GLOBAL SMALL CAP

Portfolio Comments
December 31, 2022

Summary of Global Investing Landscape

There are few periods in our investing lifetimes that have been characterized by as much uncertainty as 2022. Inflation, which was initially expected to be 'transitory,' spiked to over 8%, levels not seen since the 1990s. As a result, the Federal Reserve embarked on an aggressive program of raising interest rates in order to quell inflation. This has lead to a spike in both short term rates and bond yields. Two-year and ten-year treasury yields started 2022 at 0.9% and 1.7% and ended the year at 4.4% and 3.9% respectively. This has contributed to a consensus view that growth stocks are less attractive in the current environment and that a recession will likely occur in 2023. Adding to the uncertainty and fear were lingering pandemic issues particularly in China, Russia's invasion of Ukraine, a potential energy crisis in Europe, tensions between China and Taiwan, and notable changes to government leadership across the world. Several key sentiment indicators for small caps reached all-time lows in 2022, including the Michigan Consumer Sentiment (back to 1952), NFIB Small Business Economic Outlook (back to 1974) and the AAII Bull-Bear Spread (back to 1987)[1]. Metrics outside the US are even worse, in some cases.

2022 was a year of extreme negative sentiment (rather than negative estimate revisions) which resulted in significant multiple compression. However, all the issues that gripped the markets in 2022 have been well-documented and, no doubt, a certain level of concern is priced in; only time will tell if it is enough. Given the extent of cautious market commentary by economists and strategists, 2023 could potentially be one of the most anticipated recessions of all time. It is worth remembering that the market is a forward-looking mechanism that discounts economic and geopolitical issues many months in advance. In fact, after signs of peaking inflation and slightly less hawkish commentary from the Fed, the market already seems to be shifting its focus to earnings growth in 2023. Given the significant valuation adjustment that growth stocks experienced last year, we are laser-focused (even more so than usual) on the earnings, or "E", of our portfolio companies.

Conditions Remain Challenging for Secular Growth

While the global small cap market performance was positive for the period (+10.8%), the MSCI World Small Cap Value Index (+12.1%) outperformed the MSCI World Small Cap Growth Index (+8.7%) again this quarter. In fact, over the last 9 quarters, value stocks in our benchmark have dramatically outperformed growth by over 30 percentage points (+29.4% vs -2.3%). Energy has been the leading sector for two years in a row (2021 +68%, 2022 +51%). In 2022, Energy, Utilities, Consumer Staples, and Materials were the top performing sectors. We are consistently underweight these sectors, as their characteristics related to cyclicality of growth, returns and capital intensity are not generally a good fit for the small cap growth portfolio.

[1] Furey Research Partners

	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022
Growth	21.2	5.6	5.0	(1.7)	0.5	(11.3)	(20.2)	(4.4)	8.7
Value	26.2	12.5	4.1	(1.8)	3.4	(2.5)	(15.3)	(6.9)	12.1
Variance	(5.0)	(6.9)	0.9	0.1	(2.9)	(8.8)	(4.9)	2.5	(3.4)

Source: Bloomberg

Viewed another way, the cheapest stocks in the universe have outperformed the highest P/E multiple stocks since February 2021 (see chart below). The difference between the highest and lowest quintiles was 16-17% for the US, Canada, and Europe. A majority of the Global Small Cap portfolio is invested in Core Growth and Pioneer companies which carry higher valuations given superior future growth prospects. Encouragingly, during the two meaningful rallies in 2022 (i.e., 6/16- 8/15 and 9/26-12/2) driven by hopes that Fed tightening was peaking (i.e., "risk on"), the portfolio outperformed as expected.

