

Fourth Quarter Letter 2017

PERSPECTIVE

Many individuals focus on the everyday fluctuations of their investment portfolios, sometimes to such an extent that daily price quotes, rather than the long-term value of their investments, drive their sense of success or failure. It is this short-term emphasis which gives rise to the distinction between speculating versus investing. At first glance the difference between these two concepts can be a fine line. Both speculators and investors attempt to experience rewards by the upward movement of an asset (unless they are "shorting"); otherwise, they would not purchase the asset.

An excellent recent example of speculating is the bitcoin phenomenon. Bitcoin has been the best performing asset of the financial markets in 2017. Over the past weeks and months, speculators have flocked to bitcoin, a digital currency whose value has soared by about 2,000% (as of this writing) in the past year alone. This "speculation" example is not a critique of bitcoin as indeed the technology underlying it could fundamentally change the way money is used as a medium of exchange. Our purpose is to illustrate the distinction between valuing an asset based on short-term price momentum, versus pricing it based on its underlying sustainable economic value.

Bitcoin was released in 2009 by an anonymous creator known as Satoshi Nakamoto. The software is opensourced, meaning anyone could copy it and produce a refined version with any changes they want. It's a digital form of money, except there is no government or central bank printing it or standing behind it. In other words, bitcoin has no identifiable intrinsic value. Quite literally,

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it is software. It's a program that is run across an interlinked network of computers, which facilitates transactions between parties. At the heart of the software is an open ledger – called a blockchain – that is visible to the public. Every bitcoin transaction is recorded in this distributed ledger.

The advocates of bitcoin hope that it can do the job of mainstream currencies, such as dollars, euros and yen, more efficiently, cheaply and anonymously. To do so, a digital currency would have to fulfill at least two of the basic functions of money: a stable store of value and a widely-used medium of exchange. To date, bitcoin's wild volatility shows that it cannot fulfill either.

Bitcoin's price ascent has many of the characteristics of a classic bubble. In a recent survey by *The Wall Street Journal*, 51 of 53 economists said the price of bitcoin is the result of an unsustainable, speculative bubble. Much of the trading volume has been in Asia starting in China, before shifting earlier this year to Japan and recently to South Korea as the latest hot spot. Earlier in the month, the Securities and Exchange Commission (SEC) halted an initial public offering of a competing digital currency because investors "didn't get the extensive disclosures that enable informed investment decisions."

The current price of bitcoin is driven solely by the buying and selling of speculators betting for or against its continued appreciation. In 2013, bitcoin jumped more than 5,000% though the next year it lost 60% of its value. This speculative purchase criterion stands in contrast to investors whose criterion is dependent on the ability to calculate a reasonably accurate intrinsic value for an investment, coupled with the patience to hold that investment until it reaches intrinsic value. Time is one of the key elements, which favors the investor over the speculator.

When an investor successfully uncovers an undervalued asset, one cannot expect to reap the gains of the mispricing overnight. It is the waiting game that challenges the investor, particularly when the overall market is advancing while the "undervalued" asset remains stagnant.

The disruptive technologies such as bitcoin may well survive. We make no judgments on the possibility that bitcoin may one day be widely accepted and used. However, its recent price does serve to illustrate a demarcation between speculating and investing. At Delta, we avoid attempting to time markets or make trades based on short-term price momentum or the market sentiment of speculators. We are committed to a conservative, disciplined, value approach that emphasizes attempting to price assets first (based on estimating the economic value) before committing our and our clients' capital.

December 20, 2017

COMPANY COMMENTS

Comments follow regarding common stocks of interest to clients with stock portfolios managed by Delta Asset Management. This commentary is not a recommendation to purchase or sell but a summary of Delta's review during the quarter.

Microsoft

Microsoft Corp. { MSFT }

Microsoft is the leading provider of operating systems for PCs and the world's largest software maker by revenue. The company's products include Office business solution applications, Windows operating systems for personal computers, servers, server applications, video games and its online search offering, Bing. Microsoft has emerged as one of the most important cloud computing firms in the world. Azure, the company's public cloud platform, has established itself as the No. 2 player in the space behind Amazon. In addition, Microsoft designs and sells

hardware, including the Xbox 360 entertainment and gaming console and assorted PC hardware products.

