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The Disconnection of Style-Based Investing - Round Two

In early 2019, we authored *The Disconnection of Style-Based Investing*[i] to explore how the notion of Growth versus Value holds up when one looks at style-based assignments *within* sectors rather than that used by S&P's methodology, which involves assigning Growth and Value labels *in the aggregate*. Index developers, such as S&P Dow Jones (S&P) create methodologies that label companies into two basic camps: (i) those who grow quickly or (ii) those whose securities are priced inexpensively, while creating proprietary mechanisms for those companies that are a hybrid of the two. Since these evaluations take place at the root index levels, well-documented sector biases result: Technology and the newly coined Communications Services sector comprise 42% and 14% of the S&P 500 Growth Index, respectively, compared to 12% and 7%, respectively, for the Value Index[ii]. As these index construction differentials give rise to performance differentials amongst the conventional style-based indices, we asked the question, "As styles go in and out of favor, is this nothing more than sector rotation or sectors going in and out of favor?" A related question might be, "If we are in a conventionally-defined Growth (Value) market, shouldn't the Growth (Value) securities *within* sectors be outperforming as well?"

Using the S&P 1500, we redefined how securities' growth and value tendencies stack up *within* their sectors. That is, we re-characterized securities' Growth/Value labels, re-assembled these constituents into alternative style-based indices – ($Growth_{IP}$ and $Value_{IP}$), and measured the performance alignment from 2009 through 2018 between the conventionally defined and alternative style-based indices[iii]. We found that in four of ten years within this period, the style that outperforms when constructed in the Isthmus Partners' methodology was different than the winner per S&P's convention. Moreover, the performance differential in most years between $Growth_{IP}$ and $Value_{IP}$ was often significantly less than the difference in the S&P 1500 Growth and Value Indices with the range between the two IP indices less than the range between the S&P Indices in eight of the ten years, including the last four, muting the difference in performance of growth and value, per our definitions, over a longer time frame.

The Refresh

The remarkable advantage of conventionally defined Growth versus Value in 2020 prompted us to extend our analysis through 2020. Given no distinctive cumulative performance differential over the 2009-2018 time frame between our alternatively-defined $Growth_{IP}$ and $Value_{IP}$, we were curious to learn if (a) the "winner" flipped, as it did in 2009, 2012, 2013 and 2014 or (b) if $Growth_{IP}$ outpaced $Value_{IP}$, was the magnitude of the difference less pronounced as in prior periods (we included 2019 as well for continuity).

Results

The updated results can be seen in TABLE 1 below.

TABLE 1

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	12 Year CAGR
S&P 1500 Growth	32.2%	16.7%	4.2%	14.8%	33.1%	13.9%	5.2%	7.9%	26.5%	-0.8%	30.6%	32.4%	14.7%
S&P 1500 Value	22.2%	16.1%	-0.7%	17.8%	32.5%	12.1%	-3.5%	18.5%	15.0%	-9.3%	31.3%	1.6%	11.9%
Winner	Growth	Growth	Growth	Value	Growth	Growth	Growth	Value	Growth	Growth	Value	Growth	
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	12 Year CAGR
IP Growth	22.0%	17.8%	3.0%	16.1%	32.1%	11.0%	2.7%	8.8%	23.4%	-3.5%	40.2%	28.0%	13.8%
IP Value	31.8%	14.1%	0.9%	15.1%	32.3%	12.9%	-0.5%	15.7%	17.6%	-6.3%	29.1%	10.4%	12.9%
Winner	Value	Growth	Growth	Growth	Value	Value	Growth	Value	Growth	Growth	Growth	Growth	
Same/Different	Different	Same	Same	Different	Different	Different	Same	Same	Same	Same	Different	Same	

Source: FactSet Research Systems Inc.

In 2019, we saw the equation flip for the first time since 2014, but for the fifth time in the last twelve years, with $Growth_{IP}$ outperforming $Value_{IP}$ despite the S&P 1500 Value Index slightly outperforming the S&P 1500 Growth Index. While 2019 proved to be a fairly mixed year with both Growth and Value generating strong returns in both calculations, 2020 was really a blowout year for growth across both S&P and IP indices. That said, similar to our prior analysis the gap between the two was 57% smaller under the IP scenarios when compared to the traditionally constructed indices.

In the previous whitepaper, we also broke down this performance by industry. You can see the updated tables below.

