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Neuberger Berman Large Cap Disciplined Growth Portfolio

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Performance Highlights

The Neuberger Berman Large Cap Disciplined Growth was up in the third quarter but underperformed its primary benchmark, the Russell 1000 Growth Index.

Market Context

Equity markets have been quite strong thus far in 2024 albeit with a bit more volatility than in recent memory, and we believe the global economy is positioned for a soft landing. The level of economic growth has been waning and slack in the economy is increasing, driving an improvement in the rate of inflation but also raising concerns about the ultimate trajectory of the economy. The Federal Reserve (the "Fed") has clearly signaled that it will act rapidly to release its brake (the Fed Funds Rate) to stimulate lending activity to help engineer a soft landing. At the same time, the corporate earnings growth that ultimately drives equity market returns has been strong in 2024 and broadly better than expectations. Earnings and investment performance has again been led by the Big 6 (the former Magnificent 7 members Alphabet, Amazon, Apple, Meta, Microsoft and NVIDIA less Tesla), but the stock outperformance gap versus 2023 has narrowed as the forward earnings trajectory inevitably slows to less spectacular levels. Nevertheless, the Big 6 is up +33% year-to-date and, now 33% of the S&P 500 Index, helping to drag the Index's return up to +20% [as of 9/4/24]. Lost in some of the concerns about a generative artificial intelligence (GenAI) bubble and rising market concentration is that outperformance of the Big 6 has been largely earnings driven; We believe that NVIDIA, Amazon and Meta, in particular, are poised to grow earnings per share in 2024 by an astounding 135%, 68% and 43%, respectively.

A key investment question going forward is clearly what's next for these important companies, and we do not worry that a performance "give back" period represents a major risk to the market. The significant upside surprises are likely behind us, but the overall trajectory of these companies is solid in our view. Given their importance to the market outlook, we think it's worthwhile to provide quick, simplified thoughts on how we are thinking about each, organized by how they are priced relative to the broader market:

Alphabet trades at a valuation multiple below the market despite its monopoly search business, growing YouTube / YouTubeTV franchises, leadership in robotaxis with Waymo, strong position as a public cloud provider and combined online properties that enable excellent ad targeting. Regulatory agencies are challenging Alphabet globally, and its default search provider agreement for Apple's Safari browser will need to change. Consumer GenAI applications are slowly changing how consumers find and use information, presenting a risk to Google's core search business, but the commercially oriented queries that drive the business are remaining steady. Despite some headwinds, we believe Alphabet is likely to grow earnings per share faster than the market, barring a major disruption to its business which we don't anticipate, and therefore appears attractive.

Meta trades at roughly a market multiple on earnings that include losses of almost $20B per year (or ~20% of earnings) in its Reality Labs division (augmented and virtual reality development). In other words, earnings could inflect higher as costs in this area are rationalized or new products move that business towards profitability. Investors are reluctant to assign a high multiple to the company, however, because social media platforms face significant competition for consumers' time, and behaviors can change quickly, as they have with the rise of TikTok. That said, like Alphabet, we believe that Meta has among the best targeting capabilities, and in our opinion, the company's investments in open source large language models position it to benefit from GenAI chatbot advertising use cases.

Amazon, Apple, Microsoft and NVIDIA all trade at 30-50% valuation premiums to the broader market, but in each case we feel the price is justified by the combination of the durability and growth of the future earnings stream. Amazon has two significant "wide moat" businesses: retail is essentially now a logistics and marketing business, monetized by selling commissions and advertising – the business is economically-sensitive but competitively well-positioned, with more shipments delivered than UPS; Amazon Web Services invented the public cloud industry – the business is a growing high-margin oligopoly (Microsoft the other major competitor, but also Alphabet and others), with growth accelerated by customers' GenAI spending. The company overbuilt capacity during Covid-19, and growing into that capacity is producing a powerful earnings trajectory going forward. Apple dominates the high-end of the

