

APPALACHES

capital

“Most men pursue pleasure with such breathless haste that they hurry past it.”

- Søren Kierkegaard

Dear Client of Appalaches Capital,

Appalaches Core LO finished the 2nd quarter with a gain of 3.7% after all fees and expenses. This compares with the S&P 500's return of 15.1%, the equal-weighted S&P 500's return of 11.2%, and the SOFR Index return of 0.9% in the 2nd quarter. Year to date, Appalaches Core LO has achieved a net return of 1.4%. When annualized since inception, the portfolio has achieved a net return of 10.7% per annum.

Instead of burying the lede, I will be direct: I believe this is a great time to be putting capital to work in high-quality and reasonably valued businesses. We are close to fully invested today, and as the figures above show, our results have diverged meaningfully from the major indices this period. While the result is currently disappointing, the divergence should be expected. We do not manage this portfolio to track any given benchmark, and short-term deviations—in either direction—are a result of our concentrated and differentiated process. I cannot predict with precision when the results will show up favorably in the performance figures, but I am optimistic about our portfolio based on today's opportunity set and prices.

Seemingly, investors are much more excited about potential returns from artificial intelligence than other areas of the economy. So much so that unrelated stocks are being sold ostensibly to fund their purchases of the AI trade, which is bad for our immediate investment results but otherwise a good opportunity for buying great businesses. This is not to say that every business involved in AI is undeserving of an investment, but rather that I am not finding compelling value in those that I can understand. It is standard psychology to get swept up in the excitement and fervor and that is exactly why it pays to be cautious instead of throwing caution to the wind.

We are looking for industries and business cycles with clear winners that are reasonably valued. Unfortunately, many of the top performing equities of late do not meet that bar by my own estimations. Take memory, for example, which is a bona fide commodity. Even with a consolidated industry structure, the barriers to entry for new capacity and supply are quite low among incumbents. Supply is short currently, and thus there is a huge benefit to incumbents now, but this should not last forever. It takes time, but as the old line goes, *“the cure for high prices is high prices.”* We cannot know for certain today if memory chip supply will be similarly constrained relative to its demand in a few years' time, particularly when incumbents are aggressively raising capital today for uncertain demand in the future. Will demand be higher? Most likely. Will supply also be higher? Most definitely. *How much* for each is the question – and I am much more inclined to believe that the supply side will win out.

Portfolio Commentary

We have had the opportunity to invest in a couple of new businesses this quarter, and the great opportunity to invest more in some of our current holdings. We increased our stakes in AutoZone, CME Group, and Progressive. We also made a new investment in McKesson Corporation and had other smaller purchases.

Now, the disappointing relative showing this quarter can be attributed to waning investor sentiment in some of our largest holdings, namely AutoZone and CME Group. As I have said before, our goal is strong absolute returns, but it is still reasonable to question the large relative gap for the current period. The upside of having such a concentrated portfolio (fifteen individual stocks at quarter-end) is that our best ideas can have a meaningful impact on our portfolio's performance and that we can look significantly different from the index. The downside is that we don't get to choose when. Over a short period of time, the performance of a stock can have nothing to do with the underlying earnings power of the business. And this is good, too. Otherwise, what opportunities would we be able to find?

For AutoZone, the company is currently undergoing a large-scale investment project that has inhibited near-term earnings growth. As I have written before, auto parts distribution is an availability game— whoever can deliver the part in the least amount of time typically wins the business. Both AutoZone and O'Reilly have consequently continued to invest in their distribution capabilities while finding ways to efficiently stock more parts in more stores. AutoZone has been in the process of building out a network of "Mega Hubs" over the last several years but has particularly ramped its development cadence over the last two years. These ~40,000 sq. ft stores act as local distribution hubs and provide faster restocking and delivery for satellite stores within a region. Delivery times for commercial customers can fall from six hours to just 45 minutes in some cases.¹ From a business owner's point of view, investing in their distribution network makes perfect sense, however, for the impatient investing public, the lack of immediate earnings growth is uninspiring. It is my view that this will reverse as the buildout reaches its peak intensity in the coming year and store economics accelerate as AutoZone becomes more competitive in its commercial programs.

