portfolio AQR currently manages. Please read the Disclosures for important information.

[13] With momentum at the within-industry value strategy's back and the fundamentals (separate blog forthcoming perhaps?) better than usual for value right now.

[14] In related work defending the value bet, I showed here that our conclusion, that value looked exceptionally cheap, was almost completely unaffected by ignoring the tech industry in its entirety.

[15] Recall from other blogs that, of course, when value does well there is a tendency for the value spread to fall, but it's not 1:1. In particular, turnover in what constitutes expensive and cheap and, over longer horizons, realized fundamental performance can drive a wedge between these two effects. In the value comeback to date, this has gone our way; the value spread has fallen less than we'd have guessed based only on realized value performance. While this can go both ways (the nature of imperfect relationships), it is very nice at the moment.

[16] Don't trust anyone's (including my) short-term forecasts!

[17] I'm revealing my bias by saying "animal spirits" here. If we are very wrong and innovation is more than enough to make today's (and even higher recent) value spreads rational, it's certainly possible the innovative industries doing better is correlated with the innovative firms within each industry doing better in a more rational way than "animal spirits."

[18] Of course, other cases we'd enjoy less are also possible (though by definition we think less likely).

[19] I can't help tying this to my recent Twitter kerfuffle regarding my comments about ARKK. Putting this all together, looking at current spreads it is possible (I'm not saying likely) that tech is bottoming but the value trade we implement has a long way to go. Now add in the fact that ARKK runs pretty concentrated portfolios (whereas we're betting on the overall phenomenon, not specific stocks), there is a possibility – admittedly slim as our factor exposures are so opposite, but still a possibility – that we will both be happy with the next few years (if our systematic value bet continues to do well from these still crazy levels, but tech itself is near a bottom and ARKK's concentration pays off versus tech). See, I'm always the peacemaker.

[20] Am I gilding the lily too much if I again note that the value factor is fighting momentum and fundamentals less than normal too? "Fighting less" means cheap companies usually have worse momentum and fundamentals than expensive ones. They should be cheaper, just not *as cheap* as they get (which is why we think value works long-term).

[21] Finally, after once again writing on and on about value, I remind everyone that value, even with some "sinning" going on, is only part of our process. When it goes totally mad (like 2018-2020) for "bubblish" reasons that keep other factors (like fundamentals) from helping, it's ugly for us. But value can disappoint for long periods (like post the GFC through 2017) and it turn out peachy for us if it disappoints for reasons supported by the fundamentals (i.e., the other factors capture that). One day soon I hope to write something that doesn't focus on value!

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