

INNOVATION PRIMER

Why Own Innovative Companies?

Multiple Secular Trends Provide Significant Long-Term Growth Potential

Digital Consumers

In today's connected economy, consumers are increasingly seeking state of the art technologies. This began with personal computers and eventually shifted to smartphones. Now, almost everything consumers buy is powered by technology, from automobiles to smartwatches. The proliferation of enhanced devices continues to fuel the growth of consumer-centric technologies such as 5G, which at speeds up to 100x faster than 4G, will accelerate the development of connected devices that will significantly enhance the prevalence of artificial intelligence.

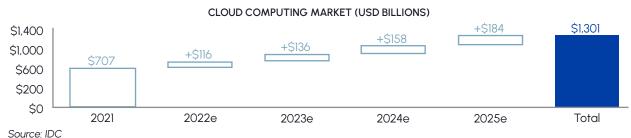
Investors can capitalize on these trends by allocating capital to companies that are supporting today's rapid technological advancement. For example, semiconductors represent key components underpinning the digitalization of consumer products. With a growing number of applications across a wide variety of industries, semis are tech building blocks with almost limitless demand. We are witnessing significant growth across verticals but especially in automotive (e.g. electric vehicles), wireless communications and computing & data storage (e.g. high-performance computing processors). With the cost of semiconductor content rising across applications, we believe the value of the industry could surpass \$1 trillion by 2030.

Workplace Efficiency

Modern businesses need to have an online presence because they are connecting with clients through a wide array of channels (e.g. websites, chatbots, social media, email and video calls) and devices (e.g. computers, mobile phones, tablets and other smart devices). As a result, companies must continue investing in technology to meet the evolving needs of their clients. Conversely, failure to do so can lead to a significant competitive disadvantage.

With high inflation and a shortage of skilled labor, global companies are retooling to increase operational efficiencies. Cloud computing is benefiting as the world transitions to a digital-first economy, driving expectations for the cloud market to grow to \$1.3 trillion by 2025, representing a 16.9% CAGR since 2021. Cloud services (e.g. AWS) have become essential for modern businesses as they provide a more efficient and less expensive alternative to traditional on-premise infrastructure. In addition, they facilitate 24/7 operations and possess the latest cybersecurity capabilities. Lastly, the cloud has become the foundation for the delivery of modern applications (e.g. Microsoft 365) and content (e.g. YouTube).

CLOUD COMPUTING MARKET EXPECTED TO SURPASS \$1.3 TRILLION BY 2025



Technology Ecosystems

The largest companies in the world have one key asset in common: ecosystems. Apple started with devices but now provides a wide array of services including Apple Music, iCloud and Apple TV+. Microsoft, which began with the Windows operating system, is now fully entrenched in modern businesses through its Microsoft 365 productivity suite and also provides various services across cloud computing and gaming. Amazon started as a pure play E-commerce company but has since expanded into cloud computing, video, music, etc. Google started as a search engine but now offers a variety of services with over 1 billion users including Android, YouTube and Maps, just to name a few. These modern ecosystems have become staples in our lives since we use them on a nearly uninterrupted basis. Moreover, as we use more products / services from each provider, we become more ingrained and less likely to abandon the ecosystem. This is why we believe investors can rely on these leading companies to deliver durable growth while continuing to defy the law of large numbers, supporting the entire tech sector in the process

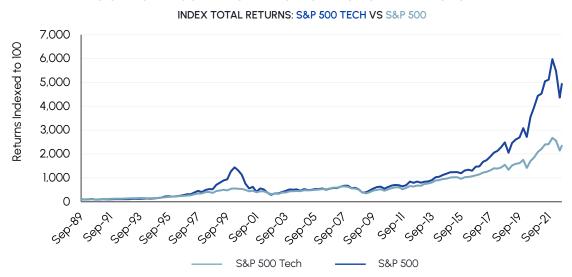
Innovation Market Leadership

An important differentiator that underpins our stock selection is technological leadership. This is one of the key components we look for when evaluating a company's sustainable competitive advantage. This is especially important for innovative companies because technology moves quickly. Leaders that continue to invest through research and development have the ability to extend their technological leadership over time, often at the expense of their competitors. We apply this way of thinking across sectors, industries and investment themes such as software, semiconductors, online advertising, e-commerce, electric vehicles, cybersecurity and payments.

