February/March 2017

THIS MONTH'S FOCUS: TECH TRENDS

Tech M&A

Michael Mintskovsky

Recently, technology has driven merger and acquisition activity, and this year is poised to be no exception. The advancement of technological capabilities, acting in unison with expectations for a more relaxed regulatory climate, should drive tech M&A this year.

Dell's $67 billion buyout of EMC in 2016 stands in a class of its own, as the largest pure-technology buyout and second largest tech deal in history. A weak year in tech IPOs has brought about a flurry of M&A activity. For the private "unicorn" tech companies (private companies valued at $1 billion or more), delaying IPOs and waiting for big-name suitors has become increasingly lucrative. The ever-growing list of "unicorns" has reached a record length, with 187 private tech companies standing valued at over $1 billion.

In 2016, macroeconomic uncertainty acted to suppress deal valuations to an extent. Despite a weaker 2016, the beginning of 2017 has already seen a flood of major tech M&A deals. Donald Trump's presidency has established a deregulatory environment, against the backdrop of stricter M&A regulation under former President Barack Obama. The Obama administration had blocked major deals, such as Comcast's purchase of Time Warner Cable and the acquisition of T-Mobile by AT&T and Sprint. Trump has set a new regulatory tone, including a proposal to allow U.S. firms to repatriate overseas funds with a 10% tax instead of the current 35% tax. This repatriation tax holiday bodes well for tech M&A. Additionally, his personnel appointments have contributed to this shift. David Higbee, an M&A lawyer who worked in the Bush administration, was named to the Justice Department Transition Team - a move interpreted by many as a statement of weaker antitrust regulation. The Republican control of the presidency, House, and Senate is expected to translate into lower corporate taxes and fewer antitrust regulations, in theory stimulating the M&A industry as a whole.

Some analysts argue, however, that expanding tech capabilities , as opposed to deregulation and tax holidays, will be the driving force of increased M&A activity. For example, the industry has seen the growth of software-as-a-service (SaaS), cloud computing, Internet of Things (IoT), and cyber-security companies. SaaS companies are particularly attractive investments, as they generally provide financial services from one centralized, scalable platform, and employ steady, predictable, and recurring revenue models. The giants of the industry (the Microsofts, Ciscos, and IBMs of the world) are equipped with large cash flows on their balance sheets, with the goals of increasing efficiency in business processes and increasing cybersecurity. Meanwhile, private equity firms are equipped with liquid securities suitable for fueling a high level of deals. Thus, advanced tech firms stand poised to be acquired, and tech giants have the motivation to purchase rising firms.

In 2017, we have already seen Cisco acquire AppDynamics, IoT platform Jasper Technologies, and cloud-based security firm CloudLock. Symantec has purchased LifeLock Inc. and Blue Coat Systems in its attempt to stay ahead in the increasingly competitive consumer and enterprise security industry. Hewlett

Packard has already announced three separate buyouts this calendar year. With this M&A influx, we also see new concerns. Analysts worry that M&A will limit innovation and diversity in the tech marketplace, and competition will stem from financial power rather than products and ideas. There are certainly two sides to this argument. Regardless, it will be fascinating to see where the technology industry will go, and how the size and volume of M&A deals will be influenced by tech trends and the newly inaugurated Trump administration.

An Altering Telecom Landscape

Jake Gans

Growth in the telecommunications industry has been dramatic by virtually any measure. Despite some reports of a slowdown, there may be room to grow in 2017. The Telecom industry is divided into three main tiers: the top tier being AT&T and Verizon, the second being Sprint and T-Mobile, and the bottom including everyone else. Recently, however, T-Mobile has moved closer to AT&T and Verizon in terms of overall presence in the industry. This is due to its aggressive attacking of industry standards which has led to a large increase in its user base. T-Mobile has a similar retention rate to Verizon and AT&T, but is currently converting customers to the firm's plan at a much higher rate (42% vs 14% for Verizon and 10% for AT&T). Sprint is the only one of these four companies that had a reduction in user base. High retention rates ensure a significant lifetime monetary value to each customer. As can be seen from the attached graphic, T- Mobile has been taking away Sprint's market share for some time now.

Washington has had an effect on telecom as well. In the 3rd quarter of 2014, Sprint dropped its offer to acquire the [then] smaller T-Mobile due to regulatory resistance from the Obama administration. Now, there is a continued belief that President Trump will promote a policy of deregulation. Trump's pick for the FCC chairman is former Verizon general counsel member Ajit Pai, who wants continued deregulation of the industry and has been quoted as supporting the push to end net neutrality. Net neutrality is the concept that telecom firms shouldn't be able to discriminate streaming speeds provided to users based on how much each consumer pays.

What this means for the telecom and media industry is that we will continue to see larger mergers and acquisitions and further consolidation from top tier conglomerates. This started in 2011, when Comcast acquired NBCUniversal for $16.7 billion. This deal was heavily scrutinized by the Obama administration, but was ultimately passed, as there was no evidence of horizontal monopolistic behavior. Additionally, Comcast this past year acquired DreamWorks for $3.8 billion.

The competition continues to be increasingly fierce, as Verizon and AT&T have both been vying for the top spot and making large acquisitions. Verizon acquired the struggling AOL in a $4.4 billion-dollar deal with the hope of repurposing the firm to further promote Verizon's mobile and video advertising. Additionally, pending federal review, Verizon will acquire Yahoo for $4.83 billion in cash. This was after many failing quarters for Yahoo and a serious hack. Verizon has also been in talks with Charter Communications about would allow Verizon to take the lead in 5G technology, by using Charter's heavily supp

On the other hand, AT&T spent $85.4 billion for the acquisition of Time Warner, which owns HBO, Warner Bros, CNN, and many other networks. This will allow AT&T to further compete against Verizon in offering higher quality streaming without cost to the customer. While President Trump has voiced concern about the consolidation of power related to this merger, many on Wall Street believe that Pai will approve the deal.

