Denali Advisors

Quarter I, 2019 Performance Review

Denali Network Value Small

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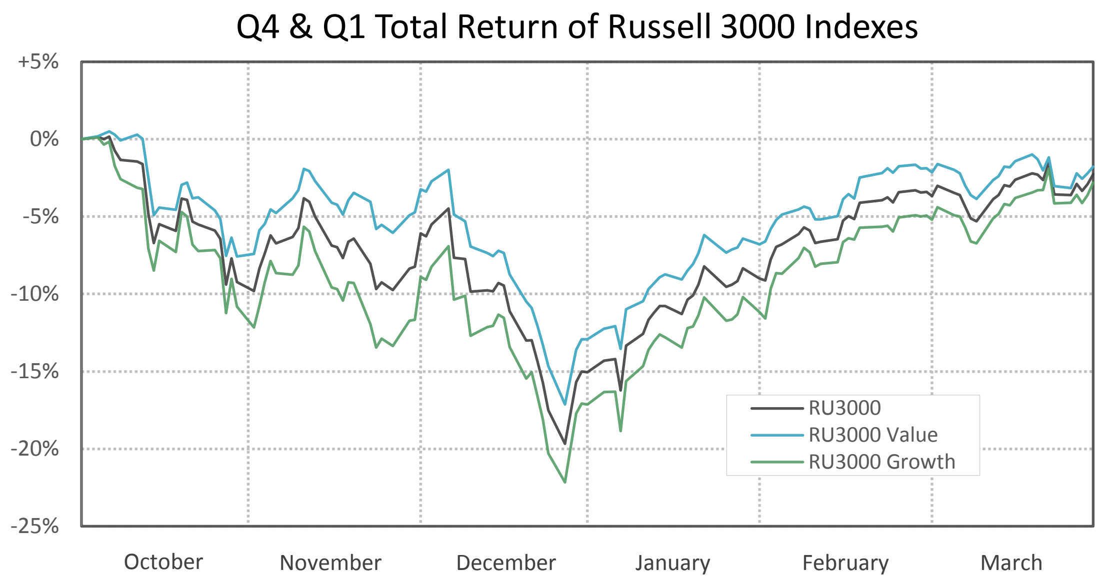
Economy and Markets

The American economy continued to grow steadily in the first quarter of 2019, despite some short-term deceleration. The annualized growth in GDP for the fourth quarter over Q3 was reported at 2.2%, somewhat lower than expected. Private investment was again the strongest driver of growth, with government spending actually contracting. Exports rebounded to expansion over the prior quarter, with both imports and exports growing near the overall GDP rate. The by-now established but still poorly understood pattern of a trough in growth in the first quarter of each year is apparently continuing, with first quarter growth estimated at 1.6% annualized over Q4. However, this would bring growth over the prior year to 2.9%, which would be the fourth straight quarter of year-over-year growth of 2.9 to 3.0%.

This growth produced almost 200,000 additional payroll jobs in Q1, but this did not quite keep up with net entries to the labor force, as unemployment ticked back up to 3.9%. Workers' average earnings grew by 3.2% over the prior year, outpacing the CPI by an estimated 1.5%. Company profits continue to grow, but the rate of increase is slowing. S&P 500 earnings for the first quarter are expected to be about flat relative to Q4. This would be 7.5% above the prior year for the first quarter, compared to 16% year-on-year growth reported for the previous quarter.

Long-term interest rate movements were a major market driver in the quarter. The fourth quarter's crash in ten-year Treasury yields ended with a spike below 2.6% in early January. Yields recovered somewhat over the next two months as the Fed's governors actively put out the message that they would be more deliberate with any further monetary tightening. At its March meeting, the FOMC held its short-term target rate steady, slowed the decrease of the Fed's bond holdings and lowered its growth forecast, prompting another drop in long-term rates. That same week, disappointing European economic data pushed down international interest rates, with German 10-year yields falling back below zero, pulling U.S. rates down further and leaving the yield curve inverted by some measures. The 10-year T-bond yield ended the quarter at 2.41%, down almost 30 bp in the period and the lowest level since 2017.

