GRANAHAN INVESTMENT MANAGEMENT LLC

FOCUSED GROWTH

Portfolio Comments
December 31, 2024

In the fourth quarter of 2024, the Granahan Focused Growth portfolio returned +9.3% exceeding the benchmark return of +1.7%. For the full year 2024, Focused Growth returned +23.9%, a solid return, both absolute and relative, compared with the Russell 2000 Growth benchmark of +15.2%. Later in this letter I'll cover more about 2024 and the outlook for 2025 and beyond, but before doing so I discuss attribution for both Q4 and the year.

Attribution for Q4 2024

Granahan's Focused Growth strategy rose 9.3 % in Q4 compared to the benchmark's +1.7% return. Stock selection was strong in most sectors led by Industrials (+362 basis points), Financials (+191 basis points), and Technology (+122 basis points). Selection was negative in two sectors, Healthcare (-283 basis points) and Consumer Discretionary (-0.73 basis points). Below I discuss the individual portfolio holdings that were top contributors and detractors in Q4:

Q4 Largest Relative Contributors:

- **Axon (AXON)** - Axon is a mission-driven company which sells products, platforms, and services designed to improve law-enforcement and workplace safety, efficiency and efficacy, reduce social conflict, enable a fair and effective justice system, and aspirationally with its Taser non-lethal weapon to "obsolete the bullet". AXON shares rose 48% in Q4 contributing +304 basis points to performance in the wake of very strong Q3 results and forward guidance. While we have trimmed the position, we maintain a large position in AXON shares.

- **Porch (PRCH)** - Porch provides homeowners insurance, software and other services for the residential housing market. PRCH shares appreciated 220% in Q4, contributing +176 basis points to performance. The company announced that its long-awaited transition to a reciprocal structure had been approved, which should significantly enhance and smooth the company's earnings going forward. The company also issued initial 2025 EBITDA guidance which was roughly 100% higher than Street consensus and held its first ever analyst day. We continue to believe that the company's prospects are good, and the stock's risk/reward is attractive. We hold a mid-sized position in PRCH shares.

- **Reddit (RDDT)** - Reddit, a social media platform that allows users to connect and discuss topics and get information in communities called subreddits, saw shares rise 142% contributing +149 basis points to performance. The company reported very strong Q3 results and raised earnings guidance substantially. We have trimmed our position but maintain a mid-sized position in RDDT.

Q4 Largest Relative Detractors:

- **Evolent Health (EVH)** - Evolent helps healthcare payers and providers manage complex conditions such as oncology and cardiology with the twin goals of providing better service and lower costs. EVH shares fell -61% in Q4, hurting performance by -344 basis points. On its Q3 call Evolent announced that some major oncology clients had much larger than expected medical costs, which led to a major reduction in the company's forward earnings outlook. The magnitude of the miss calls into question Evolent's core earnings power. We continue to believe the company adds significant value to its clients, albeit ones for which they may have to adjust contracts and earn lower margins in exchange for taking on less risk. We currently hold a mid-sized position in EVH.

- **Zeta Global Holdings (ZETA)** - Zeta operates a marketing-technology platform that lets advertisers combine their own internal first-party data with third-party data to attract, retain, and cross-sell customers. ZETA shares fell -34% in Q4, which hurt performance by -164 basis points, despite posting strong Q3 results and Q4 guidance. The company was the subject of a short report highly critical of some of Zeta's data sources and reported financials. We had cut the position significantly prior to this based on valuation and other factors, but it nonetheless had a meaningful negative impact in Q4. We currently have a below average weight position in ZETA.

- **Kinder Care Learning (KLC)** - Kinder Care is the largest provider of day care services in the U.S. KLC shares fell -26% in Q4, hurting performance by -84 basis points. The company conducted its IPO in early October, and management apparently missed the memo that Wall Street expects newly public companies to report stronger than "expected" results for the first few quarters after an IPO. That may sound a bit silly, but that is the way the public markets work and KLC shares paid the price in Q4. We have a below average position in KLC.

