

## Investing in a Tech-Driven Economy

Advanced computing power and new technologies, such as artificial intelligence (AI), are dramatically changing the way companies do business. At the same time, these technologies are becoming increasingly accessible to firms of all sizes. From our perspective, this leveling of the playing field is helping amplify economic disruption and is one reason why the tech revolution could play out for decades more.

### Global Technology Fund

#### Disruption: Just Getting Started

Portfolio Manager Denny Fish argues that we remain in the early innings of technological disruption, creating long-term growth potential for the companies driving change.



**Denny Fish**  
Portfolio Manager

#### **Q** In your view, what is a main driver of the disruption taking place in the economy?

**Mr. Fish:** I think a main driver of disruption is the big digital platforms, such as Alphabet [the parent company of Google], Facebook and Amazon. These platforms are making it possible for everyone to access advanced computing power and technologies that otherwise might be cost-prohibitive. So legacy businesses that were doing things in an analog, 21st-century way can now shift to a digital way of doing things.

It is a powerful trend with a two-sided effect: On one side, digital platforms accrue massive amounts of data, which can be used to improve the technologies they're offering and grow market share. On the other, small businesses can access previously out-of-reach technology to target customers, collect valuable data and potentially earn attractive returns on investment. So you have an entire cohort of businesses that are empowered like they've never been before, and you see it across the economy, from micro merchants to large-scale enterprises.

#### **Q** Hype vs. reality is always a risk when it comes to technology. How do you try to capture growth without taking on too much risk?

**Mr. Fish:** On the one hand, we try to find companies that have achieved escape velocity. In other words, the range of outcomes for the company has narrowed as the business has become stronger and more predictable. The large Internet platforms are one example, as well as dominant players in the Software as a Service (SaaS) space, which has disrupted the traditional software industry. In other cases, we seek businesses that we think are earlier in their life cycle but are in markets that are highly disruptive to existing incumbents. However, because these businesses still have a wide range of potential outcomes, the stocks have smaller position sizes in the portfolio.

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**Q** Tech stocks have outperformed the broader market in recent years. What has that done to valuations, and do we risk repeating the 1990s tech bubble?

**Mr. Fish:** In the 1990s, tech stocks traded on the theory that the information age would take over and digitize the economy. But the reality wasn’t there yet, and the market overpriced it. Now, 20 years later, digitization is finally happening, but this time we think the market is underpricing the potential impact that tech will have on all facets of the economy. The financial performance of tech companies today is incredibly strong, resulting in valuations that are nowhere near what they were during the tech bubble. And while it’s true that multiples have climbed along with the rest of the market, compared to some other sectors, tech’s performance has been more balanced between earnings growth and multiple expansion.

**Q** What is one example of this potential that the market could be overlooking?

**Mr. Fish:** I think we are at the start of a decade or two of accelerated growth for semiconductors, driven by the Internet of Things, cloud computing and AI. A lot of devices that didn’t use to have semiconductors or connectivity – say, your refrigerator and car – now have them. These items collect data and feed that data to the cloud, where it is analyzed and used to make devices smarter. With the advent of AI and 5G connectivity, this trend is only likely to accelerate. So we’re talking about a staggering explosion in the number of semiconductors needed, but, based on valuations, the market seems to be overlooking it.

Of course, semiconductors are a cyclical industry, so investors should expect down cycles. But relative to history, we believe the magnitude of those cycles could be less amplified given the industry’s diversification into new end markets such as automotive, industrials and medical. The product cycle booms and busts for personal computers and smartphones will likely have less of an impact.



## Forty Fund

### The Network Effect

The democratization of computing power is enabling companies to interact directly with consumers. That, says Portfolio Manager Doug Rao, can lead to powerful competitive advantages for businesses.



**Doug Rao**  
Portfolio Manager

“ Once that relationship [with a customer] is in place, companies tend to be better able to extend their platforms and sell additional products and services.”

Q

**From your perspective, what is one of the most important drivers of the disruption occurring in the global economy?**

**Mr. Rao:** I think a primary driver is the ability for certain businesses to connect directly with their customers, rather than through an intermediary. There's a much more vibrant communication channel between the company and its customers, creating a valuable feedback loop that builds trust. Once that relationship is in place, companies tend to be better able to extend their platforms and sell additional products and services.

Q

**With so much tech-based disruption occurring, how do you decide where to invest?**

**Mr. Rao:** For us, it all comes down to finding companies with a business model advantage. There can be tech trends that people are excited about, but if we can't find a business model advantage within that trend, we won't participate.

Within the technology sector, we are largely looking for companies that have built network effects, which occur when increased usage of a company's product or service leads to a direct increase in the value of that product or service to its users. Businesses with a network effect tend to be very difficult to disrupt. Google is a good example. The company launched its network effect by building a much better search algorithm than competitors. With more usage, the algorithm got better. The better the algorithm got, the more that consumers wanted to use it. The more that consumers used it, the more that advertisers wanted to place ads with Google, and so on.