The continued competition is not surprising given the deregulation initiatives that Trump is promising to all businesses. The opportunity for synergies are extremely high and there is an expectation that 2017 will be

a year of many acquisitions for the telecom industry.

Actively Choosing to Go Passive

Colby Schofield

Over the past decade, one can see a clear trend towards passively managed funds and a departure from actively managed funds. Net of fees, investors are finding it extremely difficult to generate alpha through traditional stock picking. Therefore, in this competitive investing environment, it has been increasingly difficult to justify the high fees of active management, leading to a subsequent emphasis on Exchange Traded Funds (ETFs). There may be less diversification in a solely passively managed portfolio, and there are other potential disadvantages associated with the blanket approach of investing utilized by ETFs; however, passively managed funds have consistently demonstrated better performance and entice investors to reallocate their money from active to passive funds.

As the investment landscape is changing, it is important to think about whether or not there is a place for active management in an increasingly efficient market. Traditional active management has captured returns from mispricing and arbitrage opportunities. A unique methodology is essential to capitalize on certain types of opportunities. However, actively managed funds have much higher fees – around 70 basis points – compared to passively managed funds – around 10 basis points – as seen in **Exhibit A**. Net of fees, passively managed funds more often, on average, outperform actively managed funds (see **Exhibit B**). This is the reason many investors have pulled money away from active management and invested in passively managed funds (see **Exhibit C**). (Krouse, Jakab, Zweig, and Sender). Though a well-constructed portfolio should be diversified with a blend of complementary active and passive funds, investors of actively managed funds continue to incur losses relative to benchmarks. Thus, it is evident that actively managed funds may soon be obsolete and nonexistent for future investors.

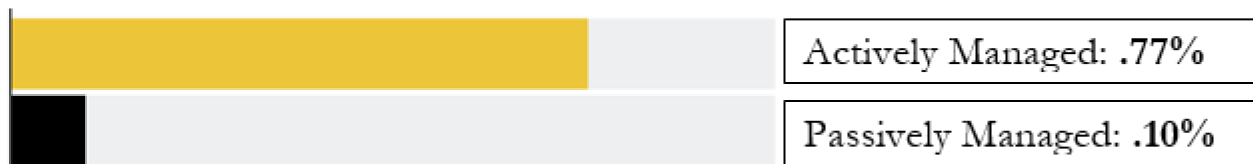
While there have been many headlines discussing the "trend towards ETFs", there are alternative investment opportunities elsewhere. Passive investment is not synonymous with ETF — there are low-management-fee index funds, passively managed funds, and both passive and active ETFs that track broad market indexes. A recent WSJ article claims that the focus on passive ETFs stems from "three big advantages … they're cheap, flexible and tax-efficient … [these advantages] continue to drive the migration of investment assets from actively managed mutual funds to ETFs."

Investing strategies and the investing players are shifting. The future may bring more quantitative strategies, computerization, and automation that could ultimately completely replace human fund managers. In such an environment, it is difficult to imagine a place for active management to capitalize on arbitrage opportunities; investments would be managed self-sufficiently without the need for hedge funds, mutual funds, and other actively managed funds. The ETF business continues to grow and, in the not-so-distant future, it is not inconceivable to visualize the absence of actively managed funds.

Appendix

Exhibit A

Average annual fees for U.S. stock mutual funds



As of October 11, 2016

Exhibit B

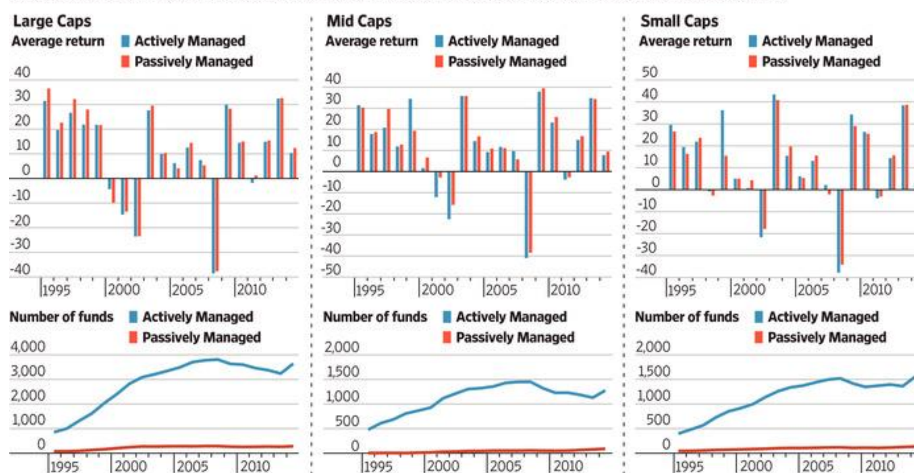
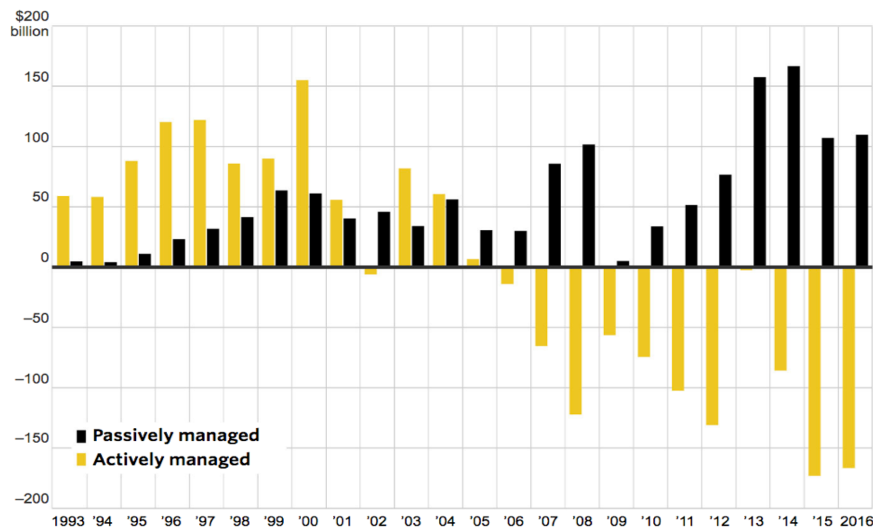