TABLE 2

By Sector - GROWTH	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	CAGR
Banking	-6.2%	9.9%	-10.5%	24.8%	37.2%	11.7%	-1.3%	20.6%	10.4%	-15.0%	36.2%	-7.0%	7.9%
Building	-4.8%	15.9%	-13.5%	47.5%	40.0%	5.1%	23.2%	25.7%	13.1%	-25.1%	40.9%	9.2%	12.7%
Capital Goods	28.3%	27.5%	-3.4%	16.8%	38.6%	5.2%	-0.1%	12.6%	34.5%	-9.8%	14.5%	14.8%	14.0%
Chemicals	22.9%	7.5%	6.2%	22.2%	29.0%	6.6%	-4.6%	11.0%	14.4%	-7.0%	34.0%	18.6%	12.8%
Consumer Durables	28.0%	40.6%	-14.3%	31.7%	35.7%	11.2%	6.6%	5.2%	35.6%	-27.0%	31.5%	224.6%	25.0%
Consumer Staples	20.8%	17.4%	16.3%	10.4%	22.0%	17.0%	11.2%	5.6%	13.9%	-7.0%	25.7%	10.0%	13.3%
Energy	5.8%	20.8%	-5.9%	2.6%	27.0%	-8.1%	-32.7%	29.8%	-4.9%	-16.9%	8.1%	-31.1%	-2.5%
Financials	33.8%	10.5%	9.1%	24.5%	29.2%	17.8%	6.3%	6.6%	23.4%	1.5%	11.9%	11.9%	15.2%
Health Care	12.5%	5.5%	6.3%	20.9%	46.0%	25.8%	6.1%	-9.0%	24.7%	4.9%	25.7%	10.0%	14.1%
Insurance	1.3%	20.2%	-2.1%	16.6%	37.2%	14.6%	-4.1%	18.0%	20.5%	-1.1%	24.6%	4.7%	11.9%
Metals	18.3%	44.6%	-19.7%	-15.5%	-3.5%	-4.6%	-33.3%	60.3%	3.9%	-26.9%	22.4%	22.2%	2.2%
Paper & Related	98.1%	-9.6%	1.9%	22.2%	20.3%	-3.2%	-17.0%	11.0%	19.1%	-10.4%	47.8%	42.0%	15.0%
Retail	24.1%	30.5%	9.7%	23.8%	41.8%	7.5%	21.7%	3.8%	36.1%	15.9%	25.4%	62.7%	24.3%
Semiconductors	61.1%	19.1%	-12.0%	-5.3%	26.9%	27.5%	-2.2%	41.3%	47.4%	-14.7%	56.8%	74.9%	23.3%
Services	19.5%	25.2%	11.1%	16.8%	44.2%	5.7%	10.4%	4.9%	19.0%	1.7%	28.1%	28.1%	17.3%
Technology	67.3%	21.6%	3.3%	20.9%	23.6%	-1.4%	6.8%	5.5%	41.1%	-3.4%	51.0%	51.9%	22.0%
Telecommunications	5.3%	16.2%	5.6%	13.6%	9.5%	2.7%	-1.9%	29.5%	-3.8%	9.7%	13.7%	12.1%	9.0%
Transportation	17.2%	25.9%	2.8%	11.3%	44.1%	38.1%	-15.0%	23.3%	22.2%	-17.8%	22.3%	26.7%	15.2%
Utilities	3.5%	5.8%	19.2%	-0.2%	18.3%	23.8%	0.0%	15.9%	13.5%	5.5%	30.2%	5.0%	11.3%

Source: FactSet Research Systems Inc.