Oil prices also continued to see large movements in the quarter. The price of crude rebounded sharply into January from the fourth quarter collapse, then climbed steadily through the quarter as production is expected to grow slower than consumption, while Venzuela and some other producers struggle. U.S. benchmark crude rose 32% in the quarter to finish about $60 per barrel, but this only regained about half the price decline in Q4. One fairly stable factor in the quarter was the U.S. dollar's foreign exchange rate, which has traded in a fairly narrow range since October and rose just about 1% in the quarter.



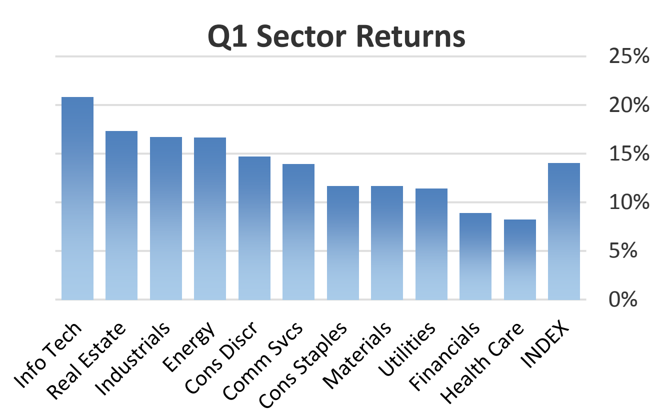
Risk off / Risk on

The U.S. stock market's performance in the first quarter was largely a v-shaped reversal of the steep drop in the quarter before, both in terms of absolute return and relative style performance, producing the largest quarterly gain since 2009 at 14.04% (but still falling just short of erasing the Q4 loss of 14.3%). The rally was sparked by direct efforts by FOMC members to address investors' concerns about interest rate risks. Strong employment reports, solid earnings announcements and reported progress in China trade negotiations also eased investors' risk perceptions. Daily volatility fell by almost half from Q4 to Q1, and the VIX index declined by the most ever in a quarter (source: *WSJ*). Meanwhile, the fallback in long-term rates was supportive of higher valuations.

Relative sector performance was also largely characterized by reversal from the previous quarter, as Technology and the traditionally cyclical sectors outperformed the more defensive sectors, with some interesting exceptions. The collapse in long-term interest rates and the resulting shallower yield curve boosted Real Estate, which was the second-best sector for a second consecutive quarter, while depressing the Financials, the second-weakest sector. Health Care was the weakest large cap sector but outperformed among small caps, as growth-oriented small biotechs handily outran big pharma stocks.

Russell Index Returns, Q1 2019

Index	All	Growth	Value
Russell 3000	14.04%	16.18%	11.93%
Russell 1000	14.00%	16.10%	11.93%
Russell Midcap	16.54%	19.62%	14.37%
Russell 2000	14.58%	17.14%	11.93%
Russell Microcap	13.10%	16.00%	10.44%



Growth style indexes led Value in all market cap ranges in the quarter, while mid caps outperformed both large and small cap stocks, historically a very common market behavior.

Denali Performance Review

	Q1 2019			One Year			Since Network Value inception			
Strategy	Gross	Net	Bench	Gross	Net	Bench	Gross	Net	Bench	mo's
Network Value Large	10.81%	10.74%	11.93%	-0.04%	-0.33%	5.67%	12.50%	12.14%	11.34%	78
Network Value Large Core	11.96%	11.90%	14.00%				-0.77%	-0.89%	-1.76%	6
Network Value Mid	15.01%	14.90%	14.37%	2.60%	2.18%	2.89%	13.86%	13.44%	11.82%	78
Network Value Small	10.83%	10.58%	11.93%	4.95%	3.91%	0.17%	11.36%	10.28%	7.98%	70
Network Value Micro	7.71%	7.40%	10.44%	-0.65%	-1.89%	-3.19%	8.37%	7.05%	6.06%	63