Attribution for the Year 2024 - A Reminder of The Importance of Being Earnings…Accurate

All told, for the year 2024 the Granahan Focused Growth strategy rose 23.9% compared to the benchmark's return of +15.2%. I believe we executed our process well throughout 2024. In my Q4 2023 letter I stated that I thought 2024 would be a year which would be about the E rather than the P/E--i.e., it would be the earnings rather than the Price/Earnings valuation multiple that would drive performance. This proved to be an accurate forecast, and while we didn't execute perfectly, thankfully we largely got the E right in 2024. Overall, it was a tough year for active small cap growth managers (only 38% outperformed the index according to Jefferies Research), and one in which the breadth of outperforming stocks was extraordinarily narrow.

For the year, 45% of the Russell 2000 Growth benchmark's return came from just 10 stocks. Thankfully, beginning in July, investors began to widen their investing appetite from one that was very narrowly focused on AI infrastructure and a few sundry other stocks, to a broader range of investments. Below I discuss the largest contributors and largest detractors for 2024:

2024 Largest Relative Contributors:

- **Zeta Global Holdings (ZETA)** ZETA shares rose 123% in 2024, contributing +782 basis points to performance. The company posted very strong results through 2024, and the stock appreciated significantly before the company became the subject of a highly critical short report (see above). As noted, we currently have a below average position in ZETA.

- **Axon (AXON)** AXON shares rose 130% and contributed +568 basis points to performance in 2024. The company continues to execute exceptionally well on most fronts, and we believe it remains superbly positioned and going after a very large opportunity. While we have trimmed the position, we maintain a large position in AXON shares.

- **Victory Capital Holdings, Inc. (VCTR)** - Victory Capital is a holding company for a diverse group of asset managers. VCTR shares rose 96% in 2024, contributing +287 basis points to performance. The company executed well through 2024 and in Q2 announced its intention to purchase Amundi's US asset management business and enter into a 15-year mutual distribution agreement with Amundi. We believe the deal makes both strategic and financial sense and expect it will lead to above average earnings growth for Victory over the next several years. We continue to hold a large position in VCTR shares.

2024 Largest Relative Detractors:

- **Evolent Health (EVH)** - As detailed above, EVH was a very significant negative contributor in Q4. For the year, the stock dropped -66% and contributed -468 basis points to performance. Please see above for details.

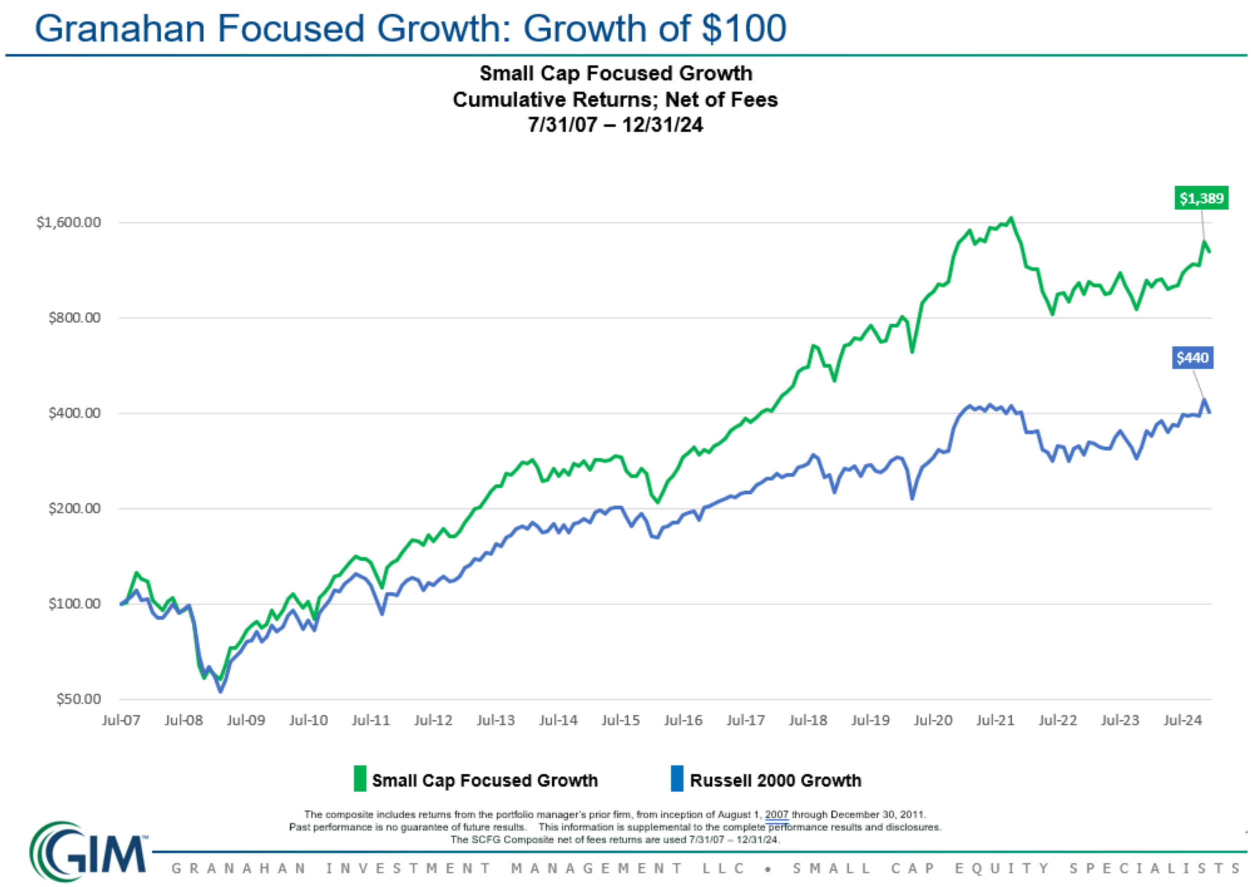
- **Sprout Social (SPT)** - Sprout, a leader in social media management software, saw its shares drop by -50% in 2024, and hurt performance by -460 basis points. Much of this was caused by very disappointing Q1 2024 results which were a function of both internal (go-to-market changes) and external issues (more difficult selling environment). While we believe that the challenges are not thesis changing, they are nonetheless significant, and we have managed our position-sizing of SPT shares accordingly. We currently hold a below average position.