Satya Nadalla is the third CEO in the company's history. Since becoming CEO in February, 2014, he has sought to change the company's culture and product development. He has overseen several critical product launches including Dynamics 365, Office 365 and Windows 10. One goal is to transform Windows into a ubiquitous cross-device operating system from a singular focus on PCs. He also plans to focus investments on core productivity experiences and platform development for Azure, SQL Server and Windows.

An increasing percentage of Microsoft's business is shifting to recurring sources of revenue. The new Office application, Office 365, is available as a subscription model, perfectly suited for a cloud future. In the past, Microsoft's legacy products, such as Office and Windows, gave the company high profit margins and cash flow to reinvest in non-core businesses. The migration of consumers away from the PC to mobile devices and the development of open source software applications threaten to erode the dominance of Microsoft's core operating system and Windows applications. Google has established itself as the leading online search player and has used its position to branch out into direct competition with Microsoft with its Chrome internet browser and operating system software. On the

mobile operating system front, Apple's iPhone operating system and Google's Android platform have become the market leaders.

To its credit, Microsoft continues to innovate, especially in its core businesses. The real question is how durable are its major franchises Office and Windows. Both have varying degrees of sustainability although the PC-based Windows is the most vulnerable due to the rise in mobile devices. Office appears to have the greatest longevity and even some growth potential by mixing local and cloud applications. An increasing percentage of Microsoft's business is shifting to recurring sources of revenue. The new Office application, Office 365, is available as a subscription model, perfectly suited for a cloud future. More than 100 million people now use Office 365 Commercial.

A cloud-based Office 365 can reduce piracy, a significant opportunity. It is estimated that due to piracy Microsoft receives only a fraction of the revenues it is due in China. With Office 365 distributed on the cloud, subscriptions can automatically renew each year and updates to software can be automatic. Every time a user opens the program, they will be running the latest version and billed accordingly. Documents will be saved to Microsoft's cloud storage system by default, so documents and personal settings are remotely accessible.

Microsoft must continue to innovate as its core businesses mature and decline. Microsoft recently made its largest acquisition in its history by acquiring LinkedIn for \$26.2 billion. The company believes the professional social network can open new platforms for Dynamics, an enterprise software for reporting and controls, and for Office.

In the past, several of Microsoft's investments (Bing, Nokia, Zune) have been outside of the company's core and – although we do not doubt the company's ability to invest its way to a viable business – the amount of capital committed in these efforts in the past made a compensatory return more challenging. Microsoft's transformation to a cloud-based software company should allow it to lower its distribution costs and focus on its strengths, serving enterprise (business) customers.

For legacy businesses such as Office and Windows, the company is moving from a transaction model to a subscription model, extending the lives of these businesses, expanding the market and setting the stage for a stronger recurring revenue structure. Updates and software fixes will be easier and there will be a higher capture of revenue as leakage from piracy improves. We anticipate that Microsoft will continue to develop and acquire a wide range of technologies and products, some of which will be outside of its core, and will experience relatively lower long-term returns on capital. Our valuation model indicates that at its present stock price Microsoft offers a potential of an almost 7.5% annual rate of return.



Comcast Corp. { CMCSA }

Comcast is the nation's largest cable provider offering a range of information, entertainment and communication services to residential and commercial customers. The five largest markets that Comcast serves are Boston, Chicago, Philadelphia, San Francisco and Seattle. The cable segment's network is complete with video, high speed internet and voice services that can be accessed by 56 million homes and businesses in 39 states representing more than 40% of all U.S. households. The company's NBC Universal business is a leading entertainment and media company that develops, produces and distributes news, sports and entertainment for global audiences.

The cable segment is mature with subscriptions for video declining and high speed internet access slowing. With its cable footprint essentially built out, requiring only periodic upgrades, return on investment and free cash flows have increased. New competitive forces are emerging with Amazon, Google, Netflix and other technology companies offering online and mobile platforms to watch video. Comcast leads the cable industry in innovations and has aggressively responded to these new entrants by launching its own online offerings such as Internet Plus, Xfinity on Campus, Stream and X1, the company's premium TV Everywhere platform. A critical Comcast defense is its industry-leading internet speeds. With the continuing growth of online and mobile video and gaming, data usage-based pricing could become another driver of Comcast's revenue growth in the future, especially as data usage increases exponentially. Comcast's network architecture allows it to add capacity to meet customer speed demands at a far lower cost than competitors.

