

Valuation 50 2023Q3 Commentary

By Jun Wang, CFA

In the 3rd quarter of 2023, the Valuation 50 returned -2.34% vs. -3.22% for the S&P500 index, and -3.16% for the R1000 Value index.

2023Q3 Top Contributing Sectors

The Valuation 50 outperformed the SP500 in 8 of the 11 GIC sectors in the 3rd quarter, with leading contribution from InfoTech, Materials, Industrials, Energy, and Healthcare.

InfoTech: InfoTech benefited mainly from outperformance in Intel, IBM, Adobe.

Intel (INTC): Intel in late July reported better than expected 23Q2 results, with adjusted EPS of 13 cents vs. a loss of 3 cents expected and revenues of \$12.9 billion vs. \$12.12 billion expected. 23Q3 revenues and earnings outlook were also better than analysts' forecast.

Intel has now exited nine lines of business since CEO Gelsinger rejoined the company, with a combined annual savings of more than \$1.7 billion so far in 2023, which helped earnings to outperform in the latest quarter. The company's execution on stabilizing its PC business also helped improve margins in Q2. As importantly, Intel's AI chip, Gaudi, has started to gain traction, and management emphasized Gaudi competes on both performance and price fronts against other players in the industry. Intel's AI accelerators' revenue has now surpassed \$1 billion, which expanded by a factor of 6 in Q2 alone. In addition, Intel can also benefit from surging demand for AI accelerators through its new foundry business. A portion of its foundry pipeline for the upcoming 18A manufacturing process is for companies designing their own AI accelerators such as Alphabet and Amazon. Intel expects to regain its manufacturing lead with 18A.

In short, Intel's recent strides into AI have started to shift sentiments among investors, contributing to improved outlook and stock performance.

International Business Machine (IBM): In July, IBM reported 23Q2 revenue and EPS of \$15.48 billion and \$2.18 vs. street estimates of \$15.58 billion and \$2.00. Adjusted gross margin was 120 bps higher than expectations, attributable to a more profitable mix of products as higher margin software was the company's fastest-growing division. The software division expanded revenue by 7.5% on a constant currency basis, driven by Red Hat's growth of 11%, and a 10% rise in data and AI products. Management commented on early traction in AI, which experienced consulting signings growth of 24%. IBM's focus is on enterprise AI, which is designed to address opportunities and solve business problems such as IT operations, automation, augmenting HR, predictive maintenance, financial forecasting, broad detection, compliance monitoring, security, sales, risk management and supply chain amongst others. Separately, consulting revenue increased by 5.7% year over year on a constant currency with broad based growth. Management reiterated 3% - 5% constant revenue growth through the end of the year in constant currency and forecasts about \$10.5 billion in free cash flow in 2023.

Another reason behind IBM stocks' outperformance was an outperform rating the company received from RBC in late September. RBC lauded IBM's software and consulting services businesses that should continuously benefit from cloud computing and AI, which are complicating IT environments. Overall, investors' sentiments turned positive in Q3 towards IBM as they focused on the company's relatively defensive business, attractive dividend yield and a possibly underappreciated AI portfolio.

Adobe (ADBE): Adobe continues to emerge as a potentially attractive opportunity in the burgeoning AI field. AI technology aligns well with ADBE's business model, and the company has embraced the new technology. Earlier this year, Adobe launched Firefly - a collection of AI tools that enable users to

generate content based on written or verbal prompts. The company's ability to incorporate AI tools quickly into its existing software could strengthen its defenses against competitors while accelerating growth. In September, Adobe expanded the availability of its generative AI tools across its creative software suite (Adobe Creative Cloud) and extended Adobe Firefly for Enterprises. This would help corporate users create content without copyright infringement concerns, as Firefly was trained using public domain images and Adobe's stock image library.