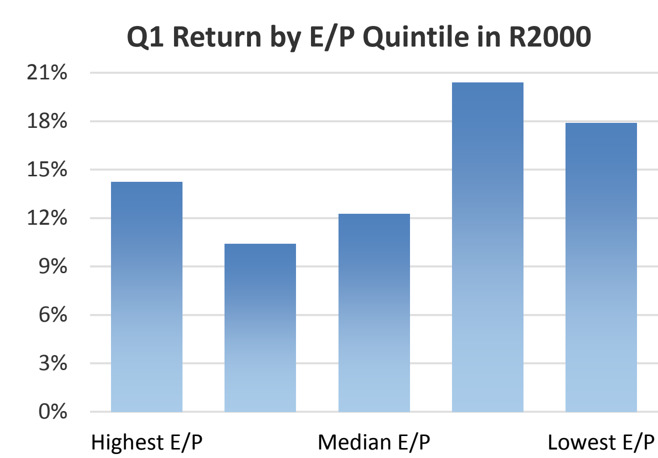
Returns for Denali's Network Value Large, Mid, Small and Micro composites are presented gross and net of management fees. Please refer to disclosures at the end of this commentary.

As is commonly the case in very fast rising markets, Denali's value-oriented strategies mostly produced returns in the first quarter that were somewhat more moderate than their benchmark indexes, while still robust in absolute terms. Our Network Value Mid strategy, however, did manage to outperform against a very strong benchmark.

The performance of Denali's portfolios over the past year was varied. With the exception of last year's fourth quarter, this was a challenging period for Value-oriented U.S. equity strategies, as low P/E ratio stocks in particular lagged behind more expensively valued Growth stocks. Network Value Large in particular was also affected by the strong selloff in smaller stocks and some disappointing individual stock selection in Q4, all leading to significant underperformance in the past year, while our Network Value Mid composite just fractionally trailed its benchmark. The Value headwinds were not as strong among smaller cap stocks, and our Small and Micro cap strategies were able to produce robust excess return for the year. All of our strategies remain significantly ahead of benchmark for the period since the inception of the Network Value based process.

Q1 Performance Analysis

The **Network Value Small** composite returned 10.83% in the first quarter before fees, against 12.93% for the Russell 2000 Value benchmark. One of the most important market effects in the quarter was the fact that stocks with less expensive valuations relative to earnings among small caps were largely left behind in the Q1 rally. This was partly the effect of lower long-term rates, which theoretically increase the relative value of stocks whose price is based more upon earnings further into the future (growth stocks), and tend to have lower current earnings/price ratios. As the chart shows, stocks in the Russell 2000 with E/P ratios above the median produced much lower returns on average than those with below median E/P. As usual, below we will discuss results of several methods of analyzing our relative return and the contributions from elements of our process, but the bottom line is that our large overweight in the highest quintile



of earnings/price and underweight in the lowest basically accounts for the difference between our return and the benchmark.

Our **Network Value Index** for the small cap universe returned 11.48% in the first quarter, accounting for about 40% of our underperformance vs. the benchmark.. The Network Value Index's underperformance vs. the Russell 2000 Value can be explained largely by its exposure to stocks with lower valuation multiples relative to earnings, and lower allocation to REITs.

The remainder of our portfolio's lower return vs. the benchmark (and the Network Value Index) was due to the other elements of our process, including negative results for our stock-level relative return forecasts. Our investment process combines two long-horizon return forecast models based on fundamental effects that tend to work in the same direction over time, with two short-horizon models that take account of trending or cyclical effects which might impact returns in the short-term:

Long term:

- The cross-sectional performance of the **Network Value Alpha** forecast model was negative overall among small cap stocks in the quarter, reflecting the broad underperformance of lower P/E stocks.
- The predictive performance of our **intrinsic value** forecast was neutral in Q1 despite general Value underperformance, reflecting the positive influence of higher long-term growth estimates on this model.

Short term:

- Our **detailed estimate revision** forecast also had neutral results in Q1 among small caps.
- Our **Characteristics Trend** model produced negative performance in Q1. With two major market reversals in the past 6 months, there was more reversion than continuity in factor return trends.

