Technology Investments and the Goal of Stable Growth

FAYEZ
SAROFIM
& CO.

At first glance, the branded, historic, and defensive consumer staples companies appear as the diametric opposite of the new, growing, and high-beta companies from the technology sector. However, we at Fayez Sarofim & Company look beyond conventional wisdom taxonomy and inspect the fundamental attributes that make up these two sectors. Upon review, the positive growth, stability, and cash generation characteristics that led to strong, steady consumer staples growth for multiple decades and resulted in rewarding returns for our clients' portfolios, in our view, are amply present for a select group of technology and communication services companies. Our view is that the growing role of technology products and services in the economy, coupled with geographic and demographic growth tailwinds, will lead to long-duration secular growth for these companies.

For decades, consumer staples companies have offered investors the combination of consistent demand, wide geographic diversification, and a low-risk supply chain. These defensive traits produced low volatility financial results through the business cycle. These companies use product innovation to renew the virtuous cycle of dominant leadership position; for example, Gillette outspent its rivals to develop new razor technology, which maintained the company's market share and premium pricing strategy. Meanwhile, leading consumer branded product companies have been the epitome of quality — simple, clean accounting and low capital investment needs allowed the profits of these companies to translate into free cash flow. This cash flow sustained a strong, conservative balance sheet while also returning excess cash flow to shareholders.[1]

A consumer brand is a low capital-intensity tool that increases demand; strong brands are reinforced with superior marketing and communication budgets that are more amply funded by companies with leading market share. It might be argued that this virtuous cycle was the exemplar network effect from the offline era. Today, the concept of a network effect is widely known, and arguably over-diagnosed, but its importance for large-cap investors remains underestimated. While most businesses lose effectiveness as they grow larger, a select few grow stronger with size, and network-enabled technology firms are the best example of this increasing return phenomenon.[2]

DEFENSIVE TRAITS

Not only are the increasing returns to scale phenomenon a compelling reason to own certain large technology companies, but these companies also demonstrate superior defensive properties as the economic cycle changes. For example, software — the largest industry within the technology sector — has seen a major transformation in the past 15 years where customers have replaced large, lumpy, and disruptive software upgrade projects with a recurring software subscription[3] that offers operational benefits as well as cost certainty. As a result, when we study government macroeconomic data since 2005, we see that the variation in software spending — as measured by beta to changes in GDP — has fallen to 0.50 and is more stable than the 0.92 figure for non-durable consumer spending.[4] The same spending data show a low and declining correlation to GDP. The revenue data for public companies paints a similar picture; software and services revenue are far less cyclical than the market.

Software Economic Sensitivity Has Declined

Rolling 36 Month Software Beta to Nominal GDP

Data as of 4/1/2020. Source: Federal Reserve Economic Database, St. Louis Fed.

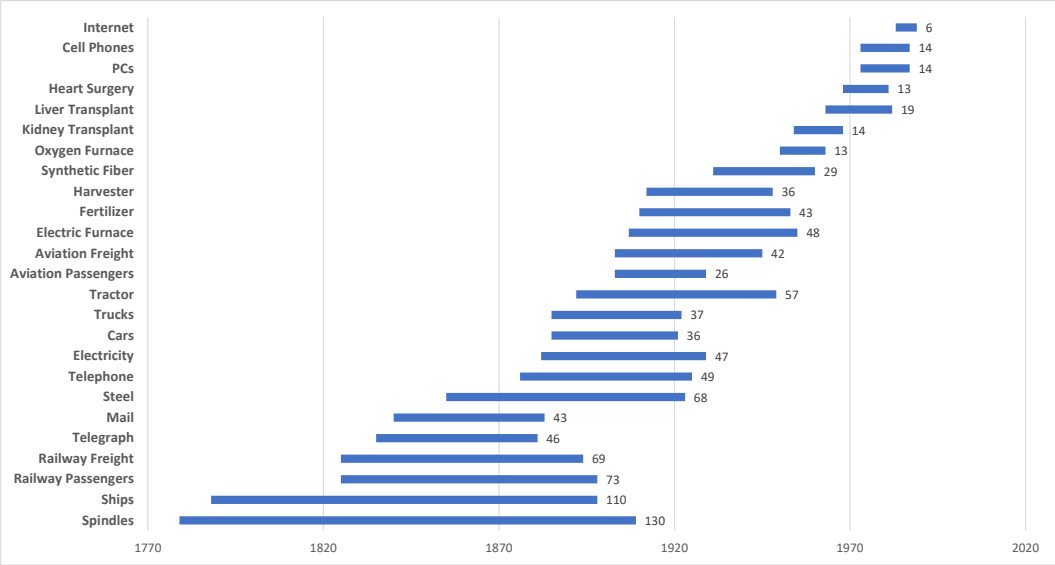
In addition to software, other major industries within technology have shifted towards a lower-risk recurring profile. Apple's business has transformed from winning a first-time customer to making a repeat sale to its more than one billion customers. With its envious customer satisfaction and retention attributes, Apple is able to cross-sell additional innovative products and renewing services to these customers. As a result, Apple produced resilient results even through major supply and demand disruptions from the recession of 2020. Finally, the third-largest industry within the technology sector is IT Services, which is dominated by consumer payments companies. Credit card payments have evolved beyond a special occasion transaction when a customer was traveling, needing financing, or catalogue shopping. Today, credit and debit cards have become the default form of payment for nearly all consumer categories and, therefore, the economic sensitivity of these payment processors more closely mirrors overall global consumer spending.

