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Integrated Equity Quarterly Newsletter

Q4 2022

T. Rowe Price Integrated Equity Team

Quarterly Factor Returns

(Fig. 1) October 1, 2022–December 31, 2022

Universe	Total Return	Valuation	Growth	Momentum	Quality	Profitability	Risk	Size
Russell 1000 Value	12.42%	13.83%	-8.89%	-2.09%	5.25%	9.11%	-5.37%	1.20%
Russell 2500	7.43%	22.05%	-14.29%	2.78%	14.13%	20.63%	-13.75%	9.75%
Russell 1000	7.24%	15.07%	-12.15%	-1.26%	7.45%	12.27%	-8.86%	-0.14%
Russell 1000 Growth	2.20%	13.09%	-20.27%	-0.24%	8.18%	15.93%	-12.94%	5.04%
MSCI Pacific ex-Japan	10.70%	12.24%	-3.87%	-17.78%	-8.98%	-5.51%	15.85%	-3.74%
MSCI Europe	10.46%	7.86%	-1.53%	-5.05%	-8.69%	-4.83%	11.37%	-3.57%
MSCI Emerging Markets	6.66%	9.45%	-1.30%	-18.55%	-3.10%	-6.60%	10.84%	-18.50%
MSCI Japan	3.25%	8.78%	-2.84%	-11.77%	-2.35%	-1.08%	4.78%	1.37%

Past performance is not a reliable indicator of future performance.
Sources: IDC data/Refinitiv, Compustat, Worldscope/Refinitiv, Russell, MSCI. Analysis by T. Rowe Price. See Additional Disclosures. MSCI returns are in local currency. Factor returns are calculated as equal-weighted quintile spreads. Please see Appendix for more details on the factors.

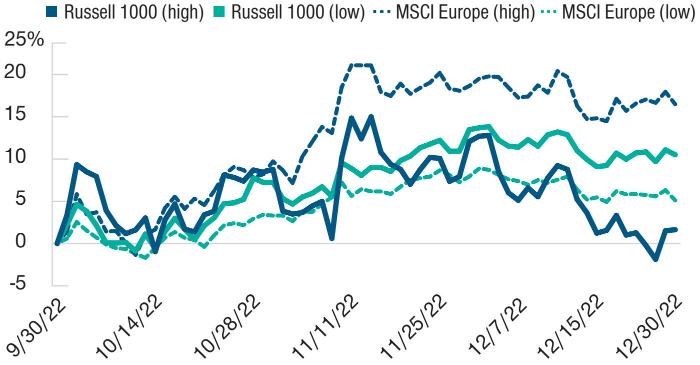
On the surface, the fourth quarter of 2022 featured a welcome rebound for global markets, which generally rose 5%–10%. However, below the surface, we noted three interesting dynamics:

Factors diverged significantly between the U.S. and the rest of the world—a tentative, low-conviction rally in the U.S. alongside a more traditional rally in risk assets outside the U.S.

- Figure 1 is sorted by region this quarter to highlight that while all featured markets were positive, the underlying factor performance was quite different. Within the U.S., this was a defensive market recovery with growth and risk continuing to underperform and quality and profitability continuing to outperform. Outside the U.S., the recovery was led by risk and low quality, with profitability underperforming and growth nearly flat. Our takeaway is that non-U.S. market behavior fits the classic risk rally—either a bear market rally or a sustainable market turn—whereas the U.S. rally appeared to be a tentative, low-conviction rally that is atypical of historical market bottoms.

Performance of High and Low Risk in U.S. and Europe

(Fig. 2) September 30, 2022–December 30, 2022



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Sources: IDC data/Refinitiv, Russell, and MSCI. Analysis by T. Rowe Price. See Additional Disclosures. Factor returns are calculated as equal-weighted quintile spreads. Please see Appendix for more details on the factors.

