

## FUNDAMENTAL EQUITY ANALYSIS: WHAT DO THE NUMBERS SAY?



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At its core, our equity investment approach at Clifford Swan is to own businesses. On behalf of our clients, we purchase companies that make goods, provide services, or do a combination of the two. We do not buy an index of 500 or 3,000 stocks, which includes companies regardless of what those companies sell, their financial standing, or their business prospects. In contrast, we invest in companies we know well—those where we look “under the hood” to understand the investment value.

To decide whether to invest in a business, we conduct fundamental, bottom-up equity analysis. That is, we evaluate the “fundamentals” of a specific company, including the company’s business model, the industry it operates in and general growth prospects, and the company’s future revenue, profits, and cash flows.

There are two basic approaches to fundamental equity analysis: *accounting valuation*, which utilizes basic accounting-centric metrics, and *economic valuation*, in which a company’s value is determined based on the cash flow it generates. Each approach has its own toolkit. *Accounting valuation* uses tools like price/earnings ratios, return on equity, and price-to-book value, while *economic valuation* considers valuation models such as economic value added (EVA), cash-flow return on investment (CFROI), and economic margins

(EM). While we utilize both accounting valuation and economic valuation when we evaluate a company, we rely more heavily on economic valuation, or wealth creation, in our stock analysis.

At the heart of evaluating wealth creation is a methodology called *discounted cash flow* (DCF). According to one major Wall Street firm’s primer,<sup>1</sup> “the DCF approach values a business based on its future expected cash flows discounted at a rate that reflects the riskiness of the cash flow.” Variables to this analysis include revenue and margin estimates, present value determinations, cash flow model-

“At the heart of evaluating wealth creation is a methodology called *discounted cash flow* (DCF).”

ing, and, importantly, the volatility or unpredictability of the company’s cash flows. Essentially, EVA, CFROI, and EM attempt to determine the value of a company by estimating 10 to 20 years of cash flows for that business, and then pricing that future cash in today’s dollars.

Obviously, a lot goes into DCF. The building blocks of this methodology developed over many years, if not centuries, and incorporate statistics, probabil-

ity theory, present value analysis, and modern portfolio theory.

The rise of statistics and probability can be traced to the seventeenth and eighteenth centuries, when the concepts of compound interest and probability theory rose to prominence (e.g., Pascal, de Fermat, Halley—yes, like the comet!). Much of this was driven by the needs of the life assurance business in England at that time. Similar to insurance, assurance typically refers to a policy that is for a long period of time or until death, and we saw the emergence of mortality tables in conjunction with this assurance work. In order to determine the profitability of insuring a person, an assurance company needed a way to incorporate the likelihood of the person dying (probability, statistics, and mortality tables) relative to the potential compounded earnings of the life assurance payments.

Moving ahead a couple hundred years to the late nineteenth and early twentieth centuries, the dominant railroads and telecommunication companies of that era utilized present value analysis extensively. These companies wanted to know whether an investment in a new locomotive (or locomotives) would provide attractive returns. The concept relied heavily on the time value of money. What is the time value of money? Consider a company that can invest its money in a savings account

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that earns 3% interest. If the company invests \$0.97 today at 3%, then a year from now that \$0.97 will be worth \$1.00. That is the basic concept of the time value of money. A dollar today will be worth more next year, and that dollar next year will be worth less today.

A few decades later, in the 1950s and early 1960s, a tremendous amount of financial research was published, especially out of the University of Chicago. These two decades following World War II saw the extensive development of modern portfolio theory and the basic investment frameworks that are taught today and were utilized in the development of many of our contemporary investment options, including mutual funds. These concepts include efficient market hypothesis (everybody knows everything); capital asset pricing model (CAPM is an elegant and sophisticated pricing theory for investments that is primarily embraced by academics), and initial discounted cash flow models. This work is credited to names such as Markowitz, Miller, French, Fama, Solomon, and Hirshleifer, all with ties to the University of Chicago and many with Nobel Prizes in Economics.

