Note for Investors in the Granahan Small Cap Focused Growth Strategy in light of COVID-19 and Market Volatility March 16, 2020

Unchartered Terrain

We are in unchartered territory. Wall Street abhors uncertainty, and there are very uncertain health impacts and very uncertain economic impacts from COVID-19. In this context, the past four weeks' volatility is not surprising.

Granahan's investment team has been investing for many years, and through many periods of extreme fear and market corrections, including for most of us:

- '87 Crash
- '89 Mini-crash
- '91 Recession and impending invasion of Kuwait
- '97 Asian Contagion
- 2000 Dot.Com crash
- 9/11
- 2003 pending Iraq invasion
- Global Financial Crisis ("GFC")
- 2011 GFC Echo

That said, This One is Different. A few things about the current situation:

- The economic impact is apt to be severe and is impossible to quantify. It will depend on how quickly the outbreak is contained, and when and to what degree businesses and consumers resume their (new normal) lives
- Current valuations relative to the dot.com bust and GFC are generally not expensive, but nor are they dirt cheap (as ultimately was the case at the trough of the GFC).
- Investor psychology can, and likely will, change rapidly. This bipolar market (manic ups and downs) could persist for some time. There are no guarantees we've seen the bottom, but when the bottom occurs, the move to the upside is likely to be violent.

How should I think about Granahan's US Focused Growth Fund?

- As always, and as mentioned in previous letters, we don't have a crystal ball.
- Make sure you are within your asset allocation parameters.
- If looking to add to Focused Growth, perhaps do so in tranches--say spreading over the next few weeks or months.
- Focused Growth:
 - Is fully invested (with a small amount of cash to facilitate buys/sells), and thus will undoubtedly drop should the broader markets continue to do so.
 - We hope the Fund will be able to perform in-line with or better than the Russell 2000 Growth benchmark in a drawdown scenario; but, of course, there are no guarantees.
 - Historically, when investors decide it is "safe to swim" again, they look to buy shares in our (Desert-Island-worthy) names. The one caveat to this is that after times of extreme risk aversion, the best



performing stocks in the immediate aftermath are often those most threatened with extinction; ex., bad business and/or bad balance sheets. This could represent a short-term headwind to the portfolio.

How are our portfolio companies positioned for COVID-19 and what are we hearing from them?

• Positioning:

- We own a few, though not many, hardware companies with supply chain risks (among these are Brooks Automation, Axon, Enphase Energy). To date the supply chain has not threatened shipments, but the situation is fluid.
- Similarly, our companies generally have strong balance sheets, but there are exceptions (among these are: One Spa World, Health Equity, and Upland).
 - Stocks Impacted by COVID-19
 - Business Hurt The portfolio company most in the crosshairs of the virus is One Spa World (OSW), which operates spas on cruise ships. If this were a "normal" downturn, cruise operators would drop prices to keep occupancy full and OneSpa World would be largely shielded. However, when ships do not sail, the company is not generating revenue. This together with a leveraged balance sheet has left OSW shares down hard (71% YTD). We have sold a small amount of shares and this, together with the price decline, has left the position a small one.
 - Business Enhanced Teladoc (TDOC) has seen its already strong business trends strengthen as
 the appeal of telemedicine has clearly been enhanced. We believe this benefit will enhance
 the company's growth for some time. That said, the stock is up 53% YTD and we have cut it to
 a small position based on risk/reward.
 - Impact on Business Remains to be Seen For the rest, it remains to be seen. It has likely helped a few others: 2U (TWOU), Chegg (CHGG), and possibly LivePerson (LPSN), and Strategic Education (STRA). For the vast majority, it is too early to call the impact.
- What are we hearing?
 - In terms of operations, many companies have implemented mandatory remote working policies.
 - We are hearing a lot of "business as usual so far," though truth be told, most companies have no sense of how their customers will react.

What are we doing?

- First, there is no panic at Granahan Investment Management. The investment team averages 28 years' experience and, as noted, has experienced many fearful markets.
- We are considering history (what is similar, what is different), looking at pre-cursors (China, South Korea, Italy, Spain), speaking with companies, consulting with experts, doing analysis, debating scenarios, updating Expected Return models (ER's), and selectively buying and selling shares as situations merit...and we're staying safe (GIM has mandated working remotely).
- I believe our philosophy and process are well-suited for times of volatility:
 - Company Analysis We focus exclusively on "Desert-Island-worthy" companies. This focus accrues many benefits, one of which is allowing us to focus attention on a relatively small number of companies we know well (i.e., 100 companies on the "Desert Island Monitor List.") This focus on strong companies, and on companies we know, allows us to better understand how companies' businesses might be affected in the current environment.



- <u>Stock Analysis Redoubled</u> We use a multi-scenario probability-weighted valuation discipline for each stock on the Desert Island Monitored List. This, allows us to incorporate both good and bad scenarios in our Expected Returns (for example, scenarios in which the COVID-19 virus gets worse and persists, as well as scenarios in which it is corralled more quickly and/or investors discount a quick recovery).
- Portfolio Management Our valuation methodology is disciplined. When price movements are extreme, there are valuation disconnects some stocks become overpriced, and others underpriced. Knowing our companies well, and having a clear-eyed view on valuation, enables us to lean into the volatility...buying shares in some companies, selling shares in others.
- Risk Management We are redoubling efforts to make sure the risks at a company, stock, and portfolio level – are ones we are conscious of and where the upside rewards are commensurate with those risks.

A couple of things to look out for?

- The market historically bottoms at or around when fear peaks. There is obviously no guarantee this will occur with the current panic, but it may. To provide some context I'm attaching a graph depicting the largest drawdowns in Focused Growth since the strategy's inception in 2007.
- M&A: With valuations depressed, and corporate balance sheets strong, I expect we will begin to see "green shoots" in the form of larger companies making bids to acquire strategically wellpositioned smaller companies. If this occurs, it should help remind investors of the value of owning great businesses.

As always, on behalf of the entire team at Granahan Investment Management, I thank you for entrusting us with your capital. It is invested alongside our own. If you have any questions or concerns don't hesitate to reach out.

Be Safe,



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Granahan Focused Growth: Largest Drawdowns Since Inception