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smartphone market with a loyal user base that increasingly purchases its wearables and online services. Historically, the company has seen big upticks in earnings when new iPhone offerings require customers to upgrade to the newest model. We are optimistic that Apple Intelligence, the company's GenAI software, will drive such a cycle as well as merit an iPhone price increase, something the company hasn't done in over five years. Apple will, however, need to navigate the potential loss of a very large earnings stream from its Google/Safari revenue sharing deal. At Microsoft, CEO Satya Nadella's decade-long agile stewardship of the enterprise software juggernaut is now punctuated by his early investment in OpenAI and rapid pursuit of GenAI opportunities for the company. Microsoft is the leader in productivity applications and should be a primary beneficiary of improvements now possible with GenAI. Demand for the company's Azure AI services continues to outstrip supply, but Microsoft Office Copilot, its GenAI assistant, has, in our opinion, room to improve before catalyzing big sales. NVIDIA seems well-positioned to stand atop the field of specialized semiconductors, software and hardware for GenAI, and demand for its products remains insatiable. We are laser-focused on the returns its customers are generating on this high level of spend, and we expect optimism to build as proof of concepts are moved into production over the next year.

There are other factors supporting a constructive outlook for the Big 6. Each of these companies is exceptionally well-managed with net cash or minimal debt and generates significant free cash flow which is often returned to shareholders in the form of dividends or share repurchases. Industry analysts suggest active investors own much less of these stocks than the broader indices – so, while it's possible there is an AI bubble in some stocks in the market, there's not strong evidence that active investors are crowded into the Big 6. Further, the economic slowing and disinflation that is finally upon us has historically generated some flight to safety/quality in the form of very large liquid stocks with durable businesses and strong balance sheets. All of the Big 6 are spending aggressively to win in the AI arms race while still managing to deliver strong earnings performance for shareholders – a risk into next year is certainly whether that balance can hold. Returning to valuation, we want to contextualize how the Big 6 looks today versus the dot com bubble in 1998-2000; the valuation premium (in points of price to earnings multiple) of the 6 largest companies in the S&P 500 Index versus the other 494 stocks. This premium is currently 10 points, in line with the average going back to 1997, according to UBS analysis – it was close to 30 points during the dot com bubble. Importantly, this does not speak to the absolute valuation of the market overall (which admittedly is towards the high-end of historical ranges), but rather the valuation of the six largest stocks relative to the valuation of the other 494 in the S&P 500 Index. The primary takeaway is that relative valuation of the six largest stocks is nowhere near as extreme as it was during the dot com period (1998-2000, i.e. the left side of the chart).

Finally, it's important to note that, while the Big 6 are well-represented in our portfolio, we own less than the benchmark. New ideas that we've added over the last couple of quarters include Constellation Energy (CEG), Elanco (ELAN), Spotify (SPOT) and Taiwan Semiconductor (TSM). CEG is the largest owner of US nuclear power generation assets with a 22+ Gigawatt fleet (65% US market share), ripe for direct contracts for power-hungry data centers. Nuclear power assets are scarce, carbon-free and always on, unlike solar and wind generation. ELAN is a top player in the attractive pet health industry, and we expect organic growth to accelerate as three major new products come to market. SPOT has been cementing its lead in the global premium audio streaming market and we believe is poised to increase monetization via premiumization, tiering, category expansion and cross-selling. TSM is the dominant high-end manufacturer of semiconductor chips in the world; its technological leadership is unmatched, and we expect the company to increasingly exercise its pricing power over the next several years.

Portfolio Review

On a relative basis, the Portfolio performed best in Communication Services and lost ground in Consumer Discretionary. On an individual stock basis, the best performers during the period were Apple, Meta Platforms and Constellation Energy. The worst performers were Dexcom, Alphabet and Microsoft.

Apple recovered from depressed levels as optimism built around an iPhone upgrade cycle driven by new AI functionality.

Meta Platforms outperformed as the company's advertising products continue to generate strong ROI and its other AI offerings gained industry mindshare.

Constellation Energy outperformed due to rising data center demand for green nuclear energy.

Dexcom lowered revenue and earnings expectations for the year due to poor execution and forecasting. The position is under review.

