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In our view, the Big Growth and Small Value performance cycle is linked to the business cycle and yield curve. We also believe the flattening yield curve and cyclical shift from investment-driven growth to consumption-driven growth points to Big Growth outperformance moving forward.

Key Points

- As the market cycle matures, market breadth narrows and investor preferences shift from Small Value equities towards Big Growth equities, leading to Big Growth outperformance in the later stages of the bull market.
- This phenomenon is rooted in the nature of the business cycle: In the early stages of economic recovery, growth is driven by investment. This supports outperformance for Small Value indices, which tend to be dominated by capital-intensive, investment-driven sectors. As the economic cycle matures, growth is increasingly driven by consumption. This supports outperformance for Big Growth indices, which are dominated by services-focused sectors leveraged to consumption.
- Transition from investment-driven growth to consumption-driven growth is heavily influenced by the yield curve, with a steep yield curve in the early part of the cycle supporting capital-intensive investment through cheap and easy credit, and the flattening yield curve at the end of the cycle favoring service-oriented businesses (i.e. balance sheet light) leveraged more to consumption.
- With the early-cycle "capex snap-back" well behind us and the yield curve flattening, economic activity has shifted from investment to consumption. This suggests service-oriented, consumption-driven business will fare better than capital-intensive, investment-driven.

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Market Breadth and the Growth vs. Value Cycle

In the first stages of a new bull market, most equities outperform the market average, with Small Value equities leading the way. However, as the bear market "bounce" effect fades and the bull market matures, market breadth (defined as the percentage of constituents beating the market average) declines as investors abandon high-beta winners of the early bull and instead focus on blue chip growth equities which aren't as dependent on a cyclical rebound in economic activity to drive earnings.

Exhibit 1 shows how market breadth declines as the bull market progresses, and Exhibit 2 shows the strong *inverse* relationship between market breath and Big Growth relative returns vs. Small Value.

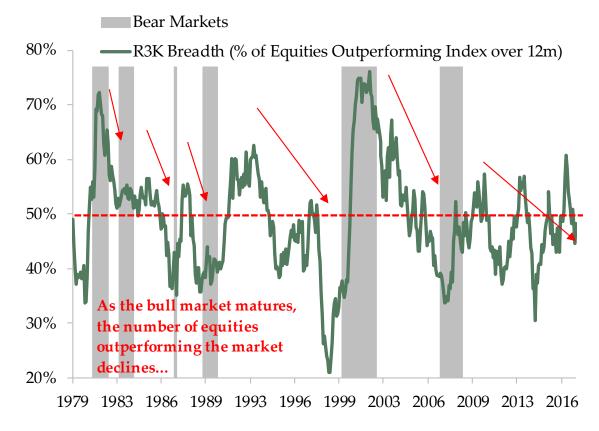


Exhibit 1: Market Breadth Narrows as Bull Market Matures

Source: FactSet as of 9/30/2017.

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R3K Breadth (% of Equities Outperforming over 12m) LHS Small Value 12m over Big Growth RHS 80% 60% Small Value leads 70% 40% 60% 20% 50% 0% 40% -20% .and as the "breadth" of the 30% -40% market narrows, investors **Big Growth leads** focus on large-cap growth over small cap value 20% -60% 1979 1983 1986 1989 1993 1996 1999 2003 2006 2009 2013 2016

Exhibit 2: Big Growth* Outperforms as Breadth Narrows

It is also worth noting that declining market breadth is an important driver for the relative returns of both style and size independently: Growth outperforms Value—regardless of size—*and* Big outperforms Small—regardless of style. This is illustrated in exhibits 10 and 11 of the appendix, which compare market breadth to Growth vs. Value and Big vs. Small, respectively.

*Unless stated otherwise, charts and data referencing "Big Growth" are based on the the Russell 1000 Growth index while "Small Value" is based on the Russell 2000 Value.