On the other end of the spectrum, CME Group's declining stock price can be attributed to fearful anticipation of competition. The CFTC approved the listing of perpetual futures for Bitcoin on Kalshi, a prediction markets platform. The general concern in the market is that 1) Kalshi is not a traditional competitor, 2) perpetual futures are a novel asset class not currently present in traditional finance, and 3) that this opens the door to obsolescence of the traditional futures market that CME dominates. While the first point is axiomatic, the second is debatable, and the third is not so poignant as a threat as many may expect. Perpetual futures are indeed a new product, being created in 2016, but they borrow their mechanics for settlement from traditional swap mechanisms.

Swaps, like perpetual futures, require ongoing payments to a party in exchange for exposure to an underlying asset. Unlike swaps, whose payments are typically tied to floating rate benchmarks like SOFR, the payment between parties on a perpetual future is instead tied to a funding rate. The funding rate is in

¹ According to company filings and conference call transcripts.

place to incentivize the price of the perpetual future to closely track the price of the underlying. When the perpetual future is cheaper than the spot price, those long the contract are paid the funding rate, and conversely, when the contract is more expensive than the spot price, those long the contract must pay the funding rate to those who are short. This funding rate can increase in times of significant changes in spot prices, which increases the cost to hedge when it matters most. I do not see a world in which perpetual futures are favored over highly predictable, established, and liquid futures contracts for institutions and commercial users. Considering that 85-90% of CMEs volumes are from institutional clients, I do not think that the underlying business is overly threatened.² We had a similar opportunity for our initial purchase of CME when BGC Group launched its FMX Futures Exchange. Today, FMX handles less than 1% of the total volume that CME does—showing just how intense a barrier to entry liquidity is and how ingrained market standards are.³

Thinking About Disruption in the Age of AI

One of the largest challenges investors face is determining the likelihood of their businesses maintaining their profitability over an indefinite future. Even highly profitable companies face competition from peers, obsolescence from alternative solutions, or governmental intervention. Around the advent of ChatGPT, investors immediately began to price in much lower expectations for obvious disruption candidates such as call centers and digital tutoring platforms. That was more or less the whole picture for a few years, however, more recently the list of “The Disrupted” has grown significantly on the back of Anthropic’s dizzying cadence of product launches. Financial exchanges, ratings agencies, data providers, software, consultants, and other professional services have all seemingly been the focus of fear. It would be unwise to say that there should be no concern, but also just as unwise to say that all will be permanently impaired. So how do we separate the opportunities from the traps? After all, we have been investing in some of these areas, having bought some software, exchanges, and other financial infrastructure during the first half of the year.

Over time, I have come to believe that product-led moats are doomed to be eroded over time. What is the best today is not guaranteed to be the best tomorrow. To think better solutions will not also eventually come into being is antithetical to the very idea of capitalism. Herein lies the threat of Claude Code and other related tools to the software industry as a whole: many of these companies produce a solution that is only the best at doing highly specific tasks among few suitable alternatives. There is limited integration, limited consumer surplus, and limited switching costs. Why should the market reward these *Systems of Action* if they can be so easily replaced by bespoke solutions? I have used these tools to quickly move some of my projects onto a unified cloud platform. New tools and analyses can be created in just a few moments. Just this past week, I was talking to a friend working in private equity who was recently tasked with using AI coding assistants to create custom staffing software for a portfolio company. Just a couple of years ago, this would have been impossible – yet now any business function can be automated with a few prompts using nothing but natural language.

² According to company conference call transcripts.

³ According to exchange volume data and as calculated by Appalaches Capital.

So, what kind of software is less likely to face the same threat of disruption? I would argue those that are integrated over several business functions, those that control the user's standards and records, and those that form their own network ecosystems are entirely durable. Forgive me for being unoriginal, but I am pointing to *Systems of Record*. But why is it these and not the Systems of Action? Why can one piece of software have enduring value while another should be easily replaced? I would posit that Systems of Action create value through their use, while good Systems of Record create value through their ecosystems. Epic Systems, unfortunately privately held, is a fantastic example of a highly durable software business model. Basically described, the software is a medical record retention tool for healthcare providers. Patient health histories, prior prescriptions, diagnoses, scheduled visits, and providers are all conveniently stored on the platform, although not in a way that is particularly difficult to replicate via a homemade SQL database. What makes Epic special is the fact that providers within and outside of an organization can share records with one another. This creates value for both patients and providers who no longer need to request and wait for documentation to be shared amongst disconnected parties. Epic has value for each provider simply because another provider uses it. We are looking for valuable ecosystems and the authority figures who maintain their standards. This framework informed our software and financial infrastructure purchases mentioned earlier, although each are too small to warrant a specifically detailed discussion at this point in time.