In mid-September, Adobe reported strong 23Q3 results and raised its Q4 guidance across almost all metrics. The strong latest quarterly results suggest that the firefly suite of tools is starting to pay off, and the company also managed to raise subscription prices. Management sees signs of improving fundamentals across Digital Media and Digital Experience, along with growing confidence in Generative AI as a significant growth driver. Adobe appears to be well-positioned to capitalize on digital transformation with its end-to-end offering.

Materials: Both holdings outperformed their sector benchmark and in particular CF Industries (CF).

CF Industries (CF): CF Industries in early August delivered a 2Q23 beat, driven by much lower-than-expected natural gas costs and strong nitrogen demand. Similarly positive dynamics for its operation continued throughout Q3 as nitrogen prices rose from end of Q2 and natural gas prices in the US declined modestly.

Though CF industries will post materially lower revenues and earnings this year after a historic 2022, confidence is high that favorable conditions such as tight nitrogen supply, lower exports out of China, and healthy global agricultural demand will keep CF's cashflows at healthy levels. In addition, CF Industries continues its efforts to advance the clean ammonia initiatives by working with global industry leaders on new projects. In the quarter, CF disclosed new ventures with utility firm NextEra for green hydrogen and ammonia at its Verdigris, OK facility. CF Industries should be able to supply a substantial volume of low-carbon ammonia beginning in 2025, just as significant demand emerges. This low carbon ammonia initiative may create meaningful mid to long term organic growth opportunities for CF Industries.

Industrials, Healthcare, Energy: United Rental (URI), Regeneron Pharmaceuticals (REGN), Valero

Energy (VLO) were the best performing stocks in those outperforming sectors for the strategy in Q3.

Regeneron Pharmaceuticals (REGN): Regeneron's strong performance was driven by the company's faster than expected re-submission of its high dose Eylea and a quick approval from the FDA on the drug. The FDA in late August signed off on the 8-milligram dose of Eylea to treat three eye diseases: wet age-related macular degeneration, diabetic macular edema and diabetic retinopathy. The approval came about two months earlier than expected and is critical in helping Regeneron keep its market share in the face of competition from Novartis' Vabysmo. The high dose low frequency Eylea is also priced competitively, which could help the franchise generate modest growth in the next 2-3 years instead of facing revenue declines.

United Rentals (URI): United Rentals in late July reported 23Q2 results that crushed expectations. Adjusted earnings were \$9.88 per share vs. the \$8.94 consensus and \$7.86 in the year-ago quarter. Revenue for the quarter was \$3.55 billion, up more than 28% year over year. What is particularly exciting is that demand was broad-based across verticals, regions, and customer segments. The industrial vertical was up double-digits despite a tough comparison against last year and the ISM Manufacturing in contraction. Based on the broad strength of its end markets, United raised its 2023 revenue forecast to \$14.0 to \$14.3 billion vs. the \$14.12 consensus and its prior guidance of \$13.7 to \$14.2 billion. Management also boosted its EBITDA guidance by \$100 million to \$6.75 to \$6.90 billion, and raised its FCF guidance to \$2.3 to \$2.5 billion from \$2.1 to \$2.35 billion.

Valero Energy (VLO): Fast rising oil prices have driven energy companies' stocks higher in Q3, and refiners as an industry performed even better than the overall energy sector. Refiners have benefited from what some dubbed a platinum age, which is attributable to import bans on Russian refined products following its invasion of Ukraine in February 2022, the shutdown of refinery capacity during COVID, and the delay of planned refinery expansions. There has been a shortage of refined oil products to meet increasing demand as the global economy emerged from the COVID period and is yet to experience a recession.

In 23Q3, US Gulf Coast cracks closed around \$45.04 on September 29 up from around \$28.90 on June 30, which bodes extremely well for refiners'

margins including VLO. It is worth noting that gasoline margins have dropped in recent weeks, and the Gulf Coast cracks are now hovering around \$37. We are yet to find out if refiners and Valero can indeed transition to a new level of sustainable mid-cycle earnings, as some expected, due to global refinery capacity delays and an overall resilient US economy.