TABLE 3

By Sector - VALUE	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	CAGR
Banking	12.0%	7.8%	-31.8%	42.9%	37.8%	14.5%	3.5%	29.4%	24.2%	-17.1%	32.6%	-19.0%	8.8%
Building	22.2%	-1.3%	-11.0%	45.3%	29.7%	10.2%	27.2%	24.2%	29.8%	-26.5%	58.8%	17.8%	16.6%
Capital Goods	23.8%	26.5%	0.6%	20.0%	46.0%	3.1%	-0.7%	25.2%	11.0%	-20.9%	3.6%	3.6%	10.6%
Chemicals	54.3%	34.7%	-4.9%	16.8%	32.9%	9.5%	-0.5%	14.5%	21.6%	-19.0%	4.8%	17.1%	13.6%
Consumer Durables	80.2%	26.4%	-15.9%	36.9%	29.4%	0.1%	-2.7%	5.0%	22.6%	-26.2%	30.2%	18.2%	14.0%
Consumer Staples	15.7%	13.2%	12.5%	9.2%	31.4%	15.0%	4.9%	5.8%	4.2%	-12.4%	23.7%	6.4%	10.3%
Energy	29.9%	18.8%	13.5%	4.1%	24.5%	-9.8%	-15.7%	23.6%	1.8%	-20.2%	11.0%	-35.3%	1.8%
Financials	49.4%	17.9%	-30.1%	28.9%	34.4%	15.1%	-9.4%	17.1%	21.1%	-15.1%	-1.4%	-1.4%	8.3%
Health Care	23.1%	4.2%	16.0%	14.7%	35.7%	22.2%	6.7%	4.7%	19.4%	8.3%	23.7%	6.4%	15.1%
Insurance	17.4%	22.5%	-15.2%	23.2%	45.4%	12.4%	4.8%	18.9%	15.6%	-8.3%	22.4%	-2.4%	12.0%
Metals	114.9%	8.3%	-30.5%	-1.2%	6.5%	-16.7%	-42.6%	76.5%	23.6%	-27.1%	35.7%	35.6%	7.5%
Paper & Related	23.7%	9.6%	-1.8%	36.7%	24.2%	-1.6%	8.0%	9.9%	26.6%	-27.6%	41.4%	27.0%	13.0%
Retail	52.6%	16.9%	5.4%	16.0%	24.9%	16.4%	5.8%	-0.1%	13.7%	1.6%	30.5%	24.2%	16.5%
Semiconductors	59.1%	12.4%	5.6%	2.0%	42.4%	41.8%	-0.3%	21.9%	36.7%	-2.1%	40.6%	12.8%	21.2%
Services	45.1%	21.5%	3.9%	27.2%	40.6%	13.0%	-0.4%	18.0%	17.2%	-2.6%	9.1%	9.1%	16.0%
Technology	53.5%	3.4%	-3.2%	8.4%	29.0%	19.2%	3.6%	17.0%	29.9%	2.8%	38.4%	38.3%	18.9%
Telecommunications	10.4%	20.1%	5.8%	17.3%	13.7%	2.7%	5.3%	21.4%	-0.5%	-9.3%	32.7%	-15.0%	7.9%
Transportation	30.1%	25.6%	2.9%	3.5%	42.8%	25.2%	-17.5%	23.5%	23.8%	-0.7%	21.9%	11.4%	14.9%
Utilities	19.9%	9.3%	18.6%	4.2%	10.0%	31.2%	-7.8%	18.1%	10.9%	3.3%	23.0%	-6.0%	10.7%

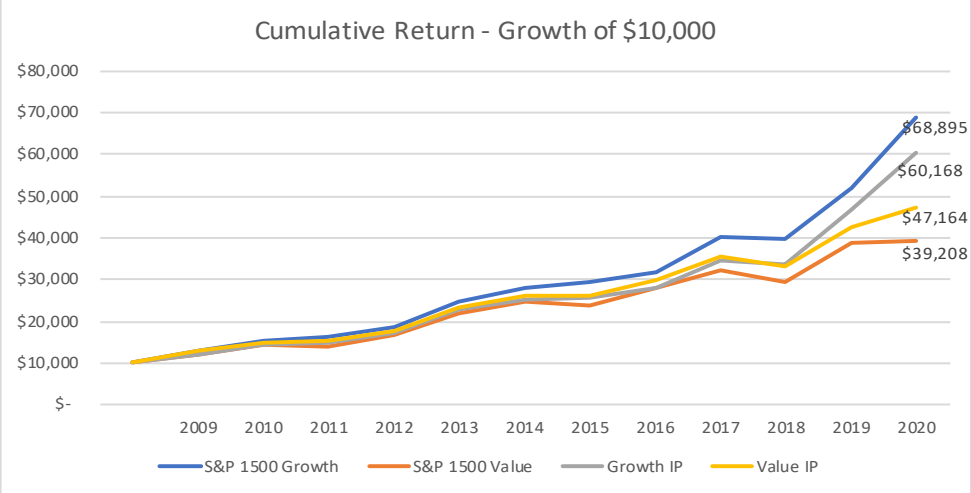
Source: FactSet Research Systems Inc.

You can see that not only did Growth$_{IP}$ outperform Value$_{IP}$ by a significant margin in 2020, but also that 17 of the 19 sectors saw growth outperform value in the adjusted scenario. The lone sectors where that wasn't the case were Building and Metals. And while our index construction differs from the conventional methodology, the impact of outlier performances can still be seen in places like Consumer Durables, where the blowout performance in Growth$_{IP}$ was driven by a heavy weight in Tesla, Inc. (TSLA).

A few other observations: even traditional "value" sectors like Banking, Capital Goods and Telecommunications saw a pretty strong outperformance of growth. Next, in looking at the traditional Growth sector of Semiconductors, we see that the Growth$_{IP}$ composition outperformed the Value$_{IP}$ component by 62%! That's far and away the biggest discrepancy between the two indices if we throw out Consumer Durables due to the outsized impact of TSLA. And while Technology was among the top performers in both Growth$_{IP}$ and Value$_{IP}$ sectors, the Growth$_{IP}$ Technology sector outperformed its counterpart by over 1350 bps. All of these data show that 2020 was truly a Growth year in nearly every aspect of the word.