Finding the Tangible Advantages

For those looking to take an easier approach to estimating terminal values in an age of disruption, one of the better routes to take is to find businesses solving physical challenges. In these cases, the value of the business is not tied to its intangible assets and is therefore much more insulated from AI-driven competitors. We had the opportunity to invest in shares of **McKesson Corporation (MCK)** during a bout of general market apathy towards defensive businesses.

McKesson is one of the "Big Three" drug distributors in the U.S. As a group, they control over 90% of all drug distribution.⁴ Centralized drug distributors are important due to the complexity of the pharmaceutical supply chain, and they are necessary for connecting two highly fragmented ends of the market. Even if sourcing drugs was relatively straightforward, that is, if every drug was branded and sold by one manufacturer, pharmacies would still need to coordinate the delivery of hundreds of separate SKUs per day. Manufacturers would also need to coordinate their own delivery logistics, of which the handling is highly regulated under federal law. You could easily imagine an unwieldy complicated system where a pharmacy has dozens of trucks stopping by at all hours of the day. Instead, distributors make life easy by consolidating inventory and managing the entire change-of-control process.

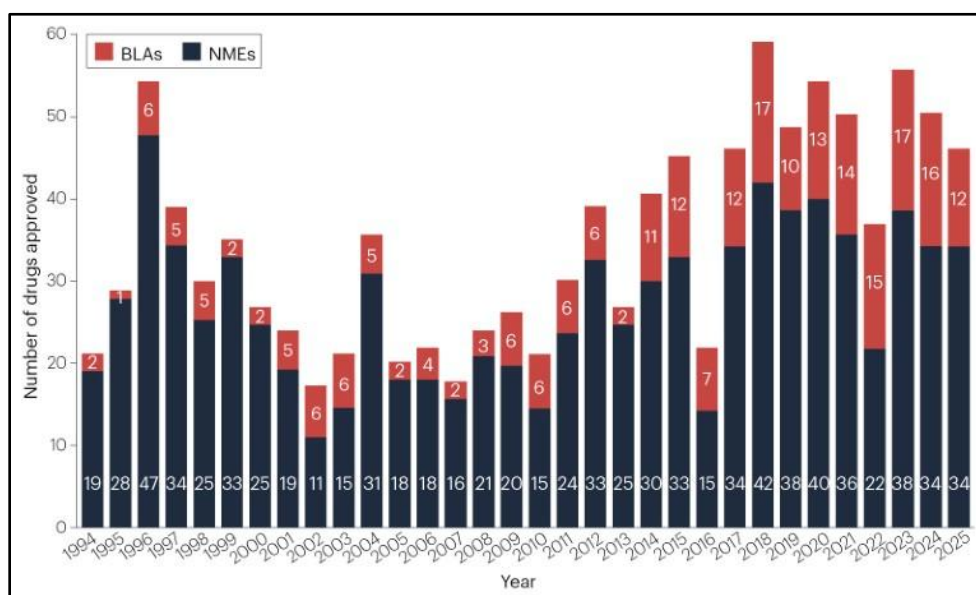
The opportunity for McKesson is a rapidly changing backdrop in the generic pharmaceutical market. The last decade has been challenging for the company due to weakness amongst generic manufacturers, and the litigation overhang as a consequence of the opioid crisis. Today, however, there is strong reason to believe that stabilization is coming to the generic market and the risks from opioid litigation have been largely resolved.

⁴ According to company and industry filings.

Under their traditional distribution model, McKesson acquires and distributes branded and generic drugs to pharmacies, doctors offices, and hospitals. Within branded drugs, McKesson is typically compensated under a fee-for-service arrangement, which leads to fixed gross profits on inflated prices. In this case, McKesson is working with one manufacturer and many pharmacies, resulting in limited negotiating power on the buy side and on the sell margin. Generic drugs on the other hand, are manufactured by many different parties, resulting in stronger negotiating leverage for McKesson on the buy margin. Gross margins on generics are consequently upwards of 10x higher than branded drugs. Since 2016, the generic drug market has experienced prolonged price depreciation after a dearth of new generic offerings came to market in the prior decade, which stimulated competition and price wars amongst manufacturers. Drug distributors were consequently unable to capture as much margin on generics, which is where a significant portion of their gross profits are made.