In the early 1960s, Joel Stern, who earned his MBA from the University of Chicago, developed economic value added (EVA). This preliminary discounted cash flow model structure relied on probability, statistics, interest rates, the time value of money, and estimates of revenues and profits to determine a company's value in today's dollars.

This initial EVA approach was refined during the 1980s and 1990s—again led by MBA students at the University of Chicago—into the concept of the cash-flow return on investment (CFROI). CFROI looks at projected cash flow returns relative to a company's assets and the investments a company has made. Since the 2000s, CFROI was refined to include the use of economic margins, which consider CFROI-like returns, but net of a capital charge. That is, if it costs 8% to obtain the funds to run a company

(through a combination of equity and debt), in order to create wealth, the company's returns need to exceed the 8% cost of capital (the capital charge). The key to economic margins is to look at the difference between a company's returns and the cost of capital to determine whether wealth is being created or destroyed.

This multilayered history puts our valuation methodology at Clifford Swan into context. We use proprietary software that considers economic margins to conduct DCF analysis, and internally develop the assumptions (variables) the software requires. We project revenue and margin trends, as well as estimate potential financial structures and real interest costs, among other key data points. A new car provides a good analogy. DCF is the car and we have all the fancy accessories (DCF software), but unless we

**“This multilayered history puts our valuation methodology at Clifford Swan into context.”**

put gas in the car and set a destination in the navigation system, the car will not go anywhere. As the environment/circumstances changes, so too should our inputs/route (valuation is a fluid concept). Our DCF estimates and assumptions are the gas and navigation inputs in our car analogy. In the final analysis, our intent is to produce a valuation estimate that we can compare to today's market value. Is the market price lower than the value we calculate? Or, is the market value above our estimated value? We would buy one, and not necessarily buy the other.

The methodology behind our equity analysis is similar to our evaluation work for bonds. In many ways, the analyses of bonds and equities are similar (sounds strange, right?). Both involve number crunching and analysis, and rely on fundamental cash flow and present value analysis. With a bond, we know the inter-

est rate, the coupon payment dates, and that the principal will be returned at a set future date. Assuming a particular interest rate today, we could calculate the value in today's dollars of that specific cash flow with significant precision. For example, a \$1,000 five-year maturity bond with a 5% coupon interest rate, with annual interest payments and a market investment rate (i.e., the going interest rate today) of 5%, would be worth \$1,000 today. If the market interest rate was less than 5%, then the bond is worth more than \$1,000; there is wealth creation, if you will.

In contrast, with a stock, there are a lot more moving parts, with unknown and inconsistent flows of earnings, cash flows, and dividends. However, while the “coupon” and “earnings” of a company are volatile, we can make a reasonable estimate of the value of the company. In a very crude way, stocks are bonds, but with unpredictable cash flows and coupon interest.

At Clifford Swan, we buy businesses for our clients. We know what they do, how they operate, their management teams, what their prospects appear to be, and have reasonable estimates of their key revenue and cash flow metrics. As the old saying goes, portfolio management is part science and part art. This is the science part. What is the art part? Ask your investment counselor for an in-depth answer to that question.

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1. Bear Sterns. *Discounted Cash Flow Methodology*. Internal, circa 2001.

# MARKET OUTLOOK: PROCEED WITH CAUTION



By Anil Kapoor  
CFA

Following a tumultuous end to 2018, investors welcomed strong domestic equity market performance during the first quarter of 2019. U.S. equity markets have rebounded smartly in 2019, with a 18% gain in the S&P 500 Index through April 30. The first three months of 2019 provided the best quarterly return for the S&P 500 Index since September of 2009. This stands in sharp contrast to the index's losses on a price basis in 2018: 6% for the year, a staggering 14% during the fourth quarter, and 9% during the month of December alone (the worst December on record since 1931). Towards the end of the year, nerves were on edge due to chatter about a trade war with China, increasing interest rates, and regulatory rhetoric. The ferocity of the market's decline going into Christmas Eve was indicative of indiscriminate selling without regard to valuation. In our opinion, hunger to harvest tax losses after 10 years of a bull market severely exaggerated the sell-off.