Denali Network Value Small Portfolio Characteristics

as of 3/31/2019

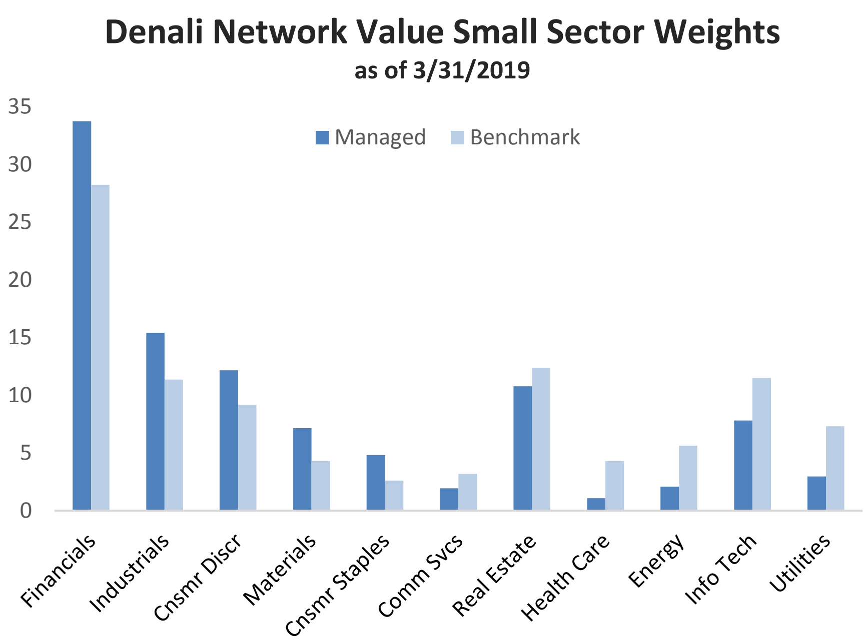
Characteristics:	NV Small	R2000V	Relative
Wgt Avg Mkt Cap $B	1,471	2,092	-30%
30 Day Dollar Weighted Volume	9.7	19.9	-51%
P/E trailing 12m	9.7	14.2	-32%
P/E forward 12m	10.3	13.7	-25%
# Names	67	1363	-95%

Characteristic Trend Model Factors:

- The sector momentum portion of the model was the most affected by the market reversals, as forecasts of underperformance for Energy and outperformance for Communications proved incorrect. However, correctly forecasting underperformance for the Financials and Consumer Discretionary stocks, and outperformance for Technology, helped us moderate our adverse exposures in those sectors.
- One trend that has been very persistent is the negative effect of exposure to stocks with higher sales-to-price ratios. Our exposure to this factor was the biggest negative impact in the quarter, consistent with the generally anti-Value environment.
- Our higher cash flow/price and higher exposure to dividend-paying stocks also had negative impacts in the quarter.

- Interestingly, in this analysis the *linear* effect of our exposure to higher current earnings-to-price ratios and higher forecast E/P ratios was actually a modestly positive impact in the quarter, *net of the effects of other factors* in our model. However, as we have seen, the relationship of returns to e/p was highly non-linear in the period.
- The linear effect of higher book/price was also slightly positive.
- Higher sales/assets exposure ("efficiency") had a positive factor impact in Q1; the positive performance of this factor has also been quite persistent in recent quarters.
- Our lower average volatility of earnings (a "quality" measure) was also a benefit for the quarter. However, our higher average Return on Equity had a negative impact.
- Our portfolio's higher short-term momentum had a large negative impact as the market reversed sharply in January.

Attribution analysis with the Barra model shows that our higher earnings yield had by far the most negative systematic effect, while our exposure to the Value factor was also negative. Our lower beta was a significant drag on our performance. The net effect of our exposures to industry factors was also seen as a negative. However, most of the net negative systematic effect was offset by what was attributed to positive specific asset selection. Interestingly, these selection benefits came mostly from avoiding some of the larger stocks in the benchmark.



Please refer to the Denali Network Value Mid disclosure at the end of this commentary.