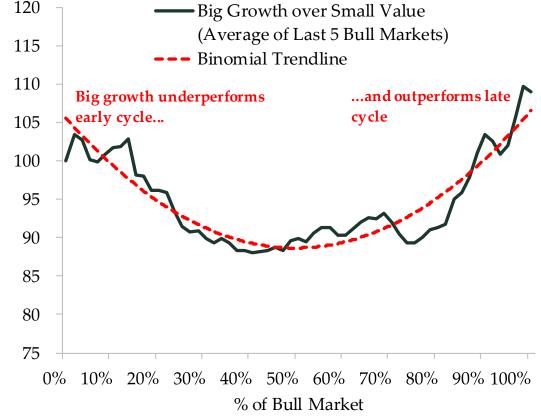
Source: FactSet as of 9/30/2017.

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Growth vs. Value and Consumption vs. Investment

As market breadth narrows as the bull market matures, this results in Big Growth outperformance in the later stages of the bull market. This is illustrated in Exhibit 3, which shows the average trajectory of the Russell 1000 Growth over Russell 2000 Value during the last 5 bull markets, with the duration of each bull market normalized on a percentage scale (i.e. 0-100%). Based on the historical trend, Big Cap Growth generally underperforms for the first half of the bull market, and then outperforms for the remainder.

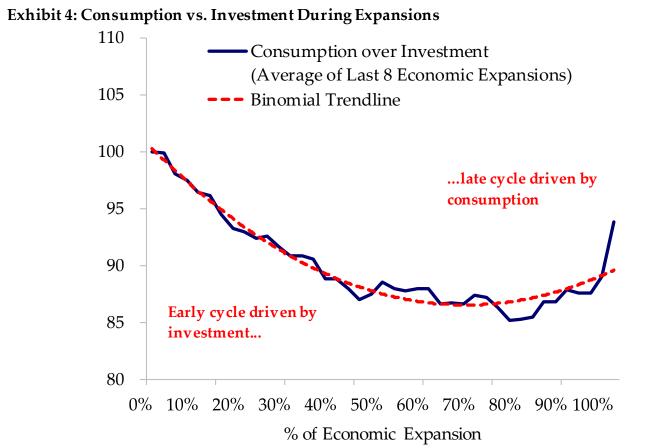




Source: FactSet, rebased to 100 at beginning of each bull market.

However, this phenomenon is not simply a function of investor sentiment—it is also rooted in the fundamental nature of the economic cycle. In the early stages of economic recovery, economic growth is driven by investment. As the expansion matures, investment slows and growth is increasingly driven by consumption. This phenomenon is illustrated in Exhibit 4, which shows the consumption-to-investment ratio during the last 8 economic expansions, with the duration of each expansion normalized on a percentage scale.

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Source: US Bureau of Economic Analysis; Personal Consumption Expenditures / Private Fixed Investment. Rebased to 100 at the beginning of each economic expansion.

There is a visual similarity between the Growth vs. Value trajectory during bull markets and the Consumption-to-Investment ratio during economic expansions. This is no coincidence—it is rooted in the sector composition of Big Growth and Small Value indices.

63% of the MSCI World Small Value Index falls in the Materials, Industrials, Real Estate and Financials sectors (see Exhibit 5). These Small Value sectors are capital-intensive and primarily driven by investment—characteristics which lend themselves to early-cycle outperformance. In contrast, 53% of the MSCI World Big Growth Index is in Information Technology, Consumer Staples and Healthcare (see Exhibit 5). These growth sectors are mostly service-oriented businesses and are primarily driven by consumption—characteristics which support late-cycle outperformance. The "Big Growth" and "Small Value" categorization is a reflection of these sectors' fundamental characteristics.

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The Small Value sectors are leveraged to the most cyclical segments of the economy (i.e. investment), tend to be mature, commoditized industries where long-term growth is a function of nominal GDP and market share (e.g. real estate, copper, credit). They are also highly capital-intensive, leading to heavy dependence on debt-financing and low rates of return on assets. Higher volatility, lower growth potential, greater leverage and weaker returns naturally lead to lower valuations and structurally lower growth rates.