The rally in stocks has coincided with a slide in bond yields. Entering the last quarter of 2018, the Federal Reserve was on a clear path to continue increasing interest rates, with the aim of returning to more historically normal levels. However, higher interest rates can be challenging for companies and consumers. As the Fed began increasing interest rates in 2018, companies faced a higher cost of funding. Consumers, were especially impacted, as higher mortgage and loan rates made the cost of purchasing homes and cars more expensive. A direct result of this was a severe dip in the U.S. housing market during the early summer of 2018.

After witnessing the economy uncomfortably digest higher rates, the Fed

decided to reverse course early this year and stopped increasing rates. Increases are not expected for the rest of the year. This reversal likely contributed to equities' tremendous rally. As bond yields decline, many stocks and their associated dividend income become more attractive to investors. The sensitivity of the market to the Fed's modest increases in interest rates is indicative that we, as a society, have become accustomed to low interest rates. Going forward, the Fed will likely be very careful in their efforts to normalize rates.

While we believe the sell-off at the end of 2018 was overblown, the sharp snapback in the market gives us reason to pause. Consider how extraordinarily strong the market's recovery has been. Annualizing the 13% return in the first quarter would equate to a 52% return for the year. That is simply unsustainable. In only a few months, investors have gone from despondency to exuberance. At Clifford Swan, a few factors in particular are giving us reason to proceed with some caution.

## HOT TECHNOLOGY SECTOR

One component of the market that is especially showing exuberance is the tech-

nology sector. We have seen the S&P 500 Information Technology Sector Index eclipse its former highs reached on October 3, 2018. Many of the same fears that caused it to sell off are still present: regulations, slowing revenue growth, and increasing competition. The sector's 37% gain from Christmas Eve through April 30, 2019 is staggering and, again, seems unsustainable.

## HOT IPO MARKET

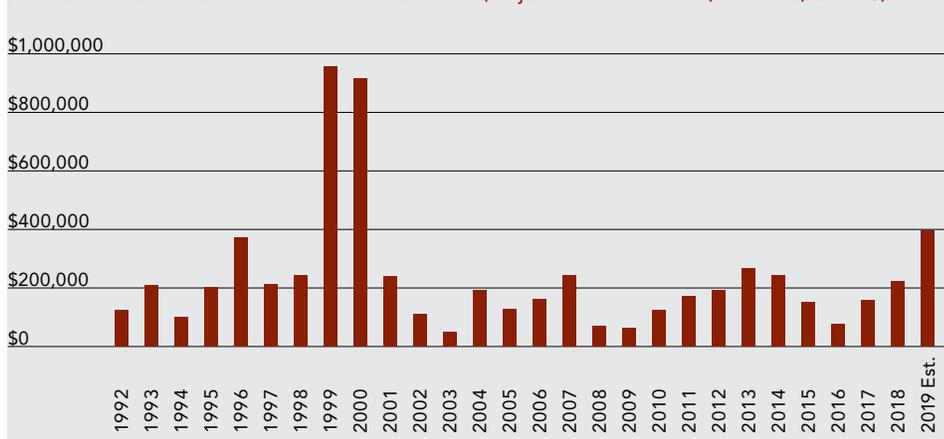
A high number of Initial Public Offerings (IPOs) are being brought to the marketplace. In IPOs, companies that have been in the hands of private investors "go public," meaning that shares in the company are made available to the investing public for purchase. There are key differences between being a private and public company. When a company goes public, reporting moves from private boardrooms to public filings with the Securities and Exchange Commission—the details of which are reported in the *Wall Street Journal*. A company's valuation is decided on stock exchanges rather than on internal spreadsheets. Keeping focused on long-term growth can be challenging after going public, as a company's management team grapples with addressing investors' often shorter-term focus.