The period featured a significant mid-quarter risk rally, followed by different global responses

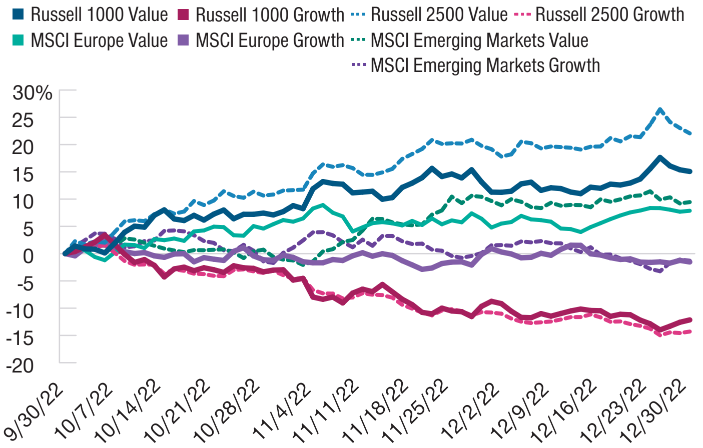
- Markets and risk rallied significantly in mid-November following a U.S. consumer price index report suggesting that inflation was slowing more than expected and that the Federal Reserve could slow the pace of tightening. Using the Russell 1000 and MSCI Europe indexes as proxies, high-risk stocks rallied sharply while low-risk stocks were more flat (Figure 2). Through this point, the performance of high- and low-risk stocks was directionally similar in both regions. The key difference was how each region responded—high-risk stocks held their gains in Europe but gave all of them up in the U.S., driving the divergence mentioned earlier. We believe this reinforces the notion of a low-conviction rally in U.S. markets.

One constant was the continued global outperformance of value over growth

- Despite these differences, the one constant was a continued rotation from growth into value. In all regions, value outperformed growth fairly continuously, with performance spreads largest in the U.S. but still present in Europe and emerging markets (Figure 3).

Value vs. Growth Long-Short Factor Returns

(Fig. 3) September 30, 2022–December 30, 2022



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Market Insight—What We're Monitoring

In our third-quarter 2022 newsletter, we discussed our expectations for earnings declines in 2023. In this newsletter, we dig deeper into an area that we see increasingly driving this risk—companies that over-invested due to the economic tailwinds from the pandemic.

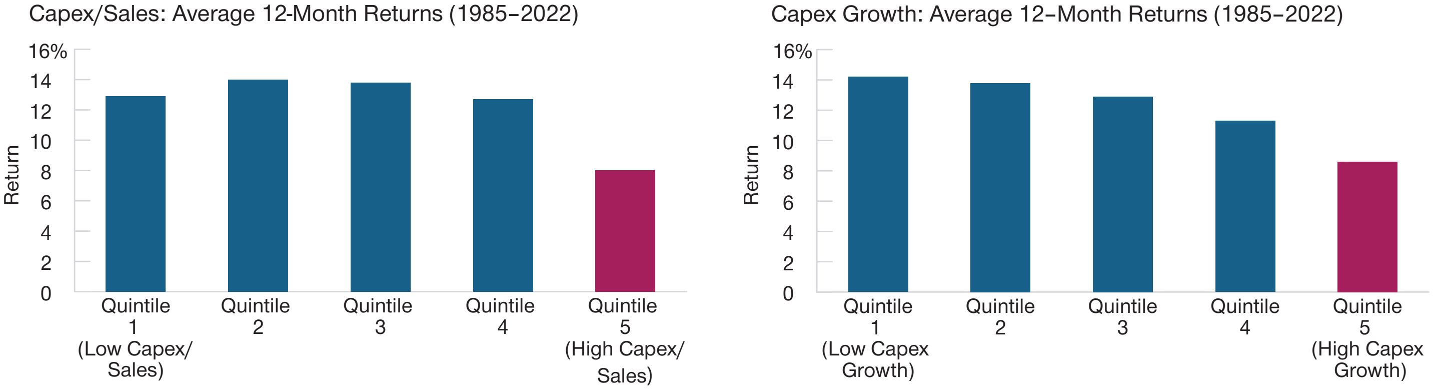
The risks of over-investment

Historically, companies with the highest capital expenditures (capex) typically underperformed (Figures 4 and 5). Why is this the case?

- Managements over-extrapolate strong cycles and invest at the top of cycles
- Managements become enamored with growth and empire-building

U.S. Performance of Capex/Sales and Capex Growth, 1985–2022

(Figs. 4 and 5)



Past performance is not a reliable indicator of future performance.
Sources: IDC data/Refinitiv, Compustat, Russell. Analysis by T. Rowe Price. The universe of stocks for this analysis is the union of the Russell 1000 Index and the Russell 2500 Index. Stocks are sorted monthly on the noted metrics.