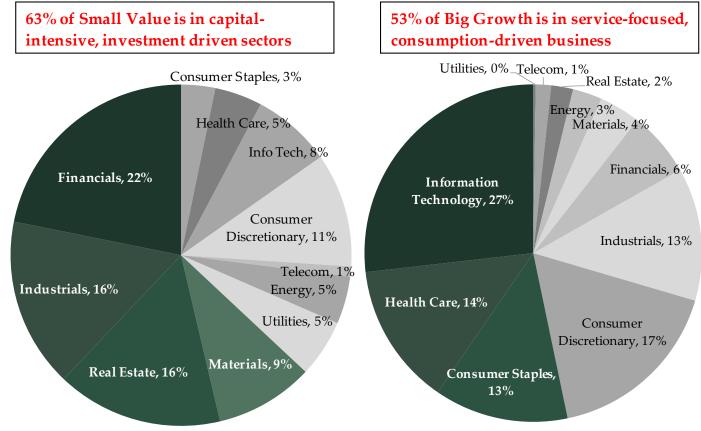


Exhibit 5: MSCI World Small Cap Value and MSCI World Large Growth Sector Weights

Source: FactSet as of 9/30/2017.

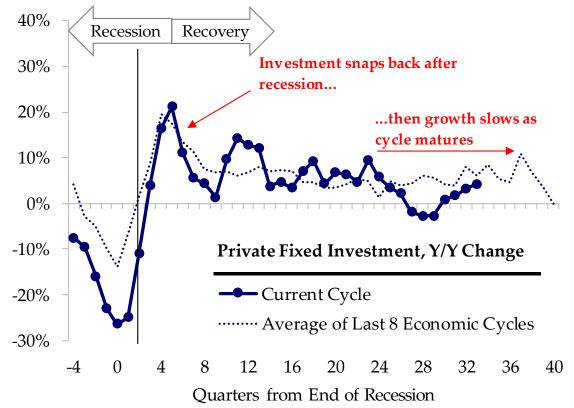
In contrast, the Big Growth sectors are less cyclical, less capital intensive, and generally aren't constrained by nominal GDP—growth can also be driven by innovation, new product development and rising market penetration (as the markets aren't as mature). This leads to structurally higher growth rates and premium valuations.

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Consumption vs. Investment and the Yield Curve

In the early stages of the economic recovery, there is an initial "capex snap-back" due to inventory restocking and pent-up demand for capital equipment—typically this results in accelerating investment growth for the first year of the recovery. This is illustrated in Exhibit 6 which shows the average trend in investment growth during the last 8 economic cycles, as well as investment growth in the current period—which has now slowed to a typically late-cycle growth rate.

Exhibit 6: Investment Growth During Expansions



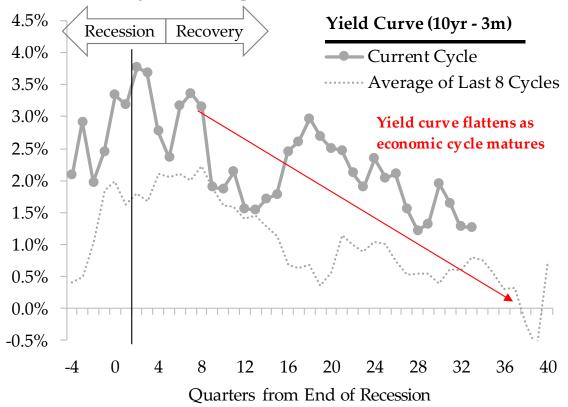
Source: Federal Reserve as of 9/30/2017

To a large degree, this early-stage "capex snap-back" is enabled by low interest rates and a steep yield curve. Low interest rates make capex more attractive, and a steep yield curve incentivizes banks to make financing available—which is particularly important for smaller companies, which have limited access to capital markets and are generally more reliant on bank lending.