Our active positions in GICS sectors reduced active performance by around 90 bp this quarter, accounting for the bulk of our underperformance. Most of the negative impact was from our overweights in the Financial and Consumer Discretionary sectors, and underweights in Technology, Energy and Real Estate. Our stock selection within sectors yielded modestly positive net results. The largest benefit was from successful stock selection results in the Discretionary sector, with selection within Energy and Industrials also contributing. Our most adverse selection results were in Financials, with modest negative selection impacts in the traditional defensive sectors of Health Care, Communications, Utilities and Staples.

- Among the **Financials** our most significant underperformers were insurance companies. We benefited from holding outperformers among regional banks and investment managers, and our overweight to Financial Services aided active performance.
- In the **Staples** sector, our overweight in grocery stores detracted from return.
- In the **Industrial** sector our most significant contributors were in the office products and transportation industries. Our overweight to information services firms was a benefit.
- Among **Discretionary** stocks, the portfolio's biggest individual contributions came from strong rebounds in retailers. However, our overweight to the leisure industry detracted from return.
- In **Technology**, our underweight to software stocks detracted, but our overweight to internet stocks was a benefit.

Outlook

Despite some large moves in asset markets this past quarter, our outlook has changed only incrementally. We still see fairly steady growth rates in the US, supported by strong consumption. The consensus of economists' forecasts for 2019 has ticked down to 2.4%, but we don't see a lot of downside risk to that estimate. U.S. growth will continue to exceed that in most of the developed world, but analysts are beginning to see growth bottoming out in Europe and China, so the drag from international trading partners should not get much worse. Unemployment is expected to fall to 3.6% this year, with average real wages rising steadily. Wage growth will put some pressure on corporate profit margins, but earnings should continue to grow, with S&P 500 profits estimated to rise around 9% this year over 2018.

The course of monetary policy has become much clearer, with short term rates on hold for this year and the Fed resuming bond purchases to offset maturing holdings. We do now anticipate that long term interest rates (e.g. 10-year Treasury notes) will take somewhat longer to recover from current depressed levels back to the 3% range, since rates in other developed markets are still on the floor, reflecting very accommodative monetary policies. Beyond that, we don't foresee much upward movement in rates in the medium term until there are signs of increasing inflation or re-accelerating growth, either here or abroad. The outcome of trade negotiations could be a catalyst for this, or for a downside surprise.

With the very sharp rebound in the market in Q1, it was not surprising that high valuation Growth stocks outperformed. However, we think that has largely played out for the short term; it was partly just the product of the falloff in long term rates, which we don't expect to persist. Spreads in valuations are now back to where they were before the fourth quarter correction, and going forward, given these spreads we see plenty of scope for outperformance for stocks with lower multiples relative to earnings. Denali's constant focus on stocks with valuations solidly supported by earnings should be beneficial in the environment we anticipate, with earnings growth, equity returns and volatility levels all more in line with historically typical levels than the extremes to both high and low that have been seen in the past two quarters -- and past two years -- and normalization as well in the behavior of the effects we use to produce added value.

Disclosures

Returns are presented gross and net of management fees and include the reinvestment of all income. Past performance is not indicative of future results. Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Denali was established in 2001 and manages equity and alternative assets for primarily institutional clients. The U.S. dollar is the currency used to express performance. Leverage is not used in these products.

Denali Network Value Mid: Composite consists of fully discretionary mid cap value portfolios, measured against the Russell Mid Cap Value Index, and intends to outperform that benchmark while maintaining similar sector, industry and security characteristics. The Denali Network Value Mid Composite was created October 1, 2005. As of January 07, 2014, the Denali Mid Cap Russell Composite was renamed the Denali NV Mid Composite, and then on July 17, 2014 was renamed the NV Mid Composite. As of October 18,2017, has been renamed Denali Network Value Mid. In September 2012, the investment process changed to select stocks using Denali's proprietary Network Value forecast model that ranks stocks by earnings and illiquidity in addition to the other factors that were previously being used to rank stocks. There were no changes to the investment objective. The sector and industry characteristics of the NV Model are still similar to the Russell Mid Cap Value Index. Net returns have been calculated by reducing gross returns by actual management fees incurred. The management fee schedule is as follows: First $25 million 0.75%, next $25 million 0.70%, balance 0.65%. Client returns will be reduced by advisory and other expenses the client may incur. There is a marketing minimum of $5 million