Consumer branded product companies place a priority on owning or controlling their supply chain to ensure product integrity, brand consistency, and local cost control. For example, direct management of the supply chain and distribution network allowed both Coca-Cola and Pepsico to pursue a lower-risk global growth strategy.

In 2019 and 2020, the global economy was challenged by forced changes to international trade and complex supply chains, first by trade & tariff negotiations and later by COVID-19. Amidst these generational disruptions, many technology companies thrived due to their digital product offerings that sidestepped physical supply chain problems, delivered directly to customers, and rapidly evolved to serve new methods of school, work, and leisure. Furthermore, the diverse global scope of leading technology firms minimizes the risk of any particular tariff, and this resilience was demonstrated in the recent years. Technology companies are poised to participate in broad global growth without needing to make risky long-term capital investments in unstable geographies.

SECULAR GROWTH

Major Technology Introductions & Mean Lag to International Adoption



Source: Diego Comin and Martí Mestieri. American Economic Journal: Macroeconomics 2018, 10(3): 137–178.4

The pace of technological change is accelerating to the benefit of the providers of new technologies and the firms best equipped to adapt to change. In the 19th century, new technologies such as textile spindles, steam ships, and railways took 70-130 years before they reached global ubiquity. In the 20th century, revolutionary technologies like fertilizer, air freight, and automobiles went through a 40 year global proliferation phase. Recent technologies like personal computers, cell phones, and the internet spread to developed nations in approximately a decade. Currently, digital marketplaces, cloud computing, and smartphones have spread beyond developed economies and into emerging markets on an even more accelerated timetable.

Technologies are not only proliferating faster as they build on the communication and transportation breakthroughs that came earlier, but also because the impetus for technology adoption is ever-growing with more industries feeling the winner-takes-all effect. Of the 5.7 billion adults on Earth, an estimated 4 billion now own smartphones and connect to the internet, thereby raising the

stakes for businesses to adopt modern technologies. According to a Kansas City Fed study,[5] the share of retail, manufacturing, and services sales and employment attributable to industry-leading firms, has been rising in both the US and Europe.

In past decades, a global rising standard of living brought billions of new customers into the market for consumer branded products. Today, the closing of the consumer digital divide plus the rapid proliferation of foundational technologies are expanding the addressable market for technology companies. Furthermore, we witnessed consumer product companies successfully win young customers and enjoy that sticky relationship for an entire lifetime. Similarly, a wide range of technology offerings are first consumed by the young, creating lucrative lifetime value and eventually attracting older consumers.

As consumer staples companies studied their customers, they discovered that consumers could be segmented and targeted with line extension products such as diet cola or lower calorie beer. These line extensions, and many more, rewarded the innovative companies through an expanded market and stronger pricing. Technology companies rapidly innovate to better serve niche demand in the market; even a consumer services company like Facebook with billions of users has tailored different services for news discovery, photography sharing, and interpersonal messaging, to name a few.