Exhibit C

Net flows of U.S. stock mutual and exchange-traded funds



THE FOURTH INDUSTRIAL REVOLUTION

Cole Obana

The first industrial revolution powered the world with steam. The second used electricity to mass produce. The third automated production. Now in the midst of the fourth, we are witnessing the fusion of automation, artificial intelligence, and biotechnology. Many are uneasy about the long-term consequences of this revolution, as technology is negatively impacting our middle-class workers, increasing income inequality, and gaining the ability to automate more jobs. However, the extreme impacts of this revolution will not be in the foreseeable future, and many of the most influential politicians, business executives, and economists have already been discussing the situation. Although technology's ultimate impacts are uncertain, and slightly concerning, our brightest minds are already addressing, predicting, and managing how it will unfold.

As strides in job automation and artificial intelligence lengthen, both middle-income jobs and income inequality have become topics of discussion amongst businesses, policy makers, and economists. The annual World Economic Forum has been a major player that facilitates such discussion. This past year, it brought together influential politicians, economists, and business leaders, which ranged from firms like IBM, Google, and Facebook.

On one hand, some executives and economists believe that, similar to past industrial revolutions, the development of technology will create more new jobs than it replaces and will continue to raise the standard of living. Ginni Rometty, the CEO of IBM, described the relationship between man and machine as symbiotic. He believes technology will replace workers, but at a slow enough rate for the labor force to adapt. Janet Yellen, the Federal Reserve Chairwoman, said that industrialization is one of the main reasons America is approaching full employment, and economists suggest that revolutions do not lead to mass unemployment.

On the other hand, although industrialization is a drive for employment, the condition of our labor force is not like it used to be. Economists believe we are in a polarized labor market. This is a situation where highly skilled workers are leveraging technology to increase productivity, which effectively replaces middle-class workers. These middle-class workers, with manufacturing or clerical jobs, usually end up with lower-class jobs that have lower wages, benefits, and job security. As the gap grows, the labor market becomes more polarized.

One solution to the skills gap is studying the tasks associated with jobs in order to find those which are automatable. It also involves benchmark-testing employee's skill level, so that private corporations, as well as the government, can have insight in finding new jobs for those who become structurally unemployed. Additionally, it would include training for these unemployed workers based on the jobs that fit their skill level. The success of this solution ultimately relies on the government's and corporations' willingness to commit resources to such a program.

Despite polarization mainly affecting the middle-class, some inequality economists say the trend will continue to climb the income ladder. A study from McKinsey found that almost every industry has automation potential. Its research showed there are over 1.1 billion full-time jobs

that could be automated, with over 100 million in the United States and Europe. It also found that automation technology could replace 49% of the time workers spend on their jobs. Researchers already suggest that self-driving cars, created by companies like Uber and Apple, could likely replace drivers, and new innovative software could replace middle-class writing and analysis jobs. The trend is that the productivity of machines is exponentially increasing, while the number of people required to create and maintain the machines is decreasing. This is because once a machine gets a task right, it does it right forever. Satya Nadella, the CEO of Microsoft, thinks this could lead to excessive regulation or social unrest and said, “if we don’t get it right, we are going to have a vicious cycle.”

HELOCS: A CLOSER LOOK

Mohammed Lawal

It's no secret that the housing crisis of 2008 put the U.S. economy through a serious recession. The housing crisis was primarily caused by speculation in the real estate market, coupled with large numbers of subprime mortgage holder defaults. Since the 2008 financial crisis, the U.S. economy has been slowly recovering in a long-winded expansion. According to the Bureau of Labor Statistics, unemployment has dropped from a high of 10 percent in October 2009 to a more healthy rate of 4.7 percent in February of 2017. Additionally, the iShares U.S. Financial Services ETF has risen 365% since it fell to $23.52 per share in March of 2009 - but the effects of the financial crisis still run deep. The recession still cost banks, investors, and funds billions, and negatively affecting millions of American homeowners. As a result, Wall Street has seen a substantial increase in government regulations.

Following this, big banks tightened up their lending practices. However, there is still a substantial chunk of the population that have bills to pay on the same type of loan that was quite common in the months and years preceding the financial crisis. An increase in delinquencies on Home Equity Lines Of Credit (HELOCs) is beginning to have a significant effect on banks' loan profitability. A HELOC involves leveraging equity from one's home in order to finance spending activities, such as paying college tuition. As such, a HELOC functions as a second mortgage, with one's home used as collateral for the line of credit they receive. Most HELOCs require that only interest must be paid over the first ten years of the loan, with principal payments due over the next 15-20 years.

The main issue with HELOCs is that once the interest payments stop and much larger payments are due, many people find themselves under major financial strain. According to the Wall Street Journal, about 840,000 HELOCs have reset over the course of 2016, and nearly one million more will have principal payments due during this year and beyond. Banks have seen a 52 percent increase in delinquencies over 2016, rising from 2.9 percent of outstanding loans to 4.4 percent. That amounts to roughly $2.8 billion in HELOCs with late payments. In addition, Reuters reports that roughly $221 billion in cumulative principal payments will be due by 2019.

A large distinction between HELOCs and general mortgages is that HELOCs leave banks subject to more exposure than they were in the pre-crisis era. This is because most lenders own their customers' HELOCs rather than selling their right to the loan to a third-party institution. According to Stuart Feldstein, president of SMR Research Corp., only 2 percent of banks' equity originations are sold as securities on secondary markets. The largest four banks by assets, J.P. Morgan Chase, Bank of America, Wells Fargo, and Citigroup, lay claim to approximately half of the outstanding HELOC balances.