Valuation 50's Consumer Discretionary and Communication Services were the main detracting sectors in Q3.

Consumer Discretionary: The equal weighted Consumer Discretionary sector return lagged the market cap. weighted sector return by 340 bps in Q3, continuing the trend from the 1st half of the year. LKQ (LKQ), Darden (DRI) and DR Horton (DHI) led underperformance of the strategy's Consumer Discretionary sector.

LKQ: LKQ in late July reported 23Q2 adjusted profit of \$1.09 per share, compared with estimates of \$1.08. Revenue for the quarter was \$3.45 billion, slightly below analysts' expectations of \$3.46 billion. Management however lowered 2023 EPS to \$3.65 to \$3.85, down from \$3.68 to \$3.98. The top end of its organic revenue growth guidance for parts and services was also trimmed to 7.5% from 8%, while maintaining the low end at 6%. The negative earnings revision was mostly driven by steeper than expected year-over-year decline in commodity prices (scrap, precious metal prices in particular), which impacts the company's Self Service segment. Stronger than expected North America and Europe operations would help offset continued weakness in the Specialty segment, which was negatively impacted by a severe downturn in wholesale shipment and retail sales of RVs.

Darden Restaurants (DRI): Darden in the quarter reported healthy FY23Q1 results, which saw adjusted EPS of \$1.78 vs. \$1.74 expected, and revenue of \$2.73 billion vs. \$2.71 billion expected. Same restaurant sales grew 5% year over year, entirely driven by 6% higher pricing, but outpaced the industry growth by 410 bps, and same-restaurant guest counts also exceeded the industry by 430 bps. Management reiterated its FY23 guidance.

Darden stock's underperformance in the quarter was likely driven by pessimism towards the restaurant industry which has witnessed negative traffic for a while. Sentiment has been particularly bad lately because of the expected resumption of student debt

payment starting October 1, which will average \$200-299 per student per month, and is expected to mostly reduce consumptions on dining out, apparel, and electronics. If Darden delivers on its FY23 outlook of adjusted EPS of \$8.55 to \$8.85, that will represent a high single digit growth y-o-y.

DR Horton (DHI): DR Horton in late July posted 23Q3 earnings of \$3.90 a share, a 16% decline from the year-ago period, but easily outpacing estimates for \$2.83 a share. Revenue rose 11% to \$9.7 billion, crushing estimates for \$8.3 billion. Management raised full-year revenue guidance to \$34.7 - \$35.1 billion, up from \$31.5 - \$33.0 billion. It expects to close between 82,800 and 83,300 home sales in FY23, vs. 57,000 homes in 2019 pre-pandemic.

While the market for affordable, newly built properties was robust this year through early summer, confidence was crushed in August and September, when the 30-year US fixed mortgage rate surpassed 7% and rose continuously to reach a two-decade high of 7.5%/7.6%. (Industry experts at the beginning of the year have widely expected the mortgage rates to fall to around 6% by the end of 2023.) Mortgage application and house purchase activities reportedly have since dropped to the lowest level since 1995/1996 while home affordability is the worst since the very early 80s. The median existing-home price for all housing types in August was \$407,100, an increase of 4% from August 2022, and as of right now, home prices are still expected to hold up relatively well because supply is very constrained on the existing home sale side. For new home sales, home builders will likely remain disciplined, focusing on generating returns and maintaining low leverage of its balance sheet.

Communication Services: Verizon Communications (VZ) and The Walt Disney Company (DIS) were the leading detractors.

Verizon Communications (VZ): Verizon shares were under great stress in July when a Wall Street Journal report revealed telecom giants such as Verizon and AT&T have historically used lead-covered cables, which are contaminating many parts of the country. The threat of potential legal action and uncertainty about how the lead issues will be resolved have prompted Verizon shares' sell-off. This is potentially a new risk factor for wireline telecom operators with legacy network assets, and the potential liability appears unquantifiable.