Q

**How are companies outside of the tech sector potentially benefiting from disruption?**

**Mr. Rao:** Technology has become a necessity for almost every company, with many firms accelerating their investment in technology infrastructure, such as the cloud. In speaking with companies, we've heard that cloud computing is providing some cost advantages today, but that those advantages will likely grow as cloud providers continue to scale their business. In addition, and more importantly, switching workloads to the cloud allows companies to become more agile enterprises. With the cloud, software is delivered through a SaaS-based model, enabling firms to elect services only as needed. Data no longer sit on-premises in servers that don't talk with each other. Instead, data sit on the cloud and are able to communicate more quickly.

## Balanced Fund

### Defending Against Disruption

Although technology can cause disruption, it can also help legacy businesses stay competitive. Portfolio Manager Marc Pinto says the key is to find those companies that are making the most of today's digital toolkit.



**Marc Pinto, CFA**  
Portfolio Manager

“ Many companies are also using technology to adapt to the digital era and defend or grow their business.”

#### **Q** Tech disruption is upending many business models. How are you investing around this potential risk in the market?

**Mr. Pinto:** We are investing in some of the companies that are doing the disruption or that are participating in it. Microsoft, for example, has transformed itself from a software company to a leading provider of cloud computing and is now a major part of the disruption wave.

But in most cases, we are looking for companies that are using technology to benefit their business. IT spending can be a significant line item when you consider all that's involved, from servers and the staff needed for an IT department to cybersecurity and data analytics. Companies that are shifting their IT needs to the cloud may realize significant savings over time. And the benefit is twofold: Companies making the shift can do more, while potentially spending less; the companies providing cloud technology or services based in the cloud, like SaaS, see increasing demand.

#### **Q** Is cost savings the only benefit that legacy businesses are getting from technology?

**Mr. Pinto:** No. Many companies are also using technology to adapt to the digital era and defend or grow their business. UPS [the package delivery firm] is one example. E-commerce was placing a significant burden on the company's network, with drivers having to make many more stops delivering packages to individual homes, rather than delivering bulk shipments to retailers. So UPS developed On-Road Integrated Optimization and Navigation (ORION), a computer program that helps UPS optimize delivery routes and be as efficient as possible. Without this technology, UPS likely would not be able to meet the demands of an e-commerce world.

#### **Q** What about industries such as retail that have been hard-hit by today's disruption: Can you still find growth opportunities among these companies?

**Mr. Pinto:** It depends, but yes. Historically, Nike sold the majority of its shoes through large retailers. Now the company is reaching customers directly through technology. Its running app allows a runner to keep track of miles logged and receive personalized coaching. The app also keeps the customer up to date on new products, makes it possible to reserve shoes to try on in a nearby store and provides exclusive discounts. In other words, Nike is creating a direct and regular connection between itself and the customer.

#### **Q** So do you think that every company is a tech company, as the saying goes?

**Mr. Pinto:** I think there is some truth to that. We evaluate management teams on a lot of metrics, including how forward-thinking they are in implementing the tools that are at their disposal. A lot of companies benefit from technology but are also at risk from it. So we always ask, is the company taking advantage of the opportunities out there to be more efficient and to protect themselves from disruptors?

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As of 12/31/19, the top 10 portfolio holdings of the Global Technology Fund are: Microsoft Corp (7.97%), Adobe Systems Inc (4.39%), Apple Inc (4.35%), Taiwan Semiconductor Manufacturing Inc (3.99%), Salesforce.com Inc (3.97%), Amazon.com Inc (3.93%), Alibaba Group Holding Ltd (3.81%), ASML Holding Nv (3.67%), Texas Instruments Inc (3.38%) and Mastercard Inc (3.38%).

As of 12/31/19, the top 5 portfolio holdings of the Forty Fund are: Microsoft Corp (8.22%), Mastercard Inc (5.87%), Alphabet Inc (5.64%), Apple Inc (4.89%) and Amazon.com Inc (4.31%).

As of 12/31/19, the top 10 portfolio holdings of the Balanced Fund are: Microsoft Corp (6.67%), Mastercard Inc (4.89%), Apple Inc (4.07%), Alphabet Inc (3.84%), UnitedHealth Group Inc (3.07%), McDonalds Corp (2.84%), Boeing Co (2.80%), Home Depot Inc (2.65%), Merck & Co Inc (2.47%) and Adobe Systems Inc (2.39%).

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Technology industries can be significantly affected by obsolescence of existing technology, short product cycles, falling prices and profits, competition from new market entrants, and general economic conditions. A concentrated investment in a single industry could be more volatile than the performance of less concentrated investments and the market as a whole.

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