Put simply, technology-enabled products and services are taking share because they offer benefits to the user. Semiconductor growth exceeds the expansion in consumer and industrial good output because the products are made more compelling, energy efficient, and lower cost through increased semiconductor content. Software tools allow enterprises to have capabilities that exceed the behemoth organizations of yesteryear. The combination of e-commerce and digital payments has morphed regional businesses into global retailers. Our research has shown that measurable digital advertising has allowed small businesses to reach customers without the waste endemic to broadcast marketing. Finally, to show that no part of society has been immune from technology's effectiveness, a recent study of 2017 marriages found that 40% of couples met online, a doubling of the rate just ten years earlier. In short, technology is a growing part of the economy because it works.

QUALITY

We make investments in technology companies that we believe have developed a self-reinforcing business model that gives us confidence that today's industry leaders will maintain leadership well into the future. The previously mentioned defensive traits and secular growth are of little use to long-term investors if industry leadership is measured in quarters and not decades. All of the measurable indicators of quality – accounting that avoids the use of revenue and cost accruals, high return on invested capital, cash conversion, a strong balance sheet, and return of excess capital to shareholders – are made possible because of the underlying quality of the business model.

Many of our technology investments* benefit from multi-sided networks of constituents. Microsoft, though its Windows PC software and its Azure cloud platform, is the nexus that lets a huge population of developers service an even larger population of users. Both Visa and Mastercard provide a link for billions of cardholders to interact seamlessly with millions of point-of-sale terminals. Apple has created a platform where more than one billion of the world's highest income consumers can securely interface with software developers, media owners, and a variety of businesses. Facebook provides platforms for more than a billion users to interact with each other, and also with millions of advertisers. In all of these cases, the threat of a "better mousetrap" is reduced because multiple sides of the network need to simultaneously move to a competitor for incumbency to be lost quickly.

In the same way that brand building created an invaluable intangible asset that never appeared on the balance sheet of consumer staples companies, many of today's technology companies show no accounting record of their crown jewels – their software, users, and network. Because the success of these firms is not directly tied to capital-hungry factories, these companies can grow larger while improving their free cash generation and return on invested capital. As strong revenue growth converts into even stronger free cash flow growth, these intangible asset-driven companies have built fortress balance sheets even while returning cash to shareholders and defending the franchise with accretive acquisitions.

Without the capital intensity demands of most companies, technology companies rank toward the top of the S&P 500 for converting revenue into free cash flow. This cash conversion allows leading companies to return cash to shareholders while also maintaining financial strength.

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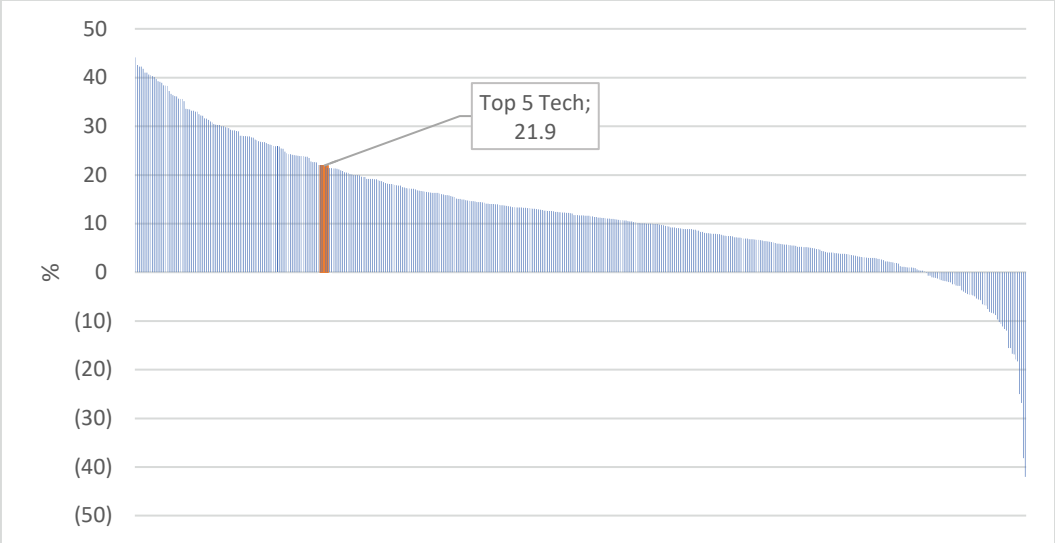
*References to specific securities for illustrative purposes only, and are not intended as recommendations to purchase or sell securities. Portfolio composition is subject to change at any time.