When homeowners first obtained these loans, many Americans were confident that housing prices would continue to increase in a healthy market, which subsequently prompted banks to keep lending. Even if worst came to worst, people could refinance their loans and continue to pay lower interest. Now, with many HELOCs entering their principal-payment period, borrowers with subprime credit scores are struggling to refinance. In addition, many HELOCs

are variable-rate loans, which means that a higher interest rate period could make their payments even more costly. Many investors expect the Fed to increase rates in the near future, which could increase this economic burden.

Over 50 percent of borrowers with HELOCs have seen their homes significantly depreciate in value. Many borrowers essentially find themselves owing more than the value of their homes. Consequently, this makes it almost impossible for homeowners to borrow more from banks in order to keep up with their payments, exposing themselves to foreclosure. A 2015 report by RealtyTrac estimates that 60 percent of HELOCs under principal payment over the course of this year will be secured by homes that are underwater. The main concern regarding a substantial rise in HELOC defaults is the subsequent effect on the other types of debt, such as car and credit card loans. This can have a negative impact on the economy at large, as individuals will have trouble accessing credit markets and driving U.S. consumption.

With several million Americans experiencing increased financial pressure from the price shock of their HELOC loans, many individuals will be diligently observing how this issue, however great or small, manifests itself in housing markets, the financial services industry, and on the American economy at large. One thing is certain: if the HELOC default growth trend continues down a slippery slope, it could have several adverse effects on both lenders and borrowers. For now, let's hope that the HELOC situation doesn't become the second coming of a housing crisis.

TOUGH TALK, NO WALK: DEFENSE STOCKS SOAR AMID PRESIDENTIAL CRITICISM

Investors Anticipating a Return to Robust Growth for the Sector in FY2017

Jameson Mah

Public prime defense contractors, a cornerstone of both American democracy and interventionism abroad, have gained $49 billion in market capitalization since President Trump was elected in November, an 11% overall increase led by the likes of massive contractors such as Boeing and Raytheon, returning approximately 20% and 12% respectively, according to the Washington Business Journal*.* President Trump's campaign promises readily reflect many factors in this sector's surge. He has promised to scale up the military from its current downsized scope. His campaign has promised to eliminate spending cuts, grow the size of the navy, and revamp missile technology, providing a contract boon for every major defense company associated with the United States government. His cabinet has more military veterans than any other recent cabinet.

The actualization of this trend can be seen in Senator McCain's proposed $640-billion-dollar defense budget for FY2018, which represents a $54-billion-dollar increase over Obama's proposed plan, not including an Overseas Contingency Operations (OCO) account of $60 billion likely to be included in the final version of the budget. Including OCO, the total budget is expected to surpass $700 billion dollars, beginning a growth trend to continue through the administration's first term. It's no surprise that defense investors are already beginning to celebrate.

Yet, the Commander-in-Chief's 'deal or no deal' bargaining tactics and his tendency to engage in Twitter onslaughts have developed volatility among publicly traded defense stocks. It began with Boeing (NYSE: BA), the largest public defense company, which has a market cap of approximately $100 billion. President Trump tweeted "Boeing is building a brand new 747 Air Force One for future presidents, but costs are out of control, more than $4 billion. Cancel order!" Indeed, the Air Force One should cost a decent sum of money; it's designed to withstand a nuclear war, refuel in the air, and perform a whole host of other undisclosed intelligence and security features. Boeing's share price sunk 1% in pre-market trading, only to almost immediately recover at market open. The shares currently trade nearly 10% higher since the day of the tweet.

Investors were more receptive when the President's ire redirected towards Lockheed Martin (NYSE: LMT) in two tweets about the F-35 fifth-generation fighter jet program: "The F-35 program and cost is out of control. Billions of dollars can and will be saved on military (and other) purchases after January 20th," and "based on the tremendous cost and cost overruns of the Lockheed Martin F-35, I have asked Boeing to price-out a comparable F-18 Super Hornet!" Lockheed's share gains have lagged its counterparts by a sizable margin. Nevertheless, the outlook remains positive given the unusual pattern of defense company CEOs publicly working directly with the Commander-in-Chief. Lockheed Martin's CEO, Marillyn Hewson, has met with President Trump multiple times, and expressed a willingness to compromise and reach a mutually beneficial middle ground on cutting costs and creating new jobs.

These tweets, as far as investors are concerned, are water under the bridge. In this politically-driven financial market, policy promises and the delivery of those promises are paramount. For defense, the policies and the extent of their enactment hold strong, regardless of the tweets President Trump fires out. Global tensions are rising among the Middle East, Eastern Europe, North Korea, and the East and South China Sea, consequently forcing a heightened pressure to remilitarize. Acceleration of the adoption of next generation military equipment and spending by the United Arab Emirates, Saudi Arabia, India, South Korea, Japan, China, and Russia, along with a growth trend in the U.S. defense budget, should generate a robust expansion for the defense sector. Deloitte forecasts a minimum 3.0% growth in FY2017 — and no amount of tweets or "cancel orders" appear to stand in the way of that.