Denali Network Value Large: Composite consists of fully discretionary large cap value portfolios measured against the Russell 1000 Value Index benchmark, and intends to outperform that benchmark while maintaining similar sector, industry and security characteristics. The Denali Network Value Large Composite was created September 30, 2012. As of July 17, 2014, the Denali NV Hi Concentrated Composite was renamed the NV Large Composite. As of October 18, 2017, it has been renamed Denali Network Value Large. As of February 18, 2016, the secondary benchmark S&P 500 was removed as it is no longer representative of the strategy. The NV Large portfolio construction was based on the analysis of earnings and liquidity of selected companies from the Russell 3000 index combined with a factor forecast applied to stocks in this same universe. The management fee schedule is as follows: First $25 million 0.55%, next $25M 0.50%, next $50 million 0.45%, balance 0.40%. Client returns will be reduced by advisory and other expenses the client may incur. There is a marketing minimum of $5 million.

Denali Network Value Small: Composite consists of fully discretionary small cap portfolios. Results are compared against the Russell 2000 Value and intend to outperform that benchmark while maintaining similar sector, industry and security characteristics. The Denali Network Value Small Composite was created May 31, 2013. As of July 17, 2014, the Denali NV Small Composite was renamed the NV Small Composite. As of October 18, 2017, has been renamed Denali Network Value Small. As of February 18, 2016, the secondary benchmark Russell 2000 was removed as it is no longer representative of the strategy. The NV Small portfolio construction is based on the analysis of earnings, liquidity and other characteristics of selected companies from the Russell 2000 index. The composite is comprised of 100% non-fee-paying accounts for all periods presented. Net returns have been calculated by reducing gross returns by a model management fee of 1%. The model fee used to calculate performance is applied monthly. The management fee for this product is 1.00%. Client returns will be reduced by advisory and other expenses the client may incur. There is a marketing minimum of $5,000.000.

Denali Network Value Micro: Composite consists of fully discretionary micro cap portfolios. Results are compared against the returns of the Russell Microcap Value Index and intended to outperform that benchmark while maintaining similar sector, industry and security characteristics. The Denali Network Value Micro portfolio construction is based on the analysis of earnings, liquidity and other characteristics of selected companies from the Russell Microcap Index. As of February 4, 2014, the benchmark was changed from the Russell Microcap Index to the Russell Microcap Value Index retroactively. This change was made because we believed that the Value style index would provide a more useful performance comparison for clients and prospective clients in this strategy. The Denali NV Micro Composite was created December 31, 2013. As of July 17, 2014, the Denali Network Value Micro was renamed the NV Micro Composite. As of October 18, 2017, it has been renamed Denali Network Value Micro. The composite is comprised of 100% non-fee-paying accounts for all periods presented. Net returns have been calculated by reducing gross returns by a model management fee of 1.25%. The model fee used to calculate performance is applied monthly. The fee schedule for this product is 125 bps on all fund assets under management. Client returns will be reduced by advisory and other expenses the client may incur. There is a marketing minimum of $5,000,000.

Denali Network Value Large Core: Denali Network Value Large Core composite consists of fully discretionary large cap portfolios. Results are compared against the returns of the Russell 1000 Index and intended to outperform that benchmark while maintaining similar sector, industry and security characteristics. The Denali Network Value Large Core Composite was created September 30, 2018.. The Denali Network Value Large Core portfolio construction is based on the analysis of earnings and liquidity of selected companies from the Russell 3000 index. The management fee schedule is as follows: First $25 million 0.55%, next $25M 0.50%, next $50 million 0.45%, balance 0.40%. Client returns will be reduced by advisory and other expenses the client may incur. There is a marketing minimum of $5 million.