S&P 500 Free Cash Flow Conversion Distribution

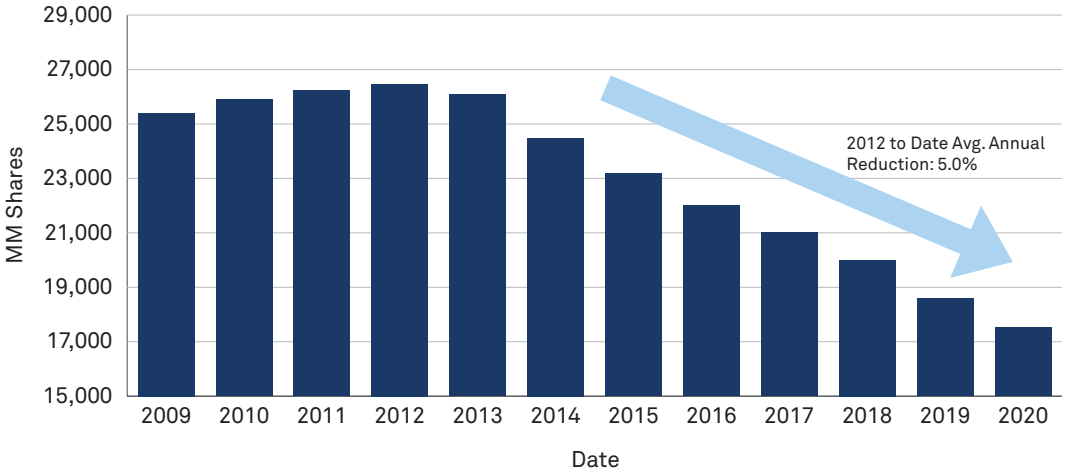


2019 data, as of August 2020. Source: Factset

The Cash Conversion Ratio (CCR), also known as cash conversion rate, is a financial management tool used to determine the ratio of the cash flows of a company to its net revenue. In other words, it is a comparison of how much cash flow a company generates from a dollar of sales.

Top 5 Tech companies, as measured by market capitalization, include Apple, Microsoft, Amazon, Alphabet, and Facebook.

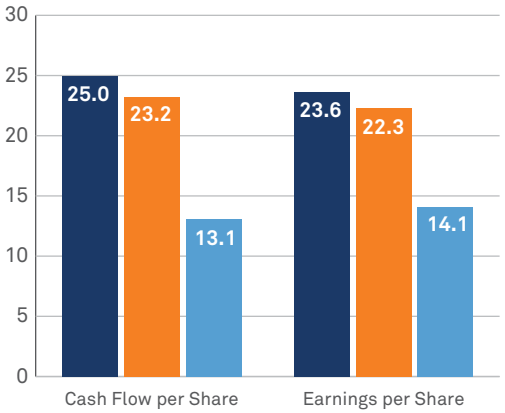
Apple Inc. Diluted Shares Outstanding



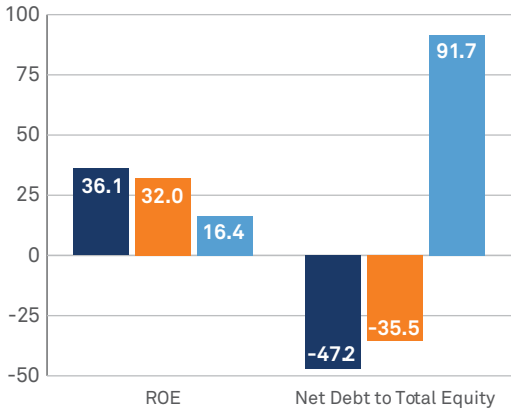
2020 Fiscal Year ended September 26, 2020, as reported October 29, 2020. Source: Factset

Measurable proof of the financial quality of technology companies is seen on their financial statements. The five largest technology companies hold nearly $600 billion in cash and investments on their balance sheets, a sum that totals 10% of these companies' market value. These companies have less debt, generate superior growth, and exhibit a higher return on equity than the overall market. In the last decade, large technology companies — particularly the very largest — have increased cash flow per share generation at an annual rate that greatly exceeds the 13% growth rate of the S&P 500.