Why are private companies rushing to go public? After all, doesn't it seem better to remain private and not subject a company to scrutiny by analysts and

MARKET OUTLOOK | Continued on page 4

## IPO Issuances at Highest Level Since the Tech Bubble (1999)

Annual Market Value at First Close of all IPOs (Adjusted for Inflation, Millions, 2017 \$)



Source: Seeking Alpha<sup>1</sup>

investors? Why have outside investors decide your company’s valuation?

The main reasons companies decide to go public are to raise money, create liquidity (which provides founders and initial investors with the ability to sell shares), and, potentially, to take advantage of frothy (overpriced) equity markets and correspondingly high valuations. The last time the market experienced a rush by technology companies to go public was in the 1999/2000 era. A very challenging period for equities followed that surge in IPOs, with the tech-heavy NASDAQ composite declining over 80% peak-to-trough from March 2000 through October 2002. When valuations become overextended, entrepreneurs see a chance to become ultra-wealthy, and look to take advantage of favorable conditions. Inherently, more IPOs usually indicate more appetite for risk. During the mega-IPO downturn at the turn of the century, even stellar survivors such as Amazon were down 93%. It is highly doubtful that many investors in Amazon at that time survived such a loss of capital. Instead, many likely sold their shares before the subsequent rebound.

What makes today’s crop of IPOs alarming is that they involve bigger companies, with the potential to fall further. Many of the firms currently coming to market are household names, such as Uber, Lyft, Pinterest, and Airbnb. Like in 1999, they are still mostly profitless (almost 80% of 2019 IPOs are expected to have negative earnings). At Clifford Swan, one component of our research discipline is to evaluate at least three years’ worth of operating history as a public company when considering an investment, meaning we don’t participate in IPOs. Our investment philosophy values companies that have proven themselves. IPOs can be unnecessarily risky investments, and even more so when they come public in a frothy market.

In a highly valued market environment that is attractive to IPOs, like we are currently experiencing, we can help insulate our clients’ portfolios by keep-

ing equity allocations in line with our clients’ long-term goals. This means trimming exposure to equities as stocks continue to rise and equity allocations naturally increase.

**OVEREXTENDED CORPORATE CREDIT**

Another item that gives us caution is the abundance of lower-quality corporate bonds in the marketplace. Invariably, most economic downturns coincide with a general decline in creditworthiness. Rating agencies, such as Moody’s, Standard & Poor’s, and Fitch, assign credit ratings to bonds. At Clifford Swan, we mostly invest in those bonds that are considered investment grade or higher. These carry ratings of BBB or better (BBB is the lowest “investment grade” rung). Currently, BBB bonds have dominated the investment grade market. The share of the investment grade market with a BBB rating is currently 52% versus 25% in the early 1990s. Importantly, given the increasing share of the investment grade market comprised of BBB bonds, we rely on our own credit analysis of companies rather than credit agencies to evaluate potential investments. We examine a company’s balance sheets and other financial reports to assess whether a company can cover their debt obligations.

The risk of downgrade is high for the pool of loans, as BBB companies have little room for error. If we start to see poor execution by some firms, subsequent bond downgrades might oc-

cur. This could lead to a sell-off in the bond market and make the interest rate demanded by investors for the credit of these companies higher. In turn, this could potentially destabilize bond markets, making it difficult to raise money.