- **indie Semiconductor (INDI)** – Indie designs and sells semiconductors for uses such as user experience, connected car (e.g., Apple CarPlay), and increasingly advanced vision and radar for driver assistance, autonomous driving, and driver monitoring. INDI shares fell -50% in 2024, hurting performance by -383 basis points. Most of this occurred in Q3 as Indie reduced guidance in conjunction with its Q2 earnings release citing a continuation of an automotive inventory correction. This in turn both reduced sales of existing designs and more significantly pushed out shipments of new models with Indie's designs. Importantly, the company has not lost design wins--i.e., shipments/sales of their chips will occur, just later than expected. The company's backlog remains robust, and we currently hold a modestly above average position in INDI shares.

Looking Back: An Affirmation of the Focused Growth Philosophy and Process and The Virtues of Asset Allocation

The central tenet of the Granahan Focused Growth strategy is to identify companies capable of generating secular growth of 15+% for many years. We refer to such companies as Desert Island worthy--that is if we were stranded on a desert island for 5-7 years when we return these companies would be substantially larger. If we can successfully identify them, and generally be disciplined by owning the stocks of these companies when risk/reward is good, and not owning them when risk/reward is not good, we believe we should be able to generate attractive returns for our clients.

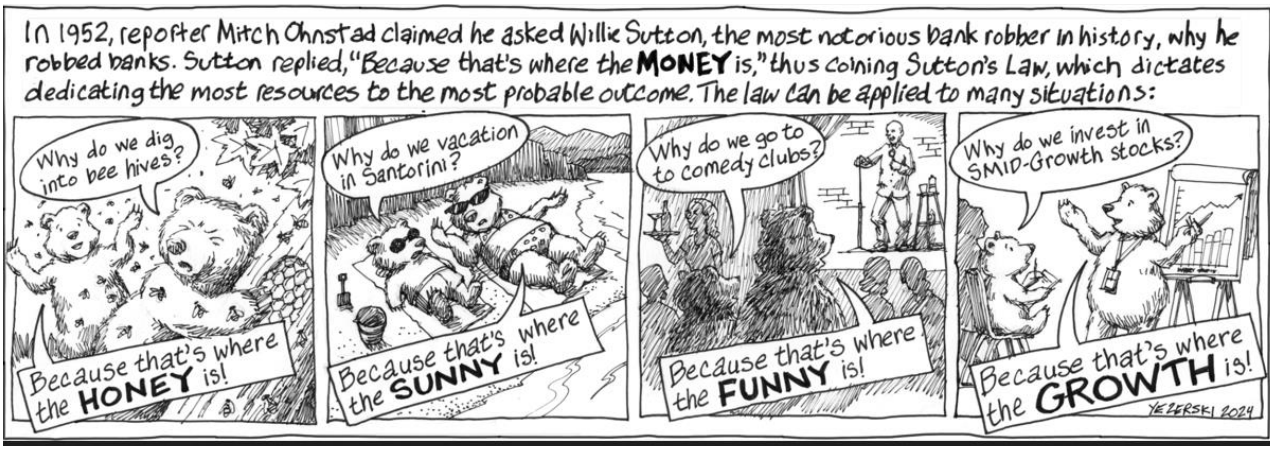
An investment of $100 at the time of the inception of the strategy in July 2007 would be worth $1,389 as of the end of 2024. This compares favorably with $440 if invested in the Russell 2000 Growth benchmark over the same period. I want to make two points about this: 1) Historical performance is absolutely not a guarantee of future performance; and 2) The performance has been anything but a straight line. Events such as the Global Financial Crisis (GFC), the Covid pandemic in 2020, and the spike in interest rates that began in late 2021 have triggered risk aversion and market selling (especially in longer duration growth stocks) and periods of outsized negative returns. At the same time, historically the recoveries from each of these events have given investors comfort that it is safe to swim in the equity markets (including longer duration growth stocks) and have led to outsized positive returns.