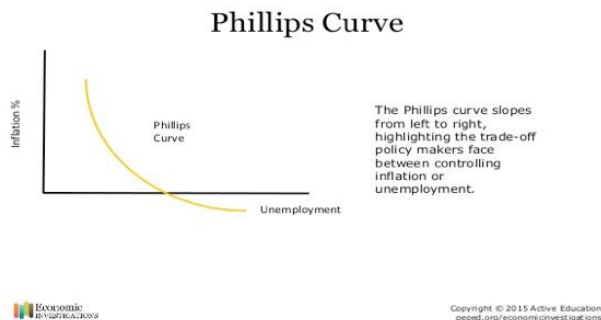
ADDITIONAL READINGS

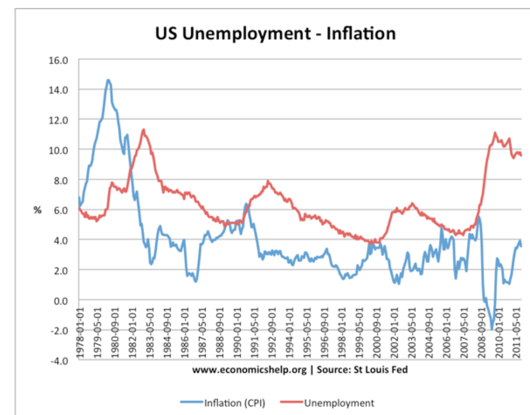
EMPLOYMENT AND EARNINGS INCONGRUITY AMIDST THE US

Pat Dunne

In light of the recent political transition in the United States, the status of the economy has been examined from every angle. However, two particularly pertinent factors for Penn students warrant further focus: the unemployment rate and the wage growth rate.

Theoretically speaking, according to the Phillips Curve, economists usually expect an inverse relationship between the unemployment rate and inflation rate, meaning specifically that wages typically rise as the unemployment rate falls (and inflation and productivity increase). However, in the past decade, this relationship has been fractured as worker's wages have not kept pace with the rise in employment, an unfamiliar situation for the United States.



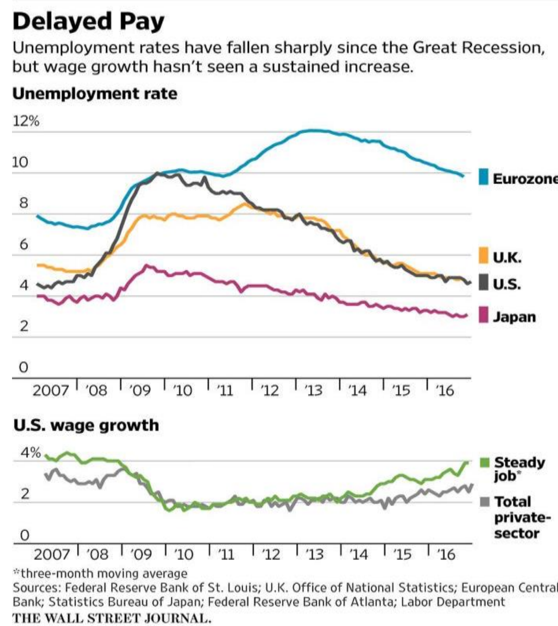


Visual 1: https://image.slidesharecdn.com/phillipscurve-150915110054-lva1-app6891/95/phillips-curve-3-638.jpg?cb=1442315402

Visual 2: http://www.economicshelp.org/wp-content/uploads/blog-uploads/2011/11/unemployment-inflation-trade-off-78-11.png

As shown in the visual above, the historical US empiricals have matched the expectations of the Phillips Curve. Throughout 2016, 2.24 million jobs were created - nearly 100,000 more than predictions - and the labor force participation rate now increased to a four-month high of 62.9%. However, while the U.S. unemployment rate (up to 4.7% in January) also remains close to a nine-year low of 4.6%, the gain in average hourly earnings over the past 12 months was much lower than the Federal Open Market Committee and Janet Yellen's prediction of a 2.7% gain. Even more

worrisome is the fact that the U.S. wage growth since 2007 has been as much as 1% per year lower than standard economic models predicted.



Visual 3: https://si.wsj.net/public/resources/images/BF-AN312A_OUTLO_16U_20170108114208.jpg

In examining employment more closely, Bloomberg shows that this year's payroll increases are benefited by growth in retailers, financial services, factory hires, the leisure and hospitality industry, and private employment, among other factors. While firms regularly hire massive amounts of workers to overcome a backlog of demand orders, this unfortunately tends to slow productivity growth and is especially tough to rationalize while growth is near zero or even declining. As such, though the employment landscape appears reasonable amidst a sour surface level summary, the details behind the wage trajectory draws hope.

In exploring unemployment, the changing makeup of the labor force plays a significant role. For example, amidst the recession, since low-wage workers were disproportionately fired and firms reduced new hires, who typically earn less, average wages could be maintained. However, as the economy recovered, lower-wage workers have re-entered the workforce as highly-paid baby boomers continue to retire, both of which place increasing downward pressure on pay. While the composition of the labor force impacts wages, so does the job category. Though jobs were lost primarily in the construction and manufacturing sectors, hiring during and after the recovery has focused on the services sector, which typically offer lower earnings per worker and are tough to eliminate simply with machines and technology.

Another large-scale impact on the incongruity between wage growth and the unemployment rate lies in the health of the global and domestic economy. In recent years, worker's bargaining power has been eroded because of general economic uncertainty, labor-market reforms and serious global competition from China amongst other markets. Workers in new service-sector jobs are less frequently organized into unions, further reducing the pressure for wage hikes. On the company

side, some firms may not have been able to reduce labor costs as much as they desired after the crisis, and, thus, dragged the adjustment out over time. Public-sector pay has also been squeezed as governments have tightened their pockets, pulling down average wages and perhaps weighing on private-sector pay by proxy.

While wages are expected to rise more strongly as labor markets tighten further and post-crisis ripples dissipate, productivity growth appears to be an almost necessary element of a wage boom in the near-future. So while employment rates have been a force in historical analysis regarding the health of the economy, productivity rates are an increasingly important element that impacts job growth in the US and a metric that Penn students can hopefully increase upon graduation.