In late September, the EPA said soil sampling for lead in two Pennsylvania towns near

telecommunications cables indicate “no threats to the health of people nearby that would warrant” an immediate government response, despite some findings of the pollutant. Earlier in September, Verizon also said third-party lead soil tests it commissioned and tests by the state of New York in Wappingers Falls concluded the lead levels do not pose a public health risk. Those are welcome news for public safety and for the telecom companies’ operations, but it is understandable more time might be required for the dust to settle with a high degree of confidence.

The Walt Disney Company (DIS): Disney had a tough quarter due to multiple factors – fears of further cord cutting impacting its broadcasting assets, potential slowdown in visitors to its parks due to an economic slowdown, a harder path to profitability for its streaming assets, the potential higher payout for the portion of Hulu which Comcast owns, the writer and actor strike leading to lower output of content to monetize in the future though saving the company some cash expenditures in the short-term.

Disney is looking to potentially divest some of its broadcasting assets as the overall business is declining due to competition from social media and streaming services. This strategic move is still in the works as some of the broadcasting assets are intertwined with rest of Disney and there is a question on who the buyers would be, the potential legal hurdles to close the transaction and most importantly the price buyers are willing to pay.

Challenges are indeed abundant for Disney, but they are also taking initiatives to get on the right path. The company is trimming costs by reducing overhead and better rationalizing its production schedule to produce fewer, better, and more cost-effective programs. It could also benefit from: higher prices for its streaming services, better ad monetization on its streaming platform, and a revamp of its park pricing and services to be more consumer friendly. These changes should lead to higher revenue growth with better profitability. In addition, Disney still has some great intellectual property to monetize in the future.

Disney in the quarter also announced the doubling of its planned expenditures for its parks and experiences segment to \$60 Billion over 10 years. Though the amount is large, and the news was poorly received by investors, the increased expenditure should lead to higher capacity and thus higher revenue at its highly profitable parks division.

Looking Back and Forward

Recap of 23Q3: During the 3rd quarter, the US equity market (R3000 as the proxy) lost 3.25% of its value, with balanced returns from Value and Growth. The large market capitalization stocks continued to outperform the SMID segment, with the R1000 outperforming the R2000 by approximately 200 bps. Among the large caps, the market cap weighted SP500 returned - 3.2% vs. - 4.9% for the equal weighted SP500.

In June, investors continued to cherish an emerging 'goldilocks' scenario of cooling inflation, resilient economic growth, and an upcoming completion of the Fed's rate campaign. The US June CPI climbed just below 3.0% year-on-year, smallest rise since 2021, and core CPI gained 4.8% from the year ago, both below expectations. The US Fed did raise the Fed Fund Rates (FFR) by 25 bps to a target range of 5.25 to 5.50% on July 26, which was met with a yawn, as many equity investors expected this to be the last rate hike. In the meantime, corporate America reported stronger than expected Q2 earnings including many commercial banks, while US GDP grew at a 2.4% annualized pace in the second quarter, topping the 2% estimates. Conviction continued to rise that the US economy will indeed accomplish a soft landing.

August started with a downgrade by Fitch of the US long term foreign currency issuer default rating from AAA to AA +. Dubbed by many as “inept”, “outdated”, “bizarre”, this downgrade however, was appropriately accompanied by only a moderate global equity sell-off, very different from S&P's 2011 downgrade, given the starkly different macro environments. Later in the month, reported July CPI data showed US inflation rose 3.2% year over year, higher than the 3% increase in June, though below the consensus expectation. In the 2nd half of August, the market continued to waver, as investors pondered about the Fed's next move, with more believing the Fed will indeed raise the FFR one more time likely in November. Amid the pessimism, the US 30 Year mortgage rate rose past 7% to reach a 21 year high. August was eventually saved by Nvidia, which in the final week of the month, reported quarterly earnings and provided a future forecast that smashed expectations. The large cap US equity market ended August with a small decline.