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Typically, the yield curve steepens during the recession as the central bank cuts the policy rate, and remains steep early in the recovery as expectations for stronger growth push long rates higher. As growth improves and inflation accelerates later in the cycle, the central bank hikes short rates and the yield curve begins to flatten. This is illustrated in Exhibit 7, which shows the trajectory of the yield curve (measured as the 10-year - 3-month yield spread) during the last 8 economic cycles, as well as the yield curve in the current cycle. The yield curve has now begun to narrow, and based on historical trend, is likely to continue narrowing for the remainder of the expansion.

Exhibit 7: Yield Curve During Economic Expansions



Source: FactSet Economics as of 9/30/2017.



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The relationship between investment and the yield curve is further illustrated in Exhibit 8, which shows the year-over-year change in the yield curve spread (measured by the 10-year rate minus 3-month rate, with the axis inverted), and the forward-looking change in the consumption-to-investment ratio. The chart shows that as the yield curve narrows, consumption tends to grow more quickly than investment moving forward.

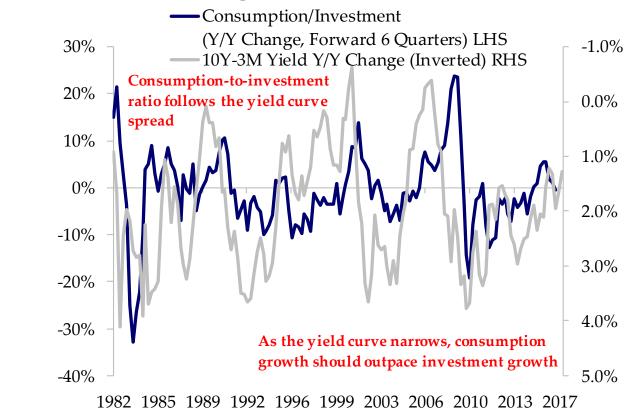
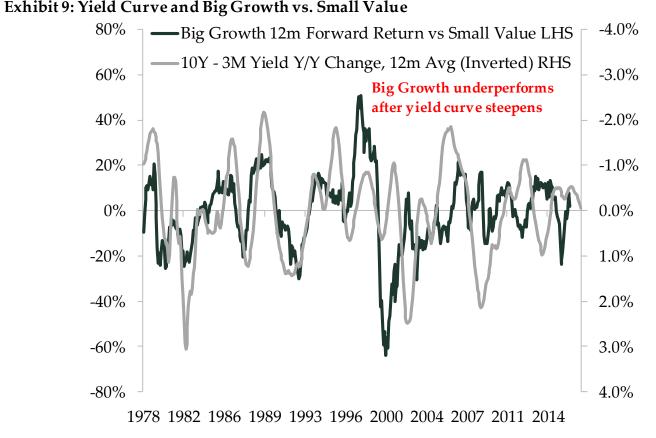


Exhibit 8: Yield Curve and Consumption-to-Investment Ratio

Source: US Bureau of Economic Analysis and FactSet as of 9/30/2017.

It stands to reason that if the yield curve drives the consumption-to-investment ratio, and Big Growth represents consumption-driven sectors while Small Value represents investment-driven sectors, then the yield curve should drive growth vs. value relative returns. The relationship between the yield curve and Big Growth vs. Small Value is illustrated in Exhibit 9, which shows the 12-month moving average year-over-year change in the yield curve spread vs. Big Growth's 12 month forward relative return vs. Small Value. Historically, when the yield curve is flattening, Big Growth outperforms Small Value 62% of the time over the next 12 months, with 2.8% average outperformance. In contrast, when the yield curve is steepening, Big Growth outperforms less than 38% of the time, with 4.7% average underperformance (Exhibit 12 in the appendix illustrates this in more depth).