**HIGH CORPORATE PROFIT MARGINS**

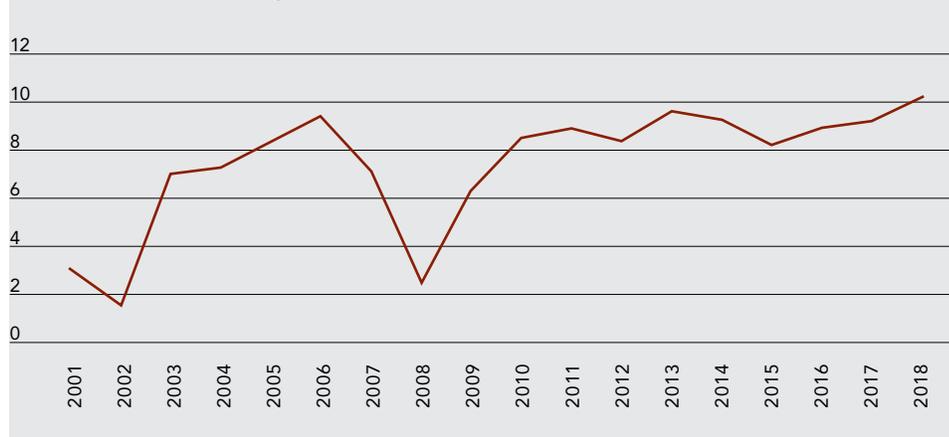
In addition to a hot IPO market and corporate credit looking extended, high corporate profit margins are another point of concern. After the Great Recession of 2009, wage and expense growth (inflation) has been minimal, contributing to profit margins for U.S. corporations reaching all-time highs (see the chart below). Over the last couple of years, we have seen increased wages across many sectors and sub-industries. This will put pressure on companies, and corporate profit margins will likely contract. To protect clients’ portfolios, we will focus (like always) on investing in companies that are less sensitive to wage pressures and can maintain pricing power.

Remember, ups and downs are the normal course of business for the market. Given the factors described above, we believe there is reason to proceed with caution during this swift upswing and will look to a potential sell-off to take advantage of buying opportunities for our clients. ♦

1. MacKenzie, Josh. “Initial Public Offerings: A Potential Contrarian Indicator.” <https://seekingalpha.com>, 27 March 2019.

**Corporate Profit Margins Are High**

S&P 500 Index Profit Margin



Source: Bloomberg

# SPRING CLEANING FOR YOUR ESTATE PLAN



By Erica S. White  
CFA

At Clifford Swan, wealth management has always been about more than your portfolio. Please do not misunderstand. Researching companies and carefully selecting investments tailored to meet our clients' needs is in our DNA. However, we know that to be truly skilled investment counselors, our relationships with our clients must be broader than the portfolios themselves. In other words, we need to understand how your portfolio connects with other aspects of your financial life.

To begin with, we encourage everyone (not just our clients) to consider having an estate plan. They are not simply for the elderly, and anyone with assets to protect or others to provide for should regard them as fundamental. We always recommend that clients

**"We always recommend that clients complete an estate plan to make sure their assets are protected, organized, and ultimately passed on according to their wishes."**

complete an estate plan to make sure their assets are protected, organized, and ultimately passed on according to their wishes. Good estate plans are often multifaceted, and crucially, they ought to be living and breathing documents. We realize that, around this time of year, many clients will have recently

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completed their taxes and may not be eager for more projects. However, this article will outline the case for an annual estate planning "spring cleaning" of sorts, easily completed to ensure your accumulated wealth is being protected as it ought to be.

Understandably, beginning the conversation about planning for after your lifetime can be difficult. However, as our CEO, Linda Davis Taylor, explains in her book *The Business of Family: How to Stay Rich for Generations*,<sup>1</sup> thinking strategically about the future of your family and its wealth is crucial to your family's success. Families (or individuals) should develop a philosophy centered upon their unique values, and that philosophy will in turn help guide the specifics of your estate planning efforts. As you get started, your Clifford Swan investment counselor is here to assist. We would welcome the opportunity to help you clarify your goals in this regard.

However, it would be a misstatement to think that estate plans only come into action after your death. While a will or trust is often the main component of your estate plan, other important ones include powers of attorney (documents that grant another person authority to act on your behalf in legal or financial matters) and medical directives (instructions concerning future medical care, should you be unable to make them).

