2017 Tax Reform in the United States – A Quantitative Analysis of Corporate Rate Reduction

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Abstract

The passing of the Tax Cuts and Jobs Act under the Trump administration has been cited by many as the most comprehensive overhaul to the U.S. tax code since 1986. While the technical details of this Act are numerous in nature, it is also important to note and factor the political implications of this action. Framed in this broader context, this research piece analyzes the impact of current tax changes for corporations layered on actions taken by corporations following prior similar actions. In addition to this initial analysis, taking into account both the changes in value of deferred tax items and tax charges on overseas earnings, this research provides additional insights. Specifically, using prior actions by corporations under Bush era tax repatriation holidays, projections are created to estimate the effect of this tax reform in the near, and medium term. Lastly, connecting the passing of these reforms to other ancillary goals of the administration, recommendations and projections are put forth related to the continued impact of this act.

Introduction

Tax reform in any country is a topic and issue that involves a variety of stakeholders, including but not limited to regulators, consumers, and a fair deal of political debate and controversy. The Tax Cuts and Jobs Act, passed in the waning days of 2017, is no exception to this assortment of forces surrounding tax reform and taxation issues. Especially in the current divisive political environment that currently exists in the United States, the passage of this legislation along, in large part, political party lines of voting only seemed to aggravate simmering political tensions. Tax strategy, ranging across industry and geographic lines, forms and occupies a large amount of time invested in strategy and strategic planning, even with the passage of tax reform (Kyi & Romeo, 2015). That said, the purpose of this research is to neither comment nor evaluate the political implications or motivations of this legislation, but to conduct a quantitative analysis of the impact this legislation will have on corporate earnings. This focus on corporate earnings and financial performance is logical since, from publicly available analysis, between 2/3 and ¾ of the benefits and tax reductions associated with this legislation will accrue to businesses.

Additional ramifications that are important to factor into the analysis of this tax legislation is the fact that, depending on the structure of the organization in question, there are different ramifications that will drive the business. Since the majority of the debate and associated uncertainty related to this tax plan are linked to the impact this plan will have on multinational organizations, this research will focus on this area. Tax changes and legislation are will influence and drive changes from governmental, corporate, and individual planning; put simply tax legislation will have a dramatic effect on macroeconomics policy (Auerbach & Grinberg, 2017). Specifically, this research will focus on the following areas of this legislation comparable to previous legislation and the areas of current legislation that appear to generate the most direct effects on businesses. First, it is important to understand the differential rates on overseas earnings, 15.5% on cash and cash equivalent earnings, and 8% on illiquid investments and assets. These tax rates, which must be paid whether the earnings are repatriated physically or only on paper, would appear to drive behavior among management teams. Second, when these overseas earnings are eventually repatriated and returned to the United States, what course of action will be undertaken by different management teams adds additional layers of complexity to this analysis.

Drilling down, the crux of this analysis is whether or not the actions taken by multinationals under this current legislation will mirror action taken under previous repatriation holidays. Under the most recent equivalent tax legislation linked to overseas earnings and tax holidays, between 60 % and 92% of funds that were repatriated were allocated toward dividends and buybacks (Dharmapala, 2011). Summarized at a high level, of every dollar repatriated, more than half of these funds were allocated toward shareholder oriented activities. In the contentious political environment that this legislation was passed within, projecting the impact of earnings repatriated to the United States appears to be an important aspect of analyzing the long term impact of this act. Third, and the concept that can cause additional questions and concerns among market analysts and users of external financial information, are the changes in deferred tax assets and liabilities. This concept and implication will be analyzed in additional detail throughout this research, but is directly linked to the changes value of deferred tax items due to changes in the corporate rates. When combined together, this combination of changes creates a potentially dramatic impact on earnings in the short and medium term. Additionally, the lower tax rates embedded within this legislation will, invariably, have a lasting impact on corporate planning and strategic decision making. Especially since certain components of the individual changes are temporary, retroactive, or otherwise transitory in nature, the permanent nature of changes to the corporate tax code are a key component of this legislation. Lastly, and of ancillary, but important, interest to this research are the changes enacted to individual rates and tax brackets for individuals. While this may not have a direct effect on publicly traded corporations, it will, in any logical analysis, influence the decisions made by certain individuals with regards to funding and backing certain organizations.