In September, confidence in the “goldilocks” scenario for the US economy quickly turned sour, giving into worries about “stagflation” in which the US would suffer chronically high inflation and

crumbling demand, possibly forcing the Fed to continue hiking. Crude oil prices underwent a furious rise, ending Q3 at more than \$90 per barrel, the first time in 2023, and up from around \$70 per barrel at the beginning of the quarter. The US Fed in late September held the FFR steady but penciled in one more hike this year and predicted the rates would stay higher for longer, after updating its forecast of stronger growth and lower unemployment for the US economy in 2023 and 2024. The 10-year US Treasury yields hit a 16-year high to end the quarter at ~4.57% with the 10-year real yields hitting a 14-year peak at ~2.24%. Equity investors were startled, betting the Fed's "higher for longer" mantra will kill the possibility for an economic soft-landing and make stocks less valuable. In September, the Russell 1000 lost 4.7% of its value.

Looking forward:

Equity investors are intensely focused on the Fed's mantra of "higher for longer", as the 10 Yr US Treasury seems to be running full speed to a 5% yield. Some experts attributed the recent, fast rise on the longer term dated treasury yield to bond investors' upgraded view of the US GDP growth in the mid- long term, and a possibly higher "neutral rate". The neutral rate is a supposedly inferred number for short-term interest rates that would keep inflation and unemployment stable over time. Widely quoted neutral rate estimates from the Federal Reserve economists had the real neutral rate in the US at around 0.6% in 23Q2. The same estimates had the real US neutral rates decline from around 4% in the 70s to around 2.5% before the great recession (2003-2007) to around 0.5% after the financial crisis (2009 to now). The decline in the real neutral rate is similar to that of other developed economies such as the Euro zone and Canada. With the US economy and labor market being resilient despite the Fed Fund rates at 5.25% - 5.5%, some argue that the neutral has risen, though Fed Chairman Jay Powell disputed the idea with "We don't know that."

In the long run the neutral rate is believed to be determined by the supply and demand of savings. Overtime, it is a function of slow-moving forces that impact the supply of and demand for savings: demographics, changing characteristics of productive economy, the level of government debt, investor's risk appetite, and others.

A declining birth rate in the US and the developed world, plus a growing labor force growth deficit, are

widely believed to have caused the neutral rate to decline and will continue to put pressure on the neutral. The technology sector, which is asset light and doesn't rely heavily on debt to finance its growth, has exerted a great impact on the productive economy. With the latest development and promise on artificial intelligence, the technology sector could become an even more important part of the economy, driving growth and productivity gains. With the US emerging from COVID in better shape than most – China suffers from increasing isolation from the rest of the world and its economic growth is stalling; Germany is undergoing recession with structural challenges to its export driven economy; not to mention the world is now coping with two wars (Russia/Ukraine, and Israel/Hamas), investors' aversion to geopolitical risk could very well rise, resulting in more capital flows to the US, the ultimate safe haven.

On the other hand, the historically high federal government debt level in the US could increase inflation expectations, which could cause the nominal neutral to rise. The latest 5 Yr and 10 Yr inflation expectations are 2.3% and 2.2% respectively, still very close to the Fed's long-term target of 2%, however. Overall, major trends seem to be mostly keeping the real neutral low, though inflation could make the nominal neutral slightly higher. Regardless, it seems that Fed Fund Rates will need to drop significantly from the current levels to the neutral rate, which probably is still around 2.5%, in order to remove the restrictions on the economic growth, as inflation stabilizes and decelerates.

When we look at the term premium for 10 Yr / 1 Yr US Treasuries, it has also been undergoing a general decline, according to research published by the New York Fed. The 10 / 1 Yr term premia for the US Treasuries have come down from the high of ~ 450 to 500 bps in the early 80s to negative during Covid and the recent. For the decade prior to the great financial crisis, the term premia mostly ranged from 50 to 250 bps, with the median around 130 bps.