Finally, we update the chart showing the growth of $10,000 over the time period of our study in Chart 1 below. You can see that the gap has widened between the cohorts, driven by growth's strong performance in 2020. The gap does remain narrower between the IP created benchmarks than the S&P benchmarks – 90 bps annually for the former compared to 280 bps for the latter - showing that there is some validity to the theory of sector bias in the latter's construction.

CHART 1



Source: FactSet Research Systems Inc.

Summary

We set out to determine whether or not the Growth label's conventionally measured outperformance in 2020 was due solely to certain sectors driving its outperformance. We conclude that Growth sustained an advantage, even when redefined, versus Value, yet the magnitude of the advantage of Growth$_{IP}$ outperforming Value$_{IP}$ was less pronounced when compared with the conventionally-defined indices. Said differently, in 2020, not only did owning "growthier" securities in general (in large part by having meaningful exposures to sectors typified by Growth) pay off, but also owning securities of companies apt to grow quickly *within* sectors paid off as well, yet by a lesser extent. Thus, the redefinition of Growth and Value did not result in a "flip" for 2020, confirming the advantage of owning faster growing companies across most industries. This sector driven disparity had amplified the price-to-value opportunities for high quality companies earlier in 2020 and prior, particularly for those industries that are more cyclically geared.

That is, although our philosophy and process is distanced away from labels, our approach in identifying securities of high quality companies that are not fully appreciated by investors has recently led us to more value-characterized opportunities in the current environment, consistent with our findings above. It would not be surprising if our strategies' characterization shifts towards companies typically associated with "growth", particularly if the recent advantage sustained by cyclicals persists.

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[i]Isthmus Insights Winter 2019 whitepaper titled *The Disconnection of Style-Based Investing* can be found at isthmuspartnersllc.com.

[ii]Based on GICS sectors for respective iShares ETFs. As of 12/31/20.

[iii]In developing $Growth_{IP}$ and $Value_{IP}$ we utilized the S&P U.S. Style Indices Methodology as detailed by S&P Dow Jones to parse the data at the sector level. Once we have redefined Growth and Value within sectors, we aggregate the securities so that roughly fifty percent of each sector's market cap is put into the growth index and the other 50% is placed into the value index to arrive at $Growth_{IP}$ and $Value_{IP}$. At a high level, this construction involves the following steps:

1. Assign Growth and Value Factors for each constituent
    - The Growth Factors used are:
        - Three-Year Change in Earnings per Share (Excluding Extra Items) over Price per Share
        - Three-Year Sales per Share Growth Rate
        - Momentum (12-month % Price Change)
    - The Value Factors used are:
        - Book Value to Price Ratio
        - Earnings to Price Ratio
        - Sales to Price Ratio

2. After being winsorized to the 90th percentile, raw values for the above are calculated, standardized and averaged for each constituent such that each has a Growth Score and a Value Score.

3. Style baskets in each sector are created by sorting by the Growth Score/Value Score Ratio
    - By S&P's convention, the highest ranked securities that account for 33% of the group's market capitalization exhibit pure growth characteristics (Pure Growth);
    - The lowest ranked securities that account for 33% of the sort's market capitalization exhibit pure value characteristics (Pure Value);
    - The remaining 33% of the sort's market capitalization are ranked in the middle and these securities exhibit some growth and value characteristics (Hybrid).

4. To create $Growth_{IP}$ and $Value_{IP}$, we aggregate the list of companies at the security level. Again, 50% of each sector's market cap will exist in $Growth_{IP}$ and the other 50% will reside in $Value_{IP}$. 100% of the Pure Growth securities' market caps are put into the $Growth_{IP}$ Index. 100% of the Pure Value securities' market caps are put into the $Value_{IP}$ Index. Finally, with regard to the Hybrid securities, a percentage of these companies' market caps, determined based on their Growth and Value Scores, is put into both the $Growth_{IP}$ and $Value_{IP}$ indices so that 100% of the securities' market caps are accounted for in one index or the other. Those Hybrid securities with a higher Growth Score/Value Score Ratio will take on a higher weight within the $Growth_{IP}$ Index compared to the $Value_{IP}$ Index.

5. Finally, we use these market caps to weight each security in their respective index. The annual returns for $Growth_{IP}$ and $Value_{IP}$ are the weighted average returns of their constituents.

6. In addition, in order for us to analyze data by sector, style baskets created in a similar manner are used to create market capitalization weighted Sector Growth and Value Indices (i.e., Technology $Growth_{IP}$ and Technology $Value_{IP}$) in a similar matter. That is, a company's weight in its Sector Growth/Value index is related to its Pure Growth, Pure Value, or Hybrid status as outlined in the creation of the IP indices above.