Hypothesis

For the purposes of this research, and due to the difficulty in obtaining a comprehensive breakdown of cash versus non-cash investments held overseas by U.S. organizations, the analysis focuses on the following. Specifically, the largest 15 cash holdings of S&P 500 companies at the end of 2017 form the basis of the analysis performed. In addition, and to provide a comparable basis for projecting the economic effect of tax legislation on taxes, repatriated cash, and share repurchases, a similar framework must be utilized. For the purposes of this study and comparison, the 2004 American Jobs Creation Act is analyzed as the basis of projected impact of the Tax Cuts and Jobs Act. Although the ultimate effects of this legislation will be studied and analyzed for years, projecting future benefits and costs associated with this legislation generates research applicable to both academics and practitioners. The 2004 legislation was selected as it most closely resembles the current tax repatriation scheme and it provides a good basis to form our hypotheses.

The hypothesis that forms the basis of this research is as follows:

H1 – The Tax Cuts and Jobs Act will lead to substantial repatriation of earnings, share repurchases, by the 15 S&P 500 companies with largest overseas cash holdings.

H10 – The Tax Cuts and Jobs Act will not lead to substantial repatriation of earnings and share repurchases, by the 15 S&P 500 companies with largest overseas cash holdings

H2: The Tax Cuts and Jobs Act will lead to substantial increases in employment by the 15 S&P 500 companies with largest overseas cash holdings

H20 - The Tax Cuts and Jobs Act will not lead to substantial increases in employment by the 15 S&P 500 companies with largest overseas cash holdings

Corporate ramifications

The implications of tax reform, especially such a comprehensive overhaul to the tax code, will inevitably generate substantial changes to management behavior and activities across industries. Following the passage of this legislation there appeared a plethora of headlines and announcements made by corporations, both positive and negative in nature, that while dramatic in some cases, are important to analyze and classify appropriately (Cordell & Langdon, 2017). First, there is a definitive business impact that this legislation will have on organizations and management behavior, which is significant in and of its own right. Such actions and activity are driven by the reality that, even after subsequent tax reform initiatives, many individuals and businesses feel much work remains (Nellen & Porter, 2016). This fundamental change to how organizations are taxed, managed, and manage various internal processes will drive changes moving forward both for organizations headquartered in the United States and internationally. Second, the short term actions undertaken by different entities and organizations, driven by the effects of taxation of overseas assets, variations in the values of deferred tax assets and liabilities, will influence both optics and further actions taken by individuals and organizations.

Income related aspects

Traditionally overseas earnings that have been earned by multinational corporations via overseas operations were able to kept overseas without paying additional taxes on these earnings (Zenner, 2016). This is a reflection of the reality that, under current tax legislation corporate income and earnings are taxed twice, both when generated by the organization and distributed to shareholders (Austin, Burman & Clausing, 2017). One of the dramatic changes in the recently passed tax reform legislation is that these earnings that were generated and obtained overseas, and subsequent investments into other assets, will now be taxed at two distinct rates. Cash and cash equivalent earnings and investments will be, going forward, taxed at 15.5% rate, whereas non-cash and illiquid assets and earnings will be taxed at a rate of 8%. The reality of this situation is that the taxes on these overseas earnings will be assessed and paid regardless of any further action taken by the management professionals at organizations, so actions may very well be separate from the tax code changes.

Second, and perhaps a change that will cause longer term changes in the business environment are the changes associated with deferred tax assets and liabilities on the balance sheet of the organizations. Drilling down into the value of the balance sheet assets reveals two fundamental truths about the tax legislation and the impact on organizations moving forward. First, many of the high profile earnings announcements and earnings releases published by organizations are one-off items, and will have limited impact on the earning and performance of the organization moving forward. Second, and even more interestingly, however, is the contrast that these one-off changes have when analyzed alongside the permanent reduction of corporate tax rates from 35% to 21%. Analyzing the announcements and public relations communications, an underlying trend appears – many financial institutions and other organizations are attempting to offset positive or negative headlines with announcements for future action or initiatives. Drilling down into these various ideas and initiatives forms a core component of this research, but it would be incomplete without acknowledging the reality that there will inevitably be news and headlines generated by this legislation.

Balance sheet issues

While the effects and top line news generated as per this tax reform act have been, for the most part, linked to the charges associated with oversea earnings, there is another component of this legislation driving management behavior. Stated above, the headline rate for C-corporations is now permanently reduced from 35% to 21%, which will generate higher relative earnings versus existing tax legislation. Drilling down specifically, however, reveals a one-time change linked to this reduction in rates that has the impact to drive both current decision making and cash flow related activities. This reduction in rates, although a driving force in earnings growth moving forward for multinational organizations with operations overseas, will also have an impact on balance sheet positioning.

Reviewing the concept of deferred tax assets and liabilities from a high level uncovers how these items can change earnings and cash flow forecasts. Global financial institutions have issued many of the market moving headlines linked to tax reform implications, so this appears a logical place to conduct an analysis. During the global financial crisis that began in 2007, multinational financial institutions suffered operating losses that