Superior Ten-year Growth Rates



Superior Capital Ratios



Data as of July 31, 2020. Source: Factset

A decade ago, similar analysis of consumer staples companies would have shown that annualized earnings growth of the sector had compounded at a 9% rate for the 1998-2008 period while the S&P 500 increased earnings at a 4% annual rate.[6] The idea that defensive, steady growth companies can compound over the long run at a superior rate is as old as Aesop's Fables; furthermore, today's defensive technology companies are faster growing and more dynamic than the tortoises of the past.

Fayez Sarofim & Co. is enthusiastic about the aforementioned favorable forces benefitting large technology companies, and we observe widening separation between advantaged and disadvantaged businesses. Active security selection and portfolio management helps sort out these winners and losers, seeking to

allow the winners to compound in portfolios for an ultra-long time horizon. We find that many industries and sub-industries have benefited from rational corporate leadership that ceased the pursuit of profitless growth and instead shifted reinvestment toward the wide-moat franchise. Our analysis of technology company management has yielded attractive excess returns.[7]

Since 1926, the top-performing 4% of companies have been responsible for all the net appreciation by US markets.[8] For a century or more, a select few companies harnessed forces that let their size drive improving returns. Presently, we see the forces of size, network effects, and increasing returns aligned with many technology companies. These large technology firms account for a disproportionately large share of total corporate research and development spending. It is likely that growth in the economy will come from the companies that made these long-term investments, thus increasing the size and importance of these technology firms even further. With so much potential for growth and stability, we believe that active security selection within this sector has never been more valuable.

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[1]Based on 8/31/20 analysis by Bernstein, the consumer staples sector ranks third and fifth by ROIC and FCF margin, respectively, and is ranked fourth and fifth, respectively, based on average statistics for the last twenty years. The sector has the third-highest Altman Z-Score, a measure of bankruptcy probability. Based on a Bank of America study of S&P Common Stock quality rankings, 9% of the S&P 500 index constituents that are rated "B+" or better are from the Consumer Staples sector, while that sector comprises 6% of the companies in the S&P 500.

[2]"Increasing Returns and the New World of Business," Harvard Business Review. July-August, 1996. Page 100-109.

[3]2020 Monetization Monitor by Revenera finds that 37% of software vendors utilize subscription revenue as their dominant model, an increase from 25% in 2019.

[4]This calculation measures the sensitivity of software growth to overall GDP growth. A beta figure of 0.50 implies that a 5% decline in overall GDP would pressure software sales by 2.5%. Discretionary purchases tend to have a beta larger than 1.0 and non-discretionary spending has a beta below 1.0. Beta calculated as the covariance of the year-over-year percentage change in private investment in software and GDP, divided by the variance in year-over-year percentage change in GDP. Raw data provided by the Federal Reserve Bank of St. Louis, August 2020.

[5]Van Reenen, John, "Increasing Differences between firms: Market Power and the Macro-Economy", Kansas City Fed, August 31, 2018.

[6]ROIC and FCF margin, respectively, and is the only sector with above-average FCF margin that has maintained its ROIC over the last 20 years. As of 8/19/2020, the technology sector has the best Altman Z-score, a statistical measure of bankruptcy probability, followed by the industrial and consumer staples sectors.

[7]A three-year retrospective analysis, for the period ending October 19, 2020, indicates Fayez Sarofim & Co. portfolios enjoyed return from the information technology and communication services sectors that was 109bps higher per year than the S&P 500, after removing the benefit of a larger allocation to these sectors. A decades-long cornerstone to the Fayez Sarofim & Co. research process is frequent and in-depth management meetings.

[8]Bessembinder, Hendrik. "Do Stocks Outperform Treasury Bills?" Journal of Financial Economics. May 28, 2018.