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Our best investment insights are driven by themes that are big, multi-year and actionable – they capture the necessary tailwinds of a favorable macro environment that will drive economic expansion as well as individual company growth and profitability.

With years of practice, we have observed most of our themes to be long-lasting.

Today, our four core themes are:

1. Personalized/Precision Medicine,
2. Environmental Solutions,
3. Automation, and
4. Infrastructure.

We have identified these themes from the combination of our bottom-up stock analysis, discussions with corporate managers, and our quantitative screens. These inputs are then blended with macro-economic data which include government funding, corporate spending, and demographic trends. Within each theme, we identify sub-themes that are derived primarily from the bottom-up, starting with companies that have passed our initial growth screens.

Most of our holdings will fit comfortably within one or more themes. Companies that do not neatly fit within a theme require a frame of reference for comparing them to other stocks that we own. To summarize, these themes provide a framework for our growth outlook and help determine our conviction level during the portfolio construction process.



Personalized/Precision Medicine

- Early disease diagnosis through genetic analysis
- Robotic Surgery
- Practice Management thru AI and big data



Environmental Solutions

- Suppliers to Electric Vehicles (EVs)
- Reducing methane emissions
- Better farming techniques



Automation

- Productivity enhancements
- Factory automation
- Internet of Things (IoT)



Infrastructure

- Rebuilding the U.S.
- Supply chain relocation
- Public/private partnership (not sure?)

THEME 1 – PERSONALIZED / PRECISION MEDICINE

Several factors drive our interest in health care and, most specifically, personalized and precision medicine. The primary factor, of course, is demographics. Not only in the U.S., but globally, this dynamic manifests across other investment themes as world population growth rates slow and our population ages. Across the globe, even with higher population growth rates in Africa and India, people are living longer, resulting in an ever-increasing demand for health care services.

Secondly, until roughly 20 years ago, the healthcare industry had not fully leveraged technological changes that are now enabling the more efficient development of drugs and diagnostic tools as well as the improvement in individual delivery protocols. We started to see this change in the early 2000s in the initial research and early advances in genetic analysis, genetic-based medicines, and cancer treatments. The impact of technological change has subsequently accelerated due to the more recent advances in AI and big data. Today these technologies, which include robotics and digitization, are enhancing people’s lives while improving their health and life spans.

One of the sub-themes we see in healthcare is the diagnostics of diseases that can be made earlier and more precisely. Another sub-theme is the use of genetic analysis to develop targeted treatments based upon a person’s genetic makeup. In this area, we have seen recent advances in the field of CAR-T genetic therapies for cancers.



Personalized/Precision Medicine

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- Robotic Surgery
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We see a promising investment opportunity for selected small-cap companies to benefit from this theme. We are attracted to companies that are the suppliers of the tools and components used in pioneering medical and pharmaceutical research for the development of innovative drugs and more personalized medical treatments. Robotics is also an interesting area that is leveraging technology to help deliver both more equitable and effective treatments. Applications such as virtual reality to improve and develop healthcare provider skill sets in remote parts of the world as well as robotic surgery to achieve surgical techniques that are less invasive and more precise are quickly evolving.

Lastly, we see interesting opportunities around medical practice and disease management. This subject has been talked about for decades but is now getting traction due to advances in AI and big data which are helping doctors and hospitals to deliver results more quickly and more cost-effectively.

To avoid unnecessary levels of company-specific risk in the healthcare space, we do not invest in pure development-stage pharmaceutical and biotech companies. In doing so, we avoid the pitfalls of product trial failure, data integrity problems, and declines in FDA approval. Alternatively, we prefer to own specialty pharma or biotech companies that already have a product to sell that provides cash flow which stabilizes the company’s financial model. We are also attracted to the suppliers of tools to development stage companies. Accordingly, we avoid the risk associated with choosing the winner in a particular area. Our portfolio companies are supporting their customers in their endeavor to develop cures or treatments for specific diseases.

THEME 2 – ENVIRONMENTAL SOLUTIONS

In the area of environmental solutions, we are looking at companies that develop innovative solutions to tackle climate change and address the trajectory of global warming. Equally as interesting, we are looking at companies that provide mitigation solutions to reduce environmental hazards.

By taking a multi-pronged approach in the environmental solutions area, we consider legacy industrial companies that provide solutions, tools, and services to “dirty” industries that are endeavoring to address environmental issues and climate change challenges. We are equally interested in emerging areas such as wind, solar, hydrogen and EVs.

We like companies that sell to the manufacturers of EVs. There is an increasing number of players competing in the EV industry. It looks a little bit like the automobile industry at the beginning of the 20th century, and certainly not all the current participants will be winners. Rather than attempt to identify the potential winners, instead, we believe there will be significant spending by all the participants on the tools and infrastructure required to support the EV industry, and we see tremendous opportunity for the suppliers.