Another Comcast competitive response is to bundle services. In 2016, 70% of video customers took at least two products and 36% took all three services. The company has added upgrades

including more HD channels, larger DVR storage and a more robust On Demand offering. Premium customers can access most of these newer services at no additional charge.

Comcast's merger with NBC Universal has been a success. Since the acquisition in 2011, NBC Universal's operating cash flow has more than doubled. In 2016, NBC was the No. 1 rated network. In four years, Comcast has significantly improved this collection of businesses, which includes cable networks, NBC broadcast stations, movie studios and theme parks, providing adequate growth and good cash flow. The NBCU segment has several popular cable channels, such as USA Network, CNBC, Golf Channel, E!, Bravo and NBC Sports.

Comcast believes it can transform the entertainment unit into a compelling multi-media juggernaut with the parent company's ample capital, scale and digital know-how. Its central focus will be sports. The NBC Sports group has a new \$100 million production facility; and with investments in the Olympics, NASCAR, Premier League soccer, NCAA football and NFL football, it is betting it can boost fees and advertising. Sports are "must see" live events. Comcast is using sports to promote its interactive

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services, such as TV Everywhere, so customers never have to miss any action and to help prevent cord cutting which is the growing trend to cancel pricey cable connections to cut costs.

Comcast has many positive attributes including recurring and predictable cash flows and competitive advantages, such as substantial scale and a fully built-out network. The significant capital investment needed for a new entrant to build a competing network serves as a barrier to entry and limits the ability to compete on price. With its network complete, Comcast can add new subscribers and improve the speed capacity with only modest additional costs while increasing overall return on investment and efficiency.

Comcast continues to operate exceptionally well with good growth and robust free cash flow. The company has a number of responses to the various competitive threats it faces; however, we believe it is prudent to expect modest revenue growth and a gradual reduction in operating margins over our forecast horizon. Our stock valuation model estimates a long-term annual return for Comcast of approximately 8.5% based on its current stock price.

S&P Global

S&P Global Inc. { SPGI }

S&P Global is a leader in credit ratings, benchmarks, and analytics that provides essential information and data content to the global capital, commercial and commodity markets. Its brands include Capital IQ, Dow Jones Indices, Platts, Standard & Poor's and S&P Indices. These businesses have a large global footprint, good market penetration, are highly scalable, require little capital investment and generate high profit margins and strong free cash flow.

S&P has completed a multiyear restructuring and is now focused on its faster-growing financial businesses, including the lucrative and not very competitive business of rating bonds. The centerpiece of this plan was the sale of McGraw-Hill Education and divestiture of smaller, non-core businesses. The company has also made important acquisitions, such as data and analytics provider SNL Financial to complement existing data offerings and expand its geographic reach. The business transformation project has created a company with a higher revenue growth and operating margin profile.

S&P Global Ratings, which makes up 50% of total company profitability, is one of the three dominant firms that rate securities and assess credit risk; the other two are Moody's and Fitch. The three firms issue more than 95% of global bond ratings, a total virtually unchanged from the pre-2008 period. Barriers to entry, such as market acceptance and reputation, scale, global distribution, network effects and complex regulations, are high. Credit ratings are used by

S&P's businesses have a large global footprint, good market penetration, are highly scalable, require little capital investment and generate high profit margins and strong free cash flow. investors, issuers, investment banks and governments, and they provide the marketplace with a benchmark to help gauge borrowers' credit worthiness. Most bonds that are issued must have at least one rating from a respected Credit Rating Agency (CRA) for the issuance to be successful. S&P and other credit rating firms benefit from a unique market structure that favors an oligopoly. Customers want two or three ratings so as to minimize the time management must spend with analysts, to diversify the risk that one analyst gets it wrong and to lower their financing costs.

CRAs continue to be subject to criticism and lawsuits as a result of missteps made during the credit crisis. The Dodd-Frank law includes a provision that makes it somewhat easier to sue CRAs for securities fraud. The global regulatory framework has become more difficult with greater scrutiny and oversight. Although we anticipate a limit to margin growth due to additional regulations and constraints, we believe the major CRAs, such as S&P, have the global presence, resources and reputation to remain highly profitable.