CUTTING THE DODD FRANK ACT

Joe Novak

President Trump's administration is yet again making good on his campaign promises. Last month, President Trump signed an executive order for a review of the Dodd-Frank Act. In 2010, the Obama Administration put the Dodd-Frank Act into action. This Act puts regulation of the financial sector in the hands of the government, as a response to the worst financial crisis since the Great Depression. Dodd-Frank is designed to reduce excessive risk among banks, to prevent another recession and to help everyone from the average investor to the overall health of the world banking system. Dodd Frank requires banks to hold much higher levels of capital and liquidity than they did prior to the 2008 recession. This requirement is set to limit the quantity of lending, and to ensure that banks have adequate capital and liquidity stored in case of loan defaults. Bankers have argued that they are required to hold excessive amounts of capital to buffer potential losses, and that this unused capital could be used to promote growth in the economy through more extensive lending.

President Trump believes the regulations have gone too far: "Regulation has actually been horrible for big business, but it's been worse for small business" said President Trump, calling the act "a disaster". It is "virtually impossible" for small to medium sized businesses to obtain a loan. These effects on small businesses have hindered growth in the US, and President Trump expects to be "cutting a lot out of Dodd Frank."

This cutting back of federal regulation has had a positive outlook by many insiders on the future of the banking industry. "I do think if there's some regulatory relief, you will see banks be more aggressive and growing, opening branches in new cities, adding to loan portfolios, seeking out clients they don't have" J.P. Morgan CEO Jamie Dimon told investors on Jan. 13.

The expectation to cut Dodd-Frank has spurred a boost in the financial stocks. Big banks such as J.P. Morgan Chase & Co. and Citigroup Inc. climbed more than 3%, while the KBW Nasdaq Bank Index gained about 2.2%. That index has risen about 24% since Election Day compared to a 7.4% gain for the S&P 500. This rise is a result of investor expectations of higher interest rates, less regulation and stronger economic growth.

The executive order highlighted the following "Core principles" of regulation:

a. empower Americans to make independent financial decisions and informed choices in the marketplace, save for retirement, and build individual wealth
b. prevent taxpayer-funded bailouts
c. foster economic growth and vibrant financial markets through more rigorous regulatory impact analysis that addresses systemic risk and market failures, such as moral hazard and information asymmetry
d. enable American companies to be competitive with foreign firms in domestic and foreign markets

e. advance American interests in international financial regulatory negotiations and meetings
f. make regulation efficient, effective, and appropriately tailored
g. restore public accountability within Federal financial regulatory agencies and rationalize the Federal financial regulatory framework.

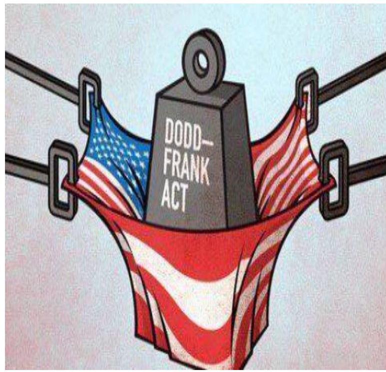
"We have the best, most highly capitalized banks in the world, and we should use that to our competitive advantage. But on the flip side, we also have the most highly regulated, overburdened banks in the world" said Gary Cohn, Trump's White House National Economic Council Director. The executive order "is a table-setter for a bunch of stuff that is coming," said Cohn, who recently left investment bank Goldman Sachs, where he was second in command to CEO Lloyd Blankfein for a decade.

There has been no specific plan set on how to loosen regulations; however, investors are anticipating change with regards to the capital requirements set out by the Dodd Frank Act. Being able to use more capital would help banks and their investors in several ways. First, banks would likely return much of the capital through dividend increases or higher share buybacks. The latter, decreasing the number of shares a bank has outstanding, helps to boost earnings per share. That, in turn, can boost share prices. We have seen share prices in banks increase in anticipation of higher earnings per share.

President Trump's actions have found some bipartisan support, but he also faces large democratic opposition. "While some targeted relief to community banks is appropriate, we cannot afford to undo Dodd Frank's essential safeguards," said U.S. Sen. Mark R. Warner (D-VA), a member of the Senate Banking Committee. Democrats and others fear that the cutting of regulations could lead to similar risk among big banks that preceded the 2008 financial crisis.

CLSA analyst Mike Mayo in a January report estimated that the typical bank's payout in the form of dividends and buybacks as a portion of earnings would go to 85% by 2019, up from 65% in 2015, with capital returned rising respectively to $110 billion, up from $70 billion.

As much as shareholders would welcome greater capital returns in the short term, such moves can create risks. For example, before the financial crisis, it was common for large banks to spend more on dividends and stock repurchases than they earned in annual profit. That left big banks poorly positioned and in financial struggle, leading the firm and other banks to be bailed out by the government. This spurred laws such as Dodd Frank to ensure nothing similar happens again. Despite criticism, Trump is holding to his word on regulation cuts. These cuts will help to boost the economy and help small business owners to attain loans, however they also increase risk in the financial markets. Only time will tell if these benefits will outweigh the potential new risks.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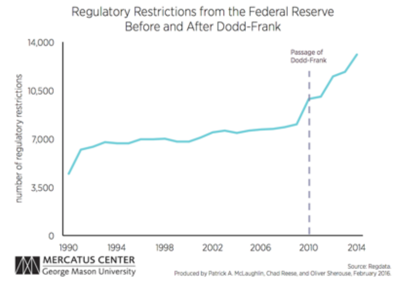
Regulatory Restrictions from the Federal Reserve
Before and After Dodd-Frank
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number of regulatory restrictions
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1990
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MERCATUS CENTER
George Mason University
Source: Regdata.
Produced by Patrick A. McLaughlin, Chad Reese, and Oliver Sherouse, February 2016.

FACEBOOK AND THE RISE OF MOBILE ADS

Aillen You

With revenue climbing 51% to $8.81 billion and earnings more than doubling to $3.57 billion, Facebook has reason to boast its performance in the fourth quarter of 2016. Having again beat analyst expectations, Facebook links its strong earnings to strong advertising revenue.