Since mid-2022, after the severe sell-off triggered by the spike in interest rates (during which the Focused Growth strategy fell a brutal -53% peak-to-trough), we have consistently opined that if our portfolio companies were able to grow their earnings in line with expectations (i.e., again, the "E" in the "P/E" or price/earnings equation), the portfolio's returns would be good. And they have been. The strategy rose 53% (18.5% CAGR) from the trough in mid-June 2022 through year-end 2024 compared with the Russell 2000 growth's return of 40.3% (15.2% CAGR).

I dragged you through all that history because I think it is worth reiterating two of my beliefs:

1. **It is difficult--if not impossible--to consistently add value trying to time the market**. Thus, we shouldn't try to do so and instead adhere to a sound asset allocation strategy.
2. **Within such an asset allocation strategy an active small/mid cap growth allocation merits consideration**. Why do small/mid-cap growth companies merit such consideration? To paraphrase Willie Sutton, ***because that is where the growth is***.



Looking Forward: Perhaps a Return to Normal in a World Which is Anything But

The 2024 US presidential election is in the rear-view mirror and thankfully we are once again set to have a normal peaceful transition after the abnormal and horrifying events during the 2021 transition. Trump 2.0 has many anticipating a period of robust economic growth spurred by artificial intelligence, tax cuts, M&A, and deregulation. At the same time, many are fearful that Trump will follow through on his campaign pledges to deport 15-20 million people and to pardon those who took part in the January 6, 2021 attacks on the US Capitol; that his promises to impose universal tariffs will hurt the US consumer and be inflationary; that tax cuts will balloon the Federal deficit; and that additional Supreme Court appointments and threats of retribution and lawfare will undermine the independence of the Federal Reserve, the judicial branch of government, and the press. And then there is his imperialistic (rhetoric? ideas? aims?) vis-à-vis Canada, Greenland, Panama, and the Gulf of Mexico…

My own view is complicated and multi-faceted, with bits of all the above. For example, I'm both hopeful and fearful about Trump's Department of Governmental Efficiency (DOGE) to be headed by Elon Musk and Vivek Ramaswamy. Hopeful that US Federal Government spending and deficits will be reined in, and fearful that critical social programs and people in need will suffer significant collateral damage. Overall, it is possible that we may experience a period of strong economic growth, along with exciting developments in a wide range of sectors driven by AI and robotics, and spurred on by lower taxes, reduced regulation, and in some cases domestic reshoring. Much of this would be a constructive environment for the Granahan Focused Growth strategy.