Alphabet underperformed due to uncertainty related to outstanding US antitrust cases.

Microsoft likely underperformed due to concerns about investor crowding and overall enterprise tech spending.

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During the quarter, we added Eaton, Tetra Tech and Wingstop, and we exited CSX and Moderna.[1]

BEST AND WORST PERFORMERS FOR THE QUARTER[2]

Best Performers	Worst Performers
Meta Platforms Inc Class A	DexCom, Inc.
Apple Inc.	Alphabet Inc. Class A
Constellation Energy Corporation	Microsoft Corporation
Tradeweb Markets, Inc. Class A	ASML Holding NV ADR
Aon Plc Class A	Amazon.com, Inc.

[2] Reflects the best and worst performers for the quarter, in descending order based on individual security performance and portfolio weighting. Positions may include securities that are not held in the Portfolio as of 9/30/2024. Information is based upon a composite account and additional information regarding the performance contribution calculation methodology is available upon request. Specific securities identified and described do not represent all of the securities purchased, sold or recommended for advisory clients. It should not be assumed that any investments in securities identified and described were or will be profitable.

Outlook

We believe that the U.S. economy remains healthy and inflation has likely peaked, though it may not revert to the very low levels of the post 2008 financial crisis period. Real first quarter Gross Domestic Product (GDP) for 2024 was reported at 1.4% and February unemployment remains at a low 4.0%. After peaking at 9.1% in June of 2022, CPI inflation has declined to 3.3% for the 12 months ended in May which represents significant progress, though still above the Federal Reserve's goal.

Importantly, the Federal Reserve has stated that interest rate increases were finished and that reductions were likely in 2024 as inflation moves towards their target. This is generally positive for equity markets, absent a recession or meaningful decline in economic growth or corporate earnings. The good news is that there are increasing signs that the Federal Reserve may actually pull off the elusive soft landing where inflation rates decline to normal levels and recession is avoided.

That said, official government inflation statistics report that prices are about 20% higher than before the pandemic. Cars, homes, groceries, restaurant meals, insurance and the like witnessed substantial double digit price increases which appear well in excess of those reflected by the official government inflation statistics. Though reductions in inflation rates back towards normal levels are welcome news, it is occurring on top of materially higher price levels than before the Covid-19 outbreak. In general, businesses have had strong pricing power in this environment which has benefitted profits. As inflation rates move lower, increasing prices from already elevated levels may become more difficult for some corporations and the earnings tailwind of higher prices is likely to be mitigated. We are increasingly seeing this stress in businesses that serve lower income consumers who have been the most negatively impacted by the materially increased cost of living over the past few years.

Depending on the outcome, the results of the upcoming U.S. elections could also have different impacts on the economy, financial markets and specific industries which need to be monitored closely. This political season is looking to be one of the more contentious and divisive in recent memory, with each side representing very different governing philosophies.

Finally, no discussion of risks would be complete without a mention of the ever-rising U.S. government deficit. Roughly speaking, the deficit rose from $5 trillion to $10 trillion under President Bush over 8 years, $10 to $20 trillion under President Obama over 8 years, $20 to $28 trillion under President Trump in 4 years and $28 to $34.9 trillion under President Biden in a little over 3 years. Including unfunded liabilities like social security which are not included in those numbers, makes the picture far worse. So far, the country has been able to quietly pass the bill to future generations, suppress the interest rate on that debt towards zero for most of the time since the financial crisis and encourage a faster rate of inflation as a way to deal with the growing debt. However, the difficult work of austerity in the form of higher taxes (we have actually lowered taxes in recent years) and decreased spending (we have actually increased spending) has been avoided so far and deficits continue to broadly rise as percentage of GDP, though they are off peak levels of a few years ago due to strong nominal GDP growth as a result of real growth and high inflation.