Though none would have expected it when Facebook first began experimenting with mobile advertising in 2012, mobile ads (as opposed to traditional ads) now account for 82% of Facebook's total revenue. Coupling the sheer size of its monthly active user base of 1.86 billion users (growing 17% year over year) and the increasing amount of time users spend watching videos (opening up ad slots), it's really no surprise that the social media giant reaps generous returns for its advertising efforts. In the fourth quarter of 2016, the average user, by consuming ads, generated Facebook $4.83, up 30% from $3.73 in the same quarter last year.

Can Facebook keep up the its current advertising revenue growth, which has been ~50% year over year?

Possibly. Executives warn that they may begin approaching an "ad limit" in 2017 and thus expect revenue growth to slow "meaningfully" this year. The call for ad reduction - mobile or otherwise - is presumably a call to prioritize the consumer experience over short-term ad revenues.

In line with the effort to reduce inventory-intensive (spacious, single-image) ads through the newsfeed, Facebook co-founder and CEO Mark Zuckerberg is pushing a "video-first" strategy, which offers video ad slots and more lucrative monetization opportunities.

Despite potentially slower growth in inventory-intensive ads, there is reason to believe that Facebook will realize alternate forms of ad monetization. Since Facebook collects and analyzes a mountainous amount of personal data, it could potentially perform even more precise targeting by presenting ads that tailor to individual interests. This way, Facebook could achieve higher click-through-rates and justify higher prices for their ad-slot inventory, spurring additional revenue growth.

How about Facebook's other businesses? Can investors expect Facebook to make up slower ad growth with revenues from its other businesses - Messenger, Instagram, WhatsApp, and Oculus?

While some apps, such as WhatsApp, have entirely different monetization strategies (through in-game purchases, etc.), others, such as Instagram, still have additional capacity for ad load. The excess capacity of Facebook's other businesses could mitigate the effect of Facebook's approaching ad limit on revenue growth. Facebook has also been experimenting with ads in Messenger. These apps have strong potential to increase Facebook's profitability.

What are investors betting on that is driving up future expectations?

Investors are betting on Facebook's "video-first" strategy. If Facebook is able to draw traditional TV viewers to view full episodes on the platform, it will gain a tremendous number of video ad slots and has fantastic potential for growth. Mr. Zuckerberg sees "video as a mega trend on the same order as mobile." And mobile sure is mega.

IPO'S AND TECH

Brandon Atkins

The IPO landscaped has altered immensely in the past year for a multitude of reasons. In 2016, the number of IPO's declined heavily to 105, which is the smallest post-recessionary level seen since 2009 (63). For comparison, 2014 and 2015 volume was 275 IPO's and 170 respectively. Many investors claim that the current drought is due to start-up companies remaining privately held for longer period of time, since they benefit from not having to release quarterly earnings. Other possible factors include poor company performance, as well as a trend of negative returns for stocks that went public in 2015.

While lagging IPO levels may be a sign of an eventual economic downturn, many investors are looking at the technology sector for 2017. Some predict this sector will bring great profitability to many companies and be the main source of IPO's this year. Facebook has been one of the top performers, increasing from $116.60 a share on December 30, 2016 to $138.51 on March 21, 2017. Facebook's growth potential may be driven by Mark Zuckerberg's interest in AI technologies and both virtual and augmented reality. Banks and prominent investors released target prices around $160 a share by the end of 2017, with some expecting the stock to reach the mid-180's by the beginning of 2018.

Snapchat's recent IPO is one of the largest tech IPO's ever, with $2.9 billion raised at a total valuation of roughly $24 billion. This is greater than Twitter's $18 billion valuation, but smaller than Facebook's $104 billion valuation. Furthermore, Snapchat, which is known mostly for its social media app, has stated that it will be recognized as a camera company due to their soon-to-be-released camera's predicted popularity. Snapchat sees this device as a unique way for its consumer base to take videos and pictures. This may fuel other IPO's if the firm decides to target existing camera companies for future growth. Interestingly, Snapchat stated that the company may never be profitable, but other tech companies such as Amazon have said this as well and seen continued growth.

Many technologies are in the process of reaching the consumer market in 2017. Virtual and augmented reality, artificial intelligence, and 3D printing have all seen increased demand and use. However, many of the major indices have reached their all-time highs, and an impending sell off in the market may come soon if firms are deemed overvalued. In all, 2017 could be a prominent year for tech, albeit with many investors keeping an eye on the public markets.

MACY'S STRUGGLE SHOWS A CHANGING RETAIL LANDSCAPE

Elizabeth Holmdahl

Macy's has come a long way from Bon Marche, (the original Macy's brand), but this retail-giant's era may soon be coming to a close. Its real estate, on the other hand, may be reborn under the Hudson's Bay brand.

In response to recent losses, Macy's has positioned itself for sale. In January, Macy's announced plans to cut more than 10,000 jobs at 68 stores. Macy's stock has fallen more than 50% from the highest level it reached in 2015. In the past year, sales have fallen 4.2%. Following the 2008 recession and financial troubles facing the middle class, Macy's has struggled with the loss of their main target market. They are unable to capitalize on low prices, like J.C. Penny, or a quality brand image, such as that of Bloomingdales. Furthermore, Macy's large size has created complications in responding to changes in the retail market, specifically millennial purchasing behaviors.

Macy's downward trend isn't unique, as most department stores have faced losses amidst a cultural shift from malls to online retailers. Brick and mortar stores are struggling to compete against Amazon and similar online stores. The aura of department stores as one-stop shopping destinations has been lost with the emergence of internet offerings, such as Amazon, that better appeal to millennials and their purchasing habits. Macy's has expanded successfully online, but hasn't been able to appeal to customers as effectively as online-based retailers. Further repositioning would be needed to redefine Macy's as a major online retailer.