Stellar Performance Supported by Strong Fundamentals

When looking back to 1989, which is as far as the S&P 500 Tech data goes, we can see that the technology sector has significantly outperformed the broader market.

SIGNIFICANT OUTPERFORMANCE FOR TECH OVER THE LONG-TERM



Source: Bloomberg. Date range: September 29, 1989 to August 24, 2022

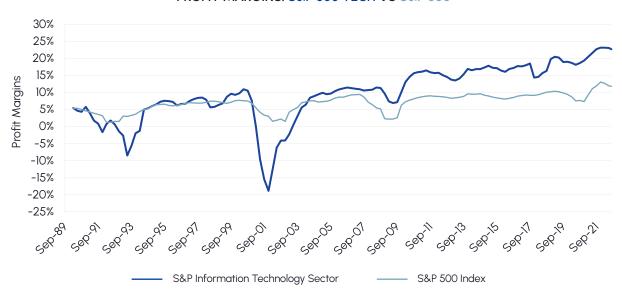


Unlike the critics who claim that tech has become too big in the S&P 500, we argue that its dominance is grounded in fundamentals. While tech's share of S&P 500 market cap has increased since the financial crisis, so has its share of S&P 500 profits. During the tech bubble, there was a massive divergence between tech's share of market capitalization and its share of profits. That is not the case in the current environment, with tech representing 28% of market cap and 22% of profits. Lastly, tech has been highly successful in increasing profit margins, which, at ~23% are nearly 2x the S&P average of ~12%.

TECH'S RISING SHARE JUSTIFIED BY FUNDAMENTALS TECH'S SHARE OF S&P 500 MARKET CAP AND PROFITS



PROFIT MARGINS: S&P 500 TECH VS S&P 500



Sources: Bloomberg, Goldman Sachs Global Investment Research. Date range: September 29, 1989 to August 23, 2022

Middlefield's Innovation Strategies

Solutions Overview

Strategy	Fund Structure	Ticker/Fund Codes	Investment Focus	Risk Rating	Fund Inception Date
INNOVATION DIVIDEND ETF	ETF	MINN	Diversified Global Innovation	Medium	March 23, 2018
INNOVATION DIVIDEND CLASS	Mutual Fund	MID925	Diversified Global Innovation	Medium	May 31, 2022

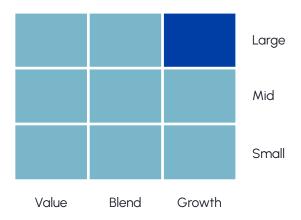
Growth + Income

All Middlefield innovation funds provide investors with attractive capital appreciation potential and significant levels of monthly income.

Holdings

Middlefield's innovation strategies are actively managed portfolios holding approximately 25-35 names with an emphasis on large-cap companies with leading market positions that have the ability to pay and grow their dividends over time

Equity characteristics





Exclusive Industry Technology Advisor

SSR Tech, Media and Telecom (TMT) Provides Our Funds With Expert-Driven Insights

SSR TMT is an independent research firm that provides expert analysis on the technology industry as well as unique comprehension and actionable investment ideas. SSR is highly regarded across the TMT industry and its client base includes multiple types of institutional investors. SSR is an independent research firm and does not engage in investment banking or sales and trading activities.



SSR TECHNOLOGY LEAD

Paul Sagawa has 20+ years of TMT industry experience. Prior to co-founding SSR, he worked at Sanford C. Bernstein as a senior research analyst. While there, Paul was named to the Institutional Investor All-Star Team in three different categories. Prior to Bernstein, he spent six and a half years at McKinsey and Company. Paul earned his BA in Economics and MBA from Harvard University.

www.ssrllc.com



Innovative Areas We Like

Powerful Secular Trends Are Driving Opportunities In The Following Industries



Software

Companies are adding new applications to enhance productivity & streamline functions across areas such as design, customer relationship management and IT services.



Semiconductors

Already widely used in smartphones and computers, semiconductors are becoming critical for industries such as automotive and data center.



Online Advertising

As a result of modern consumers always being online, particularly on their phones, digital channels continue to take market share in the overall advertising market.



E-commerce

We expect that e-commerce adoption will continue to trend higher as consumers become increasingly comfortable transacting online, especially in underpenetrated categories such as personal care.

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