All things considered, we feel the odds are probable that the real neutral rate shouldn't be notably higher than the past 10-13 years though inflation could be slightly higher, making the nominal neutral rate slightly higher going forward. That would seem to suggest an environment that has inflation around 2%, the FFR around 2-3%, and a 10 Yr Treasury at 3.5-4.5%, Normalized interest rates can encourage saving, help retirees preserve their spending power

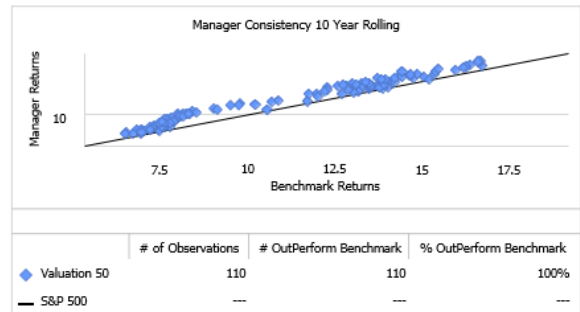
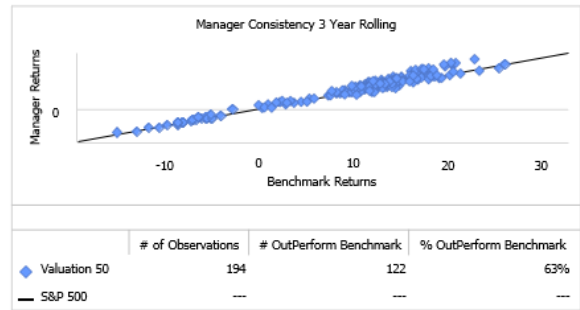
without taking on excessive risk, and help prevent asset bubbles. We appreciate that such an environment could very well be more conducive to helping the US economy grow consistently at 2-3% real rates.

Applied Finance's Market Derived Discount Rate (MDDR) data goes back to the early 1950s. When we look at the two periods during which the 10 Yr US Treasury mostly yielded at around 4-5%, they are the early to mid-60s, and early to mid-2000s. Our data indicates the real MDDR were approximately 5-6% in the 60s and 4-5% in the 2000s, with the difference attributable to higher Equity Risk Premium (ERP) in the 60s.

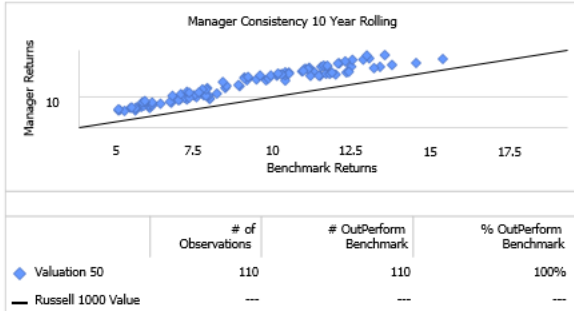
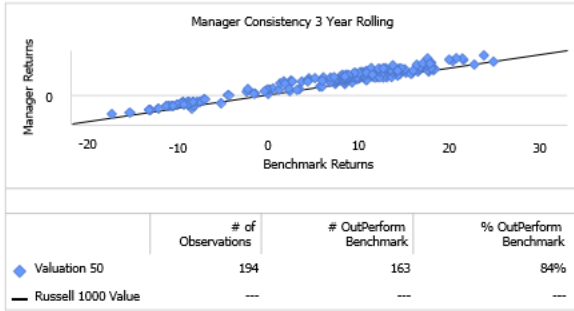
We have discussed in our previous quarterly reviews that the real MDDR since 2020 has been approximately 5%, with only small increases during the latest Fed hike campaign. We had a high ERP heading into the Fed Hikes, meaning we had an abnormally high equity risk premium embedded into stock prices relative to US debt. Rising interest rates have served as the mechanism to bring the ERP back in line with more historical norms, which is where we are today. The latest MDDR is still at ~5%, assuming 10 Yr yield at ~4.4% and suggesting an implied ERP at ~ 400 bps. Compared to the 60s and early to mid-2000s, the current MDDR appears reasonable given similar long term US Treasury yields. We don't expect a material increase to the cost of capital even if long term interest rates continue to move moderately higher.