We recognize this relationship may have changed as the economy has shifted from manufacturing to services, where accumulated investment in “organizational capital” (research and development, people, and brands) may bring long-term benefits. Nevertheless, current heightened spending reflects behavioral biases, and over-investment in organizational capital—particularly at the peak of cycles—risks destroying shareholder value.

The challenge today: COVID Camouflage

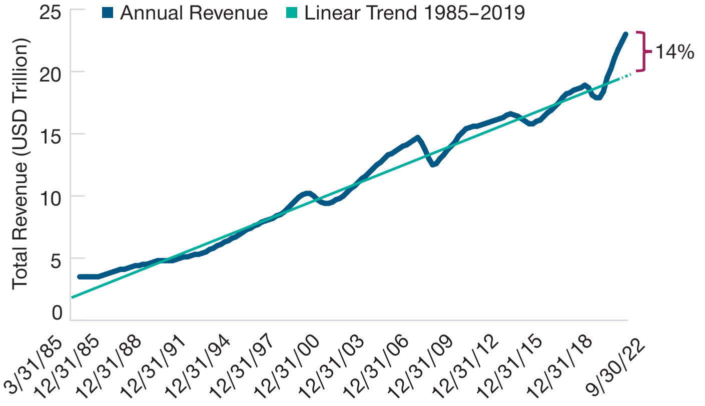
We think one of the main risks for 2023 is COVID Camouflage.

- Most investors now recognize the first-order bubble in stay-at-home pandemic beneficiaries: video conferencing, home workouts, streaming services, and outdoor leisure.
- We think investors still underappreciate the second- and third-order effects where fundamentals have been “camouflaged” by COVID—e.g., stocks where either the market hasn’t priced in reversion to the mean or where management has acted as though the benefits were permanent. We see this in areas such as online retail, transportation and logistics, cloud and software providers, online advertising, and building and construction.

More specifically, we believe over-investment (capex, employee growth) is a prime example of management teams being misled by COVID Camouflage: Management teams over-extrapolated recent profitability and over-invested in their businesses without recognizing the transitory revenue tailwinds. For example, U.S. companies’ aggregate revenue is approximately 14% above its long-term trend following the “pandemic boost” (Figure 6). In response, companies with the highest levels of capex and employee growth are also spending at the highest levels since at least the early 2000s (Figures 7 and 8). This behavior, which reflects the tendency of management to overspend at the peak of cycles, may not be different for the services economy.

U.S. Annual Corporate Revenue

(Fig. 6) March 31, 1985–September 30, 2022 (Russell 3000 Index)

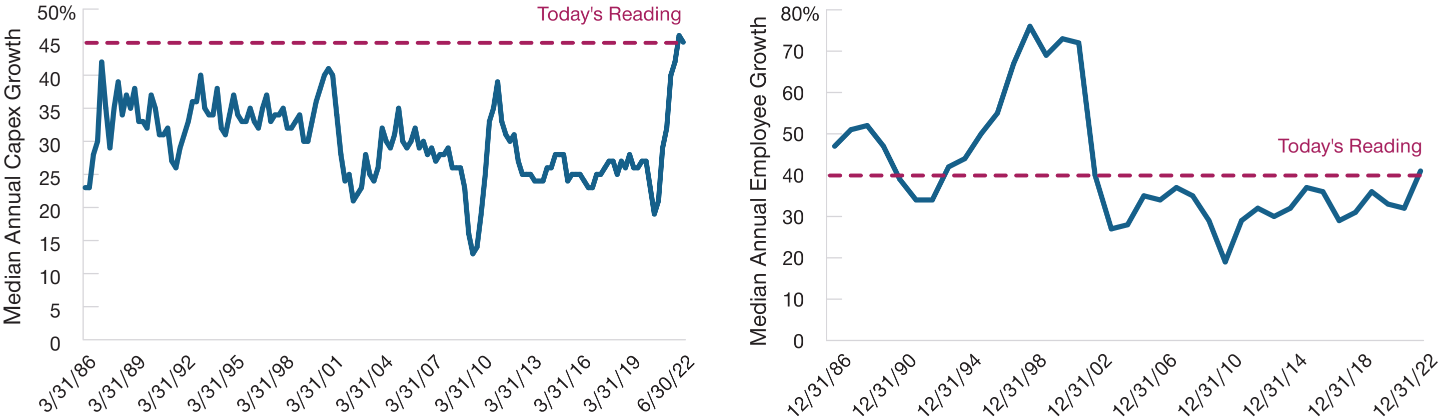


Source: Compustat. Analysis by T. Rowe Price. See Additional Disclosures. The linear trend line represents the long-term trend during the 1985-2019 time frame. Beyond 2019 is an extrapolation of that pre-pandemic trend and is shown for illustrative purposes only.