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Source: FactSet as of 9/30/2017

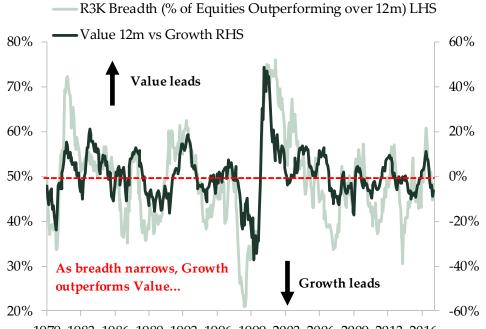
The yield curve is particularly important for the financial sector — the biggest component of Small Value indices. When the yield curve is steep, net interest margins are wider, which makes banks more profitable. Thus there is a particularly strong relationship between the yield curve spread and financial sectors relative returns, which is illustrated in Exhibit 13 in the appendix.

Outlook

Ultimately, as we enter the later stages of the market cycle we expect the yield curve to continue to flatten and the economy to shift from investment-driven growth to consumption driven growth. As such, capital intensive sectors will lag while service-oriented, consumption-driven sectors will lead, driving outperformance for Big Growth equities.

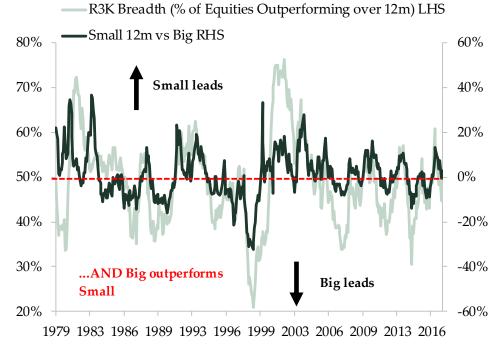
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Appendix Exhibit 10: Breadth & Growth vs. Value



1979 1983 1986 1989 1993 1996 1999 2003 2006 2009 2013 2016 Source: FactSet as of 9/30/2017.

Exhibit 11: Breadth & Big vs. Small



Source: FactSet as of 9/30/2017.

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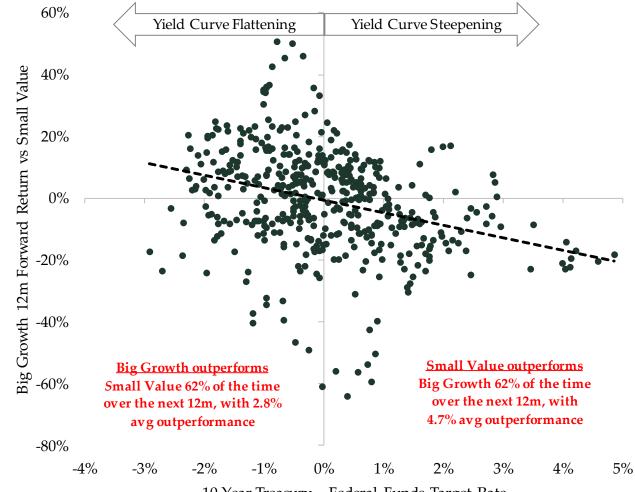


Exhibit 12: Yield Curve and Big Growth vs. Small Value

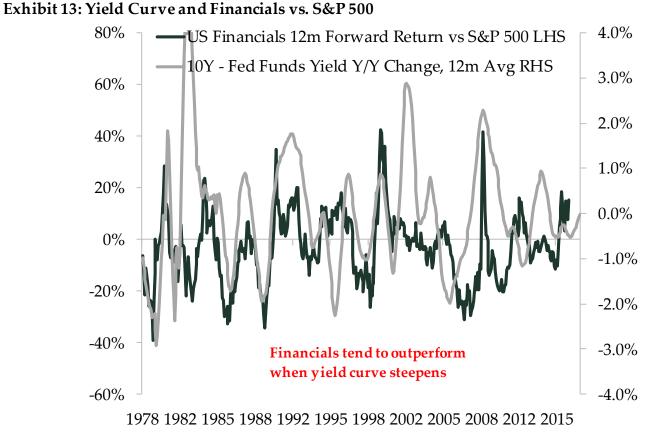
10 Year Treasury - Federal Funds Target Rate

Source: FactSet as of 9/30/2017.



Market Commentary

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Source: Global Financial Data and FactSet as of 9/30/2017.

Source: Fisher Investments, FactSet.

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