Equity investing is not just about the cost of capital, but also about cash flow generation, and a company's ability to generate that cash flow with growth and profitability through wealth creating strategies. The Valuation 50 will continue to focus on owning large cap undervalued stocks, while maintaining broad sector exposure and industry diversification. We will remain disciplined in managing the strategy by adhering to our Buy/Sell/Hold process that is Valuation and Capital Stewardship driven. While in any arbitrary short period the Valuation 50 may underperform its benchmarks, the strategy is very successful and consistent in delivering long-term outperformance. Given the uncertainty in the market, we feel it is important to emphasize the following charts we included in our 23Q2 review. They help frame the difference between short- and long-term results for the Valuation 50 versus the SP500 and Russell 1000 Value indexes.

(data: Applied Finance and Evestment)



The first chart shows the performance of the Valuation 50 versus the SP500 over 3 year rolling return periods. Notice that over such an interval, the Valuation 50 has outperformed the SP500 63% of the time. Over rolling 10-year periods since the strategy's inception in 2004, the Valuation 50 has outperformed the SP500, 100% of the time. Even stronger results hold true versus the Russell 1000 Value universe, as evidenced by the charts below.



Valuation 50 Changes in 2023Q3

- No change in 23Q3.

VALUATION 50 DISCLAIMER

The Valuation 50 Portfolio is a long strategy comprised of approximately 50 U.S. traded large cap equity securities believed to offer superior total returns over long-term investment horizons. The equity securities have attractive valuations and are selected to provide broad economic sector exposure. The Valuation 50 is a hypothetical model portfolio and does not reflect actual client investments.

The above presentation is based on holdings in the Valuation 50 strategy which started 6/10/2004. Holdings in the Valuation 50 strategy and security prices are subject to change throughout the year.

Gross Performance of the Valuation 50 strategy is based on a hypothetical fully-invested portfolio and excludes all fees and expenses. Net Performance of the Valuation 50 strategy is calculated by deducting an annual investment management fee from Gross Performance. Most individual accounts will have some cash level. Performance is calculated on a pre-tax basis and does not include any reduction for applicable non-U.S. withholding taxes, if any. Past performance is no guarantee of future results. Individual security weights may vary by account.

References to stocks held in the Valuation 50 are for informational purposes only and do not constitute an offer to buy or sell any security.

The information and data contained in this presentation were obtained from sources deemed to be reliable, but Applied Finance Capital Management LLC makes no guarantee as to the accuracy or completeness of any such information or data. The information in this report is not intended to be used as the primary basis of investment decisions, and Applied Finance Capital Management LLC makes no recommendation as to the suitability of investing in any particular security. Due to individual investor requirements, this report should not be construed as advice meant to meet the investment needs of any investor. Any opinions and projections expressed

herein reflect our judgment at this date and are subject to change without notice. Applied Finance Capital Management LLC, its owners, employees and/or clients may have positions in any security that is discussed in this report.

The Russell 1000 Index is a market capitalization-weighted index of 1000 of the largest U.S. equities. The Russell 1000 Value index measures the performance of the Russell 1000's value segment, which includes firms with lower price-to-book ratios and lower expected growth values.

The S&P 500 Index is a market capitalization-weighted index of 500 of the largest U.S. equities and is often used as the standard for measuring large-cap U.S. stock market performance.

An investor cannot directly invest in an index and the performance of the index may be materially different from the actual performance obtained by a specific investor.