Separate from S&P Global Ratings, the company's S&P Dow Jones Indices and S&P Global Market Intelligence segments are large and highly profitable global businesses with good growth prospects. S&P's indices provide investors with well-known market benchmarks, including the Dow Jones Industrial Average and S&P 500. The S&P 500 is the world's most followed stock market index with over \$8 trillion in benchmarked assets. Growing investor demand for index-based passive investments has boosted the share of exchange traded funds (ETF) and index mutual funds, increasing the fees paid to S&P Indices for the use of its benchmarks. Global retirement assets are expected to hit nearly \$60 trillion by 2020 with slightly more than half of that total in North America according to a forecast from PricewaterhouseCoopers.

S&P Market Intelligence, which includes products Capital IQ, Platts and SNL Financial, is a leading global provider of financial research, data and analytical tools for asset managers, investment banks, brokers and analysts. The global capital and commodity markets have

become more integrated driving increased demand for data and analytics. Market Intelligence continues to gain market share as it acquires, develops and integrates additional mission critical data and analytics content.

Though S&P Global's businesses are cyclical, we believe its strong position in each of its businesses and completion of its Growth and Value Plan has created a better long-term growth and margin profile. We assume mid-single digit revenue growth with operating margins averaging 40% over the long term. Based on these assumptions, our valuation model indicates over 5% annualized long-term rate of return given the current stock price.



3M { MMM }

3M is a diversified global technology innovator and marketer of a wide variety of products. With more than 80,000 employees, 3M produces more than 55,000 products including abrasives, adhesives, dental products, electronic materials, fire protection products, healthcare products, laminates and optical film. It is one of the more defensive of industrial companies because of its strong exposure to more stable healthcare, consumer and security markets and geographic diversity. Roughly 90% of its revenues are consumable products creating recurring revenue streams. 3M's unusual breadth shields it against overreliance on any market. The company's products are available for purchase in over 200 countries.

The company is well-positioned to benefit from several themes, including efficiency in healthcare, water and air quality, aging populations, industrialization in emerging markets, alternative energy and aging infrastructure upgrades. 3M has consistently reported best-in-class operating margins over the past 20 years. The company's premium margin is largely attributable to its scale, vertically integrated operations, lean manufacturing processes and differentiated brands.

In recent years, 3M launched over 1,300 new products and won 3,000 patents. Over 33% of its revenue comes from new products developed in the most recent five-year period.

In 2016, over 60% of sales were international. The company has a global manufacturing base with 40% of its plants outside of North America. Sales in developing countries have grown at a 10% compound rate over the past decade. Emerging market exposure is now 35% of sales, up from 21% in 2003. Localized production, sales and distribution have enabled the company to earn higher margins in emerging markets than in domestic markets.

3M's culture of innovation has carved a moat around its businesses. Research and development (R&D) expense as a percent of revenue is 5.5% versus the median 3% for many industrials. The company's goal is to increase R&D as a percent of sales to 6% by 2020. The investment in R&D has paid off. In recent years, 3M launched over 1,300 new products and won

3,000 patents. Over 33% of its revenue comes from new products developed in the most recent five-year period, up from 21% five years ago.

3M positions its R&D and capital expenditure spending with a long-term focus. To encourage development of new products, 3M researchers are allowed 15% free time to work on whatever projects they wish. Over time, 3M has been able to develop not only improvements in products currently being sold but also create entirely new product areas. The company's vertical integration amplifies its R&D spend. Although 3M sells thousands of products to wide-ranging end markets, the firm cites only a few dozen technology pillars that support its vast array of offerings. We expect this practice to continue, with the effect of protecting profit margins through higher-priced new product introductions.

With strong consumer and industrial brands, a track record of innovation and low cost manufacturing, 3M has competitive advantages over smaller industry players. Given these advantages and our assumptions buffeted by its current stock price, we believe that 3M's present stock price offers the potential for an average annual long-term rate of return over 4%.

Dated: December 20, 2017

Specific securities were included for illustrative purposes based upon a summary of our review during the most recent quarter. Individual portfolios will vary in their holdings over time in relation to others. Information on other individual holdings is available upon request. The information contained herein has been obtained from sources believed to be reliable but cannot be guaranteed for accuracy. The opinions expressed are subject to change from time to time and do not constitute a recommendation to purchase or sell any security nor to engage in any particular investment strategy. Any projections are hypothetical in nature, do not reflect actual investment results and are not a guarantee of future results and are based upon certain assumptions subject to change as well as market conditions. Actual results may also vary to a material degree due to external factors beyond the scope and control of the projections and assumptions.