There are many reasons to believe that stabilization is occurring and is likely to be sustainable for the foreseeable future. The most obvious of which is that nearly \$100 billion worth of branded drugs are expected to go off patent in 2028 alone.⁵ This upcoming patent cliff acts as a tailwind for generic price stability, as well as a mix shift margin opportunity for distributors. Instead of having to fight tooth and nail to gain volume in existing products, manufacturers will have the opportunity to focus on new generic launches and alleviate the constant undercutting in existing products. This tailwind is sustainable as well. With a typical patent life being twenty years, the drugs coming off patent today were first released around 2006. This marked a low point in development for the industry, and the approval of New Molecular Entities (NMEs) began a strong trend upward lasting until today. This suggests that the opportunity set for new generic formulations could grow until at least 2045 before seeing any significant drought. This was not the case during the last major patent cliff in 2016, due to a dramatic increase in NMEs in 1996 but less approvals in the years following.

Number of Drug Approvals, 1994-2025⁶



⁵ According to industry reports. \$100 billion estimate sourced from Financial Times.

⁶ Source: US FDA and Nature

Capacity within the generic drug manufacturing industry has also exited or has been retooled for other purposes. Major players like Teva and Sandoz have rationalized their portfolios to exit traditional oral solids and shifted their capacity towards more complex deliveries, like inhalers and injectables. All else equal, less supply should lead to further improvements in price stability. Just like high prices, low prices inevitably work themselves out in the free market.

Biologics have been coming into vogue over the last couple of decades, and so many of McKesson's largest opportunities are in this category. As the name implies, biologics are derived from living organisms rather than static formulas of chemicals. These typically require more delicate storage and handling, for example, Pfizer states their COVID-19 vaccine is required to be stored between -90°C and -60°C. Biologics, with their more complicated handling requirements, allow McKesson to provide more services and consequently collect higher fees. Now that many of these are also going off patent as biosimilars (the analog for generics in this category), McKesson has a clear line of sight towards sustainable, higher margin volume growth here.

The pharmaceutical industry as a whole possesses very high barriers to entry that stem from the sheer scale of these operations. The gross margin on the entire business in 2025 was just 3.7%, driven in part by fee for service arrangements but also by a generally low toll collected from the value chain.⁷ This commitment to non-extractive pricing results in a market that cannot support other competitors. Given that performing this service cheaply and with high levels of availability is what drives value for customers and suppliers, it only makes sense that the industry would remain consolidated. There is little incentive to require a new competitor because there is clear value already being provided. Even in new launches that have sought a direct-to-consumer model, such as GLP-1s, the pharma industry has still largely relied on the big three for managing the logistics. High margins can be admirable, but even more admirable is a company taking a small spread and turning it into high profitability through well managed efficiency – McKesson's return on invested capital is over 50%, which is driven primarily by their high utilization and turnover of their capital base.⁸

In terms of a variant view, my estimates for the coming year do not differ too far from the average analyst. However, based on the current valuation of around 16x forward free cash flow, the collective market does not seem to think that this growth is very persistent. With the attractive generic and biosimilar pipeline, I believe gross profits could grow at a high single digit rate for the foreseeable future which will provide a further uplift to margins. With continued repurchases shareholders should stand to do well from here.

⁷ According to company filings and as calculated by Appalaches Capital.

⁸ According to company filings and as calculated by Appalaches Capital.

Closing Thoughts

When I last wrote to you, I stated that *“I am aiming to move the portfolio to a position where we are more exposed to idiosyncratic businesses and cycles.”* That has certainly played out this quarter. This was an intentional decision and one that I am sticking to. This is obviously one of the worst relative showings that we have had, and yet, I feel the best I ever have about our portfolio. That may seem like a contradiction of sorts, but I think that in reality they are directly related.

As always, if there is anything I could do to better serve you, please let me know. I would also appreciate it if you would share this with anyone you know who may be interested in our concentrated, benchmark agnostic, and long-only approach.

Thank you for your relationship,

A handwritten signature in black ink, appearing to read "Jake Keys", with a long horizontal line extending from the end of the signature.

Jake Keys
Founder and Managing Member

Top 5 Holdings as of the Quarter Ended June 30, 2026

in alphabetical order

Alphabet Inc.	GOOGL
Arch Capital Group Ltd.	ACGL
AutoZone, Inc.	AZO
Cash and Short-Term Treasury ETF	USD, SGOV
Progressive Corporation	PGR

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