Deficits are not all bad and, in fact, have been very helpful for financial markets. The strong performance of equity markets since the 2008 financial crisis has been a combination of strong innovation and economic growth, supercharged by some of the easiest fiscal and monetary policy on record. We feel confident that innovation in the U.S. will continue and look forward to investing behind that in the years ahead. We are less certain that fiscal and monetary policy can remain as easy in the future. Federal deficits are large relative to GDP and have grown rapidly since the start of this century. It is increasingly apparent that the Federal Reserve balance sheet has evolved from being used as temporary emergency stimulus during periods of economic stress into a more permanent tool to fund the government, as the balance sheet does not revert to its pre-crisis size after the crisis has passed. In effect, the Federal Reserve has moved from an emergency temporary buyer of government debt to a permanent holder of that debt in increasing size over the years. Along with having kept interest rates near zero and below the inflation rate from the time of the financial crisis up until the recent period, these policies have been stimulative to the economy and financial markets and made it easier to fund deficits by keeping interest rates lower than they may have been otherwise. And by making

[1] Represents all buys and sells for the quarter through September 30, 2024.

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deficits less onerous to fund, Congressional purse strings are loosened, allowing the cycle of expanding debt to persist.

While this has been great for investors, debts must eventually be paid. Since the U.S. is unlikely to explicitly default on the debt, the only way to deal with it requires continued economic growth, passing more debt to future generations through increased borrowing, implementing austerity (some combination of higher taxes and lower spending) or by letting inflation run hotter while keeping interest rates low which forces savers and bond holders to foot some of the bill. Typically, some combination of the above is used.

Though taxes could rise, spending cuts may pose a greater challenge. An aging society has higher healthcare expenses and is generally less productive. The demands on social security remain immense and unfunded. We believe that the $560 billion allocated to the clean energy transition in the 2022 is likely a small downpayment on what will be required in the decades ahead. While the investment may be necessary for carbon reduction and because fossil fuels are ultimately a depleting resource, the investment comes at a cost with global estimates over $200 trillion through 2050 according to a 2022 McKinsey study.

Reshoring of critical industries and likely increases in defense spending given rising global instability could also prove costly. China, along with Russia and other autocratic nations, appear to have decided it is time to get together to push back against the expansion of Western Democracies. This has not happened since World War II and, unfortunately, higher defense spending, reduced globalization and an end to the peace dividend could result. Less globalization of labor, were it to occur, could mean higher labor costs.

Related to this, we are experiencing the first land war in Europe since World War II and a war in the middle east. So far, both have been contained, but there are no guarantees that remains the case. Sensitivity to oil prices has increased as President Biden has reduced the strategic petroleum reserve from 650,000 barrels in June of 2020, to 372,000 in June of 2024, a low level not seen since 1983 which leaves less capacity to lean into the market to moderate future price increases.

In summary, large budgetary needs in the years ahead can put upward pressure on inflation and interest rates, maybe materially so. This remains a long-term risk to policy makers and investors. It requires us to focus on finding companies with real growth in demand and a competitive position that allows them to grow their earnings at rates in excess of inflation.

Summary View

The effective shutdown of the U.S. economy as a result of COVID-19 represented a major economic shock, but the U.S. and other developed nations enacted huge fiscal and monetary stimulus to help offset the impact. While there have been and continue to be setbacks, the U.S. economy and equity markets have generally powered through the various challenges. New investment opportunities are presenting themselves. Advances in AI may create new growth opportunities in many areas, and we are positioned for this to occur. Our strategy in this complex and challenging financial environment is to research and seek out attractive investments, while avoiding problematic sectors of the market.

We believe investments with high free cash flow, demonstrated capital allocation capability and organic growth are attractive. Equities of companies with pricing power that can more likely pass-through inflation should be more attractive than bonds and cash. We continue to avoid the most directly affected sectors of the market where balance sheets are impaired or where there is excessive competition. As a result of occasional market corrections, there may be additional opportunities that present themselves as we move forward. We hold portfolios with what we believe are high quality investments that are well positioned for the long term.

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Russell 1000® Growth Index: Measures the performance of those Russell 1000® Index companies with higher price-to-book ratios and higher forecasted growth values. The index is market cap-weighted and includes only common stocks incorporated in the United States and its territories.

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