Figure 123: Perf of SMid Caps by quintiles of Trailing P/E – Feb 21 to Present (i.e. when value started to outperfo

Quintiles of Trailing P/E	Global	Cont. Europe	UK	US-Can	Japan	Aus-NZ
Highest	-1%	-15%	-22%	-3%	-8%	-14%
2nd	1%	-10%	-12%	5%	0%	-8%
3rd	2%	-4%	-10%	6%	2%	3%
4th	7%	2%	-10%	13%	3%	-4%
Lowest	7%	1%	-3%	14%	4%	2%
Lowest Qtl less Highest Qtl	8%	16%	19%	17%	12%	17%

Sector and Region Positioning

The sector allocation effect of -180bps more than offset positive stock selection of +39bps in the fourth quarter. Despite this dynamic, we remain disciplined to our process which is characterized by a meaningful overweight to Technology and Healthcare given strong secular growth potential and attractive risk/rewards. Energy and Materials continue to be a drag on performance this quarter. As mentioned above, the inability to predict energy and commodity prices, the capital intensity of the companies, and their negative ESG attributes make these sectors unattractive in our process. The low growth profile of the Staples industry makes it difficult to find companies that are generating enough organic growth to compete with those in other sectors for space in the portfolio.

Most Overweight Sectors
Avg. Weighting 9/30/22 – 12/31/22 (%)

	Portfolio	Benchmark	Diff
Technology	31.6	11.1	20.6
Healthcare	17.7	10.4	7.3
Industrials	21.3	18.9	2.5
Comm Services	3.5	2.7	0.8

Most Underweight Sectors
Avg. Weighting 9/30/22 – 12/31/22 (%)

	Portfolio	Benchmark	Diff
Energy / Utilities	-	8.5	(8.5)
Materials	0.3	7.5	(7.2)
Financials	9.2	14.5	(5.3)
Real Estate	3.6	8.8	(5.2)
Consumer Staples	-	4.8	(4.8)

As with sectors, the weightings by region are purely a function of bottom-up stock picking. We do not manage the strategy to sector or region benchmark weights. In the Nordics, we find plenty of solid companies with better-than-average growth, strong management teams, and opportunities related to sustainability (e.g., Alfen Beheer – smart grid and EV charging equipment). Alternatively, Japan is a region with lower growth prospects, below average profitability, and mediocre capital allocation due to overly conservative boards and management teams. The US underweight includes a company, James River (264 bps), that is domiciled in Bermuda but for all intents and purposes is an American company. The valuation gap between the US and international markets continues to widen.

Most Overweight Regions
Avg. Weighting 9/30/22 – 12/31/22 (%)

	Portfolio	Benchmark	Diff
Nordics	7.4	3.9	3.5
Canada	17.7	10.4	2.1
India [1]	2.0	-	2.0
Europe	10.6	8.7	1.9
UK	6.7	5.5	1.2

Most Underweight Regions
Avg. Weighting 9/30/22 – 12/31/22 (%)

	Portfolio	Benchmark	Diff
United States	53.9	60.1	(6.2)
Japan	7.2	11.0	(3.8)
Australia/NZ	1.8	4.1	(2.4)
Israel & Other [2]	1.8	2.7	(1.7)

1.) WNS Holdings is domiciled in India, but almost all the revenue is from developed markets

2.) Other: Portfolio includes Kornit Digital and InMode (recently sold); Benchmark includes Asia ex-Japan, Africa, South America, Middle East ex-Israel

Stock Performance

Stock selection was +39bps in the quarter. Of the top 10 contributors and detractors, we continue to own 9 of the companies, only selling ELMO Software after a takeout offer. Detailed explanations of our top contributors and detractors are included below.

Top Contributors to Performance Year-to-Date Through 12/31/22 (%)		
Olink Holding	1.68	Own
ELMO Software	1.27	Sold
CTS Eventim AG & Co.	0.75	Own
Azenta	0.72	Own
Veracyte	0.62	Own

Top Detractors from Performance Year-to-Date Through 12/31/22 (%)		
Silvergate Capital	(2.28)	Own
908 Devices	(1.28)	Own
AXT, Inc.	(0.88)	Own
BioLife Solutions	(0.75)	Own
Definitive Healthcare	(0.66)	Own

The three largest relative contributors in Q4 were:

- **Olink Holding** (OLK US) – Olink has emerged as the leading company in the high-plex segment of the proteomics market. The technology enables scalable research in proteomics, a field that studies the role of proteins to better understand diseases. Proteomics builds on the information gained from genomics to develop more targeted therapies to treat diseases. The company has seen strong adoption of its products in the past couple of quarters.