By far, the most common estate plan for our clients involves a revocable trust.

A revocable trust, or living trust, is a written document that outlines how your assets will be distributed upon your death, and the terms of your revocable trust can be amended or cancelled during your lifetime. You are able to serve as your own trustee, but, importantly, a successor trustee can step in should you become incapacitated, unable, or unwilling to manage your own affairs.

If you are not yet convinced of the importance of estate planning, proper planning can also make it possible for your heirs to avoid going through probate (the court-supervised process through which your estate is settled), which can be a public, lengthy, and costly process. In California, if you have

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not planned ahead, estates worth as little as \$150,000 can be subject to probate. That may seem like a low number in relation to the values of many of our clients' investment portfolios, not to mention their homes, cars, jewelry, art, etc. In our experience, revocable trusts are great tools. But, like all aspects of your estate plan, they cannot be simply put on a shelf and ignored.

**SPRING CLEANING** | Continued on page 6

Therefore, in beginning your estate planning “spring cleaning,” the most important first step is to inventory your own circumstances. Ask yourself what, if anything, has changed in the past year to affect your plan. A good place to start is looking around you at the composition of your family and those you hold dear. Are there any changes? Perhaps

“... in beginning your estate planning ‘spring cleaning,’ the most important first step is to inventory your own circumstances.”

there was a birth, death, marriage, or divorce you might need to account for in your plan. Or perhaps your preferences have changed, and you may want to include or feature charitable giving in a different way going forward.

Next, if your plan includes a trust, revisit who is listed as successor trustee. This is the individual (or institution) who will step in to manage your affairs upon your death, incapacity, or resignation as trustee. Is that individual still able to serve in this capacity? Are they willing to? In our experience, it is always a good idea to have multiple successor trustees listed, as unfortunate circumstances do arise. Should your successor trustee predecease you, and another is not appointed, your heirs may find themselves in court. When considering who to appoint as successor trustee, sometimes a professional trustee may be appropriate and sometimes a family member or friend may be more than sufficient. Your investment counselor can assist you with this decision-making. If you choose to designate an individual as a successor, it can often be wise to loop that person into your affairs sooner rather than

later, to prepare them for the eventual transition in authority.

Another important question to ask yourself periodically involves your assets themselves. Have you opened new accounts, acquired additional property, or benefited from an inheritance? If so, be sure that you continue to “fund” your trust and title these assets in the name of your trust, or otherwise account for them in your estate plan. It’s every investment counselor’s nightmare (or at least mine) to learn that their clients created a trust, but failed to retitle some or all of their assets in the name of the trust before it was too late. That is a crucial step.

Thus far, our estate planning review has focused upon revocable trusts; however, another key area of your “spring cleaning” should separately consider any retirement assets you may hold, including any IRAs (like your IRA or Roth IRA) or any employer sponsored retirement plans, to ensure your beneficiary designations remain up to date. The same goes for any insurance products you own. Your beneficiaries must be correct and current. Finally, we find it is an excellent exercise to create a summary document to list the key elements of your plan, both for your own review purposes and also for your heirs, when necessary.

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At Clifford Swan, we cannot create an estate plan for you, as we are not attorneys. Moreover, the aforementioned list of items to include in your annual review is not exhaustive. The particulars of your plan will vary according to your circumstances and wishes, and we recommend you defer to your attorney for legal advice. However, as your investment counselors, we are in a unique

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position to help you manage your plan on an ongoing basis. We can help you think through your options and we are well versed in managing assets within all sorts of trusts and planning frameworks. We value working together with your estate attorney to be part of a collaborative and expert team dedicated to advancing your objectives. ♦

1. Taylor, Linda Davis. *The Business of Family: How to Stay Rich for Generations*. Palgrave Macmillan, 2015.

WISDOM *for* GENERATIONS