Environmental Solutions

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- Reducing methane emissions
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For example, we like the manufacturers of the components that enable the fast charging of EVs. Furthermore, we are attracted to companies that provide for the transmission and distribution of power to an increasingly electrical transportation industry.

We are attracted to companies that reduce methane emissions from landfills and lessen the amount of water required for oil drilling. These companies are also reducing the methane flares from oil drilling and lowering the level of chemicals in the water. There are also exciting areas of wind, solar, hydrogen, and perhaps nuclear. Other growth areas include sustainable food, precision farming, autonomous farming, and reduced water usage.

The primary risks in environmental solutions reside in government subsidies. The economics, however, have certainly improved where these industries are less reliant on subsidies. Subsidies might get rolled back, but the groundswell of interest in more reliable power sources is going to drive a lot of growth independent of government funding initiatives. Accordingly, we think that government risk is less severe today. So other than company-specific risk, we do not see a lot of macro headwinds here.

THEME 3 – AUTOMATION

Automation is a multi-faceted theme that includes global digitization, as well as the substitution of capital for labor. Labor is a recent challenge, not just in the United States, but globally.

We think this issue is more secular than cyclical. Birth rates have declined globally, and they are expected to continue to decline further. Though the population is aging, we also automation and AI as tools that will help enhance productivity and offset these demographic issues. In our opinion, the global economy will continue to grow at a healthy rate despite the demographic challenges of an aging and shrinking workforce. Some of the big sub-themes revolve around the proliferation of AI to drive widespread productivity increases in factory automation, logistics, autonomous vehicles, and robotic surgery as well as service autonomy in restaurants and stores. These technological advances come with great promise.



Automation

- Productivity enhancements
- Factory automation
- Internet of Things (IoT)

The rapid adoption of Internet of Things (IoT) connectivity contributes to the theme of automation and productivity enhancements. Remotely connected devices across food supply, logistics, retail, medical and industrial enable data-driven insights, optimize operations, expedite decision making and add to security, especially when layered into an AI platform. Companies see the benefits of connecting and monitoring everything from frozen food cases to medical equipment to verified legal cannabis lots. Investment here caters to many industries because such a wide variety of “things” benefit from being connected. Investable companies can sell to the software analytics side, hardware/infrastructure or both.

Productivity enhancements in the service economy will happen through more efficient interfaces between customer and service in retail, food service and hospitality. These enhancements can take the burden off labor while the data insights gleaned through software and AI can boost

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THEME 4 – INFRASTRUCTURE

This is an area that is benefiting from the tailwinds of government spending. The U.S. and many other countries have experienced more than 30 years of under-investment in infrastructure, e.g., the rebuilding of roads, bridges, airports, and hospitals. This is a multi-year capital deployment cycle which also includes the buildout of new infrastructure to expand broadband deployment in the United States and to support expanded global electrification.

While we look for companies with direct exposure to construction, we also like those that have under the radar exposure. Test and measurement is an example, used for deteriorating structures, new construction and telecommunications. The cross-country broadband deployment and improvements are just getting started with \$42.5 billion of disbursements through the BEAD (Broadband Equity, Access and Deployment). The RDOF (Rural Digital Opportunity Fund) with over \$20 billion is between Phase I and Phase II of disbursements. They are both in place to significantly upgrade broadband access to underserved rural and urban communities.



Infrastructure

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Also, there is a continued move to re-shore manufacturing. Every country is looking at its supply chains and seeking to have more domestic control over the production process. As an example, the U.S. semiconductor industry is benefiting from the CHIPS and Science Act which was enacted in August 2022 and provides \$280 billion in new funding to boost domestic research and manufacturing of semiconductors. We see industrial manufacturers expanding capabilities in their U.S. and North American facilities, with attention to their U.S. customers' concerns on transportation costs, import restrictions and ethically made goods.

Within this context, we seek exposure to companies that are the beneficiaries of global re-industrialization to more localized production and domestic manufacturing.

Conclusion

Why are small-cap companies well suited to exploiting each of these themes? When you look at the infrastructure and environmental solutions themes, these are areas of the market where there has been tremendous under-investment over the last 15 years. As a result, these stocks are under-owned, under-appreciated, and under-followed. Their valuations are incredibly attractive, and the market cap of many companies has shrunk down into small-cap territory. From our perspective, there are attractive but neglected companies in the small cap space that have the wherewithal to transform their businesses and to capitalize on this spending tailwind.

During the recent period of zero interest rates when our economy was not driven by industrialization and the manufacture of things but rather by social media and the Internet, the weightings in the tech benchmarks became overexposed. Industrials, automation, and precision medicine, however, became underexposed. And therein lies the opportunity. Because we are focused on tools, the building blocks, and the suppliers to these industries, the small cap opportunity set is robust. The ultimate users of these technologies may be large cap companies. But we like the companies that are selling them the tools ... the picks and shovels... that are needed by the guys who are panning for gold.



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