- **ELMO Software** (ELO AU) – Elmo received a takeout offer from private equity firm, K1 Investment Management. We sold the stock shortly after the announcement.

- **CTS Eventim** (EVD GR) – CTS Eventim is the leading ticketing and live event platform in Europe with dominant market share. The company continued to benefit from the post-pandemic rebound in consumer spending on concerts, sporting events, etc. with increasing signs that the strength is sustainable. Momentum in the market was well-supported by Live Nation's results in early-November, announcements by artists of large tours globally, strong consumer demand for events, and higher ticket prices. CTS reported revenues in mid-November that beat expectations by a remarkable 70%. We believe the live event space will maintain above average growth rates for the next 2-3 years. As such, we continue to own a sizeable position in the stock.

The three largest relative detractors contributors in Q4 were:

- **Silvergate Capital** (SI US) – Silvergate is focused on the digital market by providing 24x7 banking functions to market participants. The stock has been very weak given the fallout seen in the digital currency market. We continue to maintain our position as the company is the leader in this sector.

- **908 Devices (MASS US)** – 908 Devices is a disruptive life sciences company focused on miniaturizing mass spectrometry, which is the gold standard used for chemical analysis. The company has seen early adoption of its technology to combat the opioid crisis through handheld detection devices and in bioprocessing research. The company did experience disruption in 2H22 as many customers deferred purchases. Despite the short-term impact, we continue to believe there is a compelling long-term opportunity.

- **AXT Inc. (AXTI US)** – AXT manufactures semiconductor substrates and raw materials. The company is well-positioned to benefit as its products are increasingly adopted in new applications like wearable devices and automotive applications; however, near-term financial results were negatively impacted by the semiconductor industry excess inventory given economic weakness.

Portfolio Activity

Most of the activity this quarter related to the addition of new names and the offsetting sales to fund them. The market volatility has created compelling opportunities to own strong secular growth companies whose risk/reward has become more attractive. **Tomra Systems**, the dominant manufacturer of recycling and sorting machines, and **Autostore Holdings**, an innovative manufacturer of warehouse automation systems, are good examples. Both stocks have significantly rerated from valuation multiples more than twice where they traded at the end of 2021. We initiated a position in **SES Imagotag**, the leader in electronic shelf labels. SES Imagotag is helping brick-and-mortar retailers be more competitive with ecommerce by digitizing store operations. We added **Xometry** to the portfolio. Xometry is a business-to-business marketplace that matches buyers of industrial components with a highly fragmented base of machine shop suppliers. The business model is disrupting the status quo in the manufacturing industry.

We also took advantage of the volatility in the market to add to our highest conviction names and/or ones that sold off despite little change to long term fundamentals. We added to **Azenta**, a provider of instruments, consumables, and services to the life sciences industry. The stock fell 41% in Q3 after a negative preannouncement due to what we believe are temporary headwinds. We also increased our weighting in **Silvergate**, as we believe the market has overreacted to the recent negative events in cryptocurrency. We added to **Rapid 7**, an innovative cybersecurity software company with a strong competitive position and large market opportunity.

Lending Tree, an online real estate lender, was one of the more notable sales in the quarter. Reduced demand in the mortgage market is proving to be too impactful to the company's growth and profitability. We sold **InMode**, a manufacturer of minimally invasive aesthetic medical devices, as the risk profile has increased with the more difficult economic environment. We trimmed **Willscot Mobile Mini** after recent strong performance, but the company remains a top 5 position in the portfolio.

Where We Stand

While the market dynamics are constantly changing, our investment process remains the same. We continue to seek out companies with durable and resilient business models that have potential for significant revenue and earnings growth over the next 3-5 years. We believe that trying to predict economic, policy and style rotations is impossible to do on a consistent basis. Our time and effort is squarely focused on identifying and analyzing stocks. While the companies in the Global Small Cap portfolio are not immune to the macroeconomic factors, we seek companies that are providing strong value propositions to customers, taking market share, and benefitting from long term secular growth drivers. Valuations for our type of secular growth stocks looks attractive after two years of multiple compression. We believe that continued earnings growth from these companies will eventually lead to higher stock prices.

As always, we appreciate and thank you for trusting Granahan with the management of your capital. It's managed alongside our own.