Companies that have over-invested will face heightened margin pressure with structurally higher expense bases as topline growth recedes. We expect this to be one of the main drivers of earnings declines in 2023. Using history as a guide, this could lead to potentially significant stock underperformance.

Median Capex Growth and Employee Growth for Highest Quintiles of Each

(Figs. 7 and 8)



Highest Capex Growth U.S. Firms: Annual Growth
March 31, 1986–June 30, 2022

Highest Employee Growth U.S. Firms: Annual Growth
December 31, 1986–December 31, 2022

Sources: Compustat. Analysis by T. Rowe Price. See Additional Disclosures. The universe of stocks for this analysis is the union of the Russell 1000 Index and the Russell 2500 Index. Stocks are sorted monthly on the noted metrics.

While Figure 5 shows the "base rate" for companies that have increased capex most aggressively, that doesn't tell the full story—when capex growth has been the most aggressive, forward (or subsequent) returns have tended to be the most negative with over 60% greater underperformance (Figure 9).

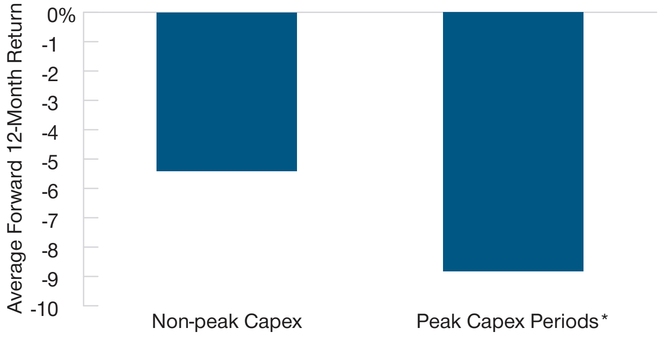
Finally, the idea of COVID Camouflage is broadly important. For example, our second-quarter 2022 newsletter focused on the emerging risk of stock-based compensation (SBC), which is another example of COVID Camouflage. As stimulative monetary and fiscal policies drove equity multiples higher, companies benefited from widespread use of SBC and reported inflated cash flows; now, as stocks have corrected, managements face difficult decisions that are likely to decrease earnings, such as switching to cash compensation and accepting higher employee turnover.

Summary

In summary, 2022 was a pivot year for the Fed and for markets—rising inflation led to monetary tightening, which triggered sharp rotations from growth/long duration/high risk into value/short duration/low risk. In many ways, this represented an unwinding of COVID-driven distortions in the market. However, companies that erroneously extrapolated COVID trends into the future need to make a similar pivot. Their businesses will feel pressure from both ends as the tailwinds from COVID revenues continue to dissipate, while the headwinds of structural expenses impair margins. We continue to focus on earnings quality and companies demonstrating prudent expense management.

Forward 12-Month Returns to High-Low Capex Firms

(Fig. 9) 1985–2022



Past performance is not a reliable indicator of future performance.

*"Peak capex periods" defined as any quarters with at least 35% trailing annual capex growth. Returns are through December 31, 2022.

Sources: IDC data/Refinitiv, Compustat, Russell. Analysis by T. Rowe Price. See Additional Disclosures. The universe of stocks for this analysis is the union of the Russell 1000 Index and the Russell 2500 Index.

Appendix

Factors are our internally constructed metrics defined as follows:

Valuation: Proprietary composite of valuation metrics based on earnings, sales, book value, and dividends. Specific value factor weighting may vary by region and sector.

Growth: Proprietary composite of growth metrics based on historical and forward-looking earnings and sales growth. Factor selection and weighting vary by region and industry.

Momentum: Proprietary measure of medium-term price momentum.

Quality: Proprietary measure of quality based on fundamental and stock price stability, balance sheet strength, various measures of profitability, capital usage, and earnings quality.

Profitability: Return on equity.

Risk: Proprietary composite capturing stock return stability over multiple time horizons (positive return means risky stocks outperform stable stocks).

Size: Market capitalization (positive return means larger stocks outperform smaller stocks).

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