Preliminary talks of a potential takeover have begun between Canadian retailer Hudson's Bay and Macy's. Hudson's currently manages 320 stores through 11 distribution centers and has claimed its place in the U.S. market. The takeover itself appears to be motivated by the value of Macy's real estate. Hudson's Bay is well known for making money from real estate assets, and did so with its purchase of Saks. After paying $2.9 billion for the company in 2013, the property was valued at $3.7 billion.

Macy's definitely has something to offer in terms of real estate. In July 2015, Starboard, a major investor in Macy's, valued the property at $21 billion, including $4 billion just for Macy's flagship store in Herald Square. However, Citigroup recently valued the real estate at a lesser $18 billion. Macy's revenue market share itself was valued at $11 billion, which will bring uncertainty to the purchase. It is also currently uncertain how Hudson's Bay would manage the real estate. Regardless of the uncertainty, shares of Macy's stock jumped 6.4% within a day in response to the announcement of preliminary talks. Hudson's Bay stock increased about 8.9% just a few days later.

However, not everyone has such a bright view of the reality of the merger. Cowen and Company noted that chances of the deal were slim, despite clear attractiveness for Hudson's Bay because of the discrepancy between the firm's size and the scale of the purchase. Furthermore, the

Wall Street Journal notes that Macy's debt, weighing in at $7.5 billion, could potentially complicate the deal. Some sources have estimated that the deal would be better executed by a tech-focused online retailer looking to move to physical stores and capitalize on land value. Some people have turned to Amazon as the potential company.

As of right now, the deal is still uncertain, and only time will tell if the acquisition becomes finalized. But, this potential deal will still have major implications for the retail industry. It further emphasizes the importance of strategic positioning to other retailers, such as J.C. Penny and Nordstrom's. These companies will need to either bolster the benefit of brick-and-mortar stores or move into the online retailing sphere. While this doesn't signify the end of major brick-and-mortar retailers, the sale of Macy's does highlight current changes in the retail industry.

WHERE IS OIL HEADED?

Will Sauser

Oil runs nations. It powers our cars, our homes, and almost every industry. The price of oil affects the bottom line of almost every company, either directly or indirectly. It's the most traded commodity in the world. Globally, we consume over 87 million barrels, or almost 3.7 billion gallons daily. Understanding consumption, production and price patterns are crucial for not just an industrial CEO, but an everyday consumer.

Oil is delivered to the nearest markets first, in order to mitigate transportation costs. Because of this, there are a few primary benchmarks that determine the price of this valuable resource. Major price-marks are West Texas Intermediate, which is oil produced from the United States (primarily in Texas). Then there's Brent, which comes from the Brent field in the North Sea. Finally, there's the OPEC Basket, which consists of 11 types of oil produced predominantly in the Middle East by key members of the organization.

As of March 21, 2017 U.S. Crude Oil was priced at $48.14 a barrel. Ultimately, the price of oil depends on supply and demand. A massive global supply glut has caused oil prices to decrease from an all-time high price of over $112 per barrel (WTI) to its low price today. Given the necessity of oil revenue for several governments to function, each country has an incentive to produce as much as it can sell to derive profits, which prevents an easy fix to the issue.

OPEC, the Organization of Petroleum Exporting Countries, has attempted to enact recent production cuts to decrease supply and lift profits via global price increases. The OPEC agreement to cut 1,200,000 barrels a day is now a two months in progress, and analysts believe OPEC has managed to cut over 90% of the production it has pledged. This inspiring commitment could boost prices, with results eventually showing as more global supplies dwindle. The cartel owns over 80% of the world's existing reserves, and is involved in over 40% of the world's daily production. Russia, another major oil player, has pledged to comply with OPEC's cuts.

Yet, the interests of individual countries have made enacting an organization-wide supply cut extremely difficult. Analysts question how compliant indebted countries like Venezuela will be. Indeed, less developed nations within the organization, like Libya and Nigeria, have already been exempted from recent OPEC cuts. Until this uncertainty is resolved, the market will be tentative to price oil higher.

Yet, there's so much more to the equation. Exploration and Production companies, the firms which discover and extract oil for eventual transportation and refinement, each have different cost curves. As the price of oil rises, more firms find it profitable to pump oil, raising the supply. This counterbalancing supply is coming from U.S. producers, especially in the Permian Basin of Texas,

where high-pressure reserves make the cost of extraction incredibly low. This domestic willingness to produce makes every dollar-increase in oil's price an uphill battle.

Congress is only further promoting this hike in domestic production. It has scaled back regulation on U.S. energy companies by decreasing environmental protection standards and financial reporting standards for oil reserves. Recently approved major pipelines, such as Keystone and Dakota Access, will transport Canadian Oil Sands and further reduce the cost curves of North American producers, which enables an even greater oil price buffer to exist. On the other side of the coin, the US has placed new trade sanctions on one of the world's largest suppliers of oil: Iran.

Many key industry players have also been in the news for a variety of reasons. Saudi Arabia's state run oil company, ARAMCO, has indicated that it will file for an IPO in the coming years, which should serve to bolster the amount of public information available about reserves and production plans. One of the world's largest players in every aspect of the value chain, Exxon, is embroiled in the midst of an accounting scandal centered around the true amount of its existing reserves.

As the dust settles around these events, experts have weighed in with their expectations. A typical barometer for increasing oil prices is the activity associated with oilfield services companies. Schlumberger, the leader in the field, recently forecasted net income to be in the red for the following year. The firm has expressed that E&P companies are very cautious about current deployment, and will likely rely on re-activating previously drilled wells instead of drilling new ones. New exploration is typically carried by rising prices, and until this indicator turns positive, changes in the price of oil won't be positive either. In the long term, reliance on existing projects and reserves should serve to decrease supplies, but won't do very much to boost prices in the short term.

In all, the number of factors affecting oil makes its price incredibly complex. Perhaps this is why when the price of oil increases ever so slightly, producers seem willing to agree to a flurry of panicked consumer-issued future contracts. Time will tell just how high oil will reach in 2017.