All of that is (some) well and (some) good. But the main, main thing will continue to be executing our process. Regardless of the economic environment, GDP growth is unlikely to grow anywhere near 15%. If we are successful in identifying companies that can grow at this rate or more, they will thus capture a disproportionate share of GDP. This, together with the other three parts of our process (disciplined valuation, careful portfolio construction, and risk management), should enable us to generate good returns for you over most intermediate and long-term environments.

Some Content You Might Enjoy

Space Men and Women:

Elon Musk - Walter Isaacson - I'm chagrined that it took me so long to get to Isaacson's biography about Musk which was released in September of 2023. The book, for which Isaacson shadowed Musk for over two years, gave me a better understanding of Musk as a person with his manic ups and downs which has led him at times to treat others horribly, but at the same time achieve great things. Specifically, it is awe-inspiring to delve into what Musk has accomplished with Tesla (electric vehicles, energy storage, and solar); SpaceX (space exploration, rocket and satellite construction, and Starlink satellite internet access); The Boring Company (tunnel construction and infrastructure development for high-speed transportation systems); X.com (merged to become PayPal, online financial services and digital payments); X (formerly Twitter social media); Neuralink (brain-computer interfaces); and xAI (artificial intelligence). It also leads me to put higher odds on Musk achieving the goals of DOGE (see above), travel to Mars, and whatever else he might set his mind on.

Jared Isaacman - Space Walk Video - In September 2024, Jared Isaacman, Founder/CEO of one our portfolio companies Shift4 Payments (FOUR), along with engineer Sarah Gillis became the first two private individuals to walk in space. Isaacson has subsequently been named to head NASA. I think this is a negative for our investment in Shift4 as I think Isaacman is an extraordinary executive and leader, but for the same reasons I am bullish about the future of US space exploration.

Jeff Bezos Interviewed by Andrew Ross Sorkin - Sorkin conducts a wide-ranging interview with Bezos covering Amazon from its early days to his surprisingly active current involvement, Bezos' space travel endeavors and dreams with Blue Origin, and many other topics. Bezos rarely does interviews, and this one is worth watching.

A Book and Podcast by Malcolm Gladwell

Book: *Revenge of the Tipping Point: Overstories, Superspreaders, and the Rise of Social Engineering* - Having read Gladwell's original book *Tipping Point*, I assumed the successor would be a mere rehash. *Au contraire*. A shoutout to Elise O'Connell, my colleague at Granahan and one of our top-notch traders, who urged me to read it. *Revenge* breaks new ground and is anything but a rehash. It also, to borrow Paul

Harvey's legendary phrase, tells the rest of the story about my favorite bank robber Willie Sutton (see Yezerski's cartoon above).

Podcast: Hallelujah | Revisionist History - As a bonus, I'd point you to an oldie but very goodie that is part of the first season of Gladwell's podcast *Revisionist History*. Gladwell explores the different paths that creative processes can take and the fascinating and improbable journey of Leonard Cohen’s classic song "Hallelujah."

A Couple of Movies

A River Runs Through It - I rewatched this 1992 film for a film and literature Zoom group I'm a part of with my father, Morris Beja, which is a private spin-off of the most popular class of his tenure as a professor and Chairman of the English Department at THE Ohio State University. The film, directed by Robert Redford and starring Brad Pitt in his breakout role, centers on a father, two brothers, their lives and fly fishing. It beautifully stands the tests of time, as does the classic novella by Norman Maclean.

Belle - Set in 18th century England, Belle is loosely based on the true story of an illegitimate mixed-race girl named Dido Elizabeth Belle who is adopted by Lord Mansfield, England's Chief Justice. Little known but critical fact: Mansfield played a key role in the advancement of the abolitionist movement. The story is excellent and features exceptional performances by Gugu Mbatha-Raw as Dido and Tom Wilkinson as Lord Mansfield.

Conclusion

Best wishes for 2025. I’d note that this April Granahan Investment Management will celebrate 40 years of managing small cap assets on behalf of our clients.

On behalf of our entire team, we thank you for entrusting us with the management of your capital which is managed alongside our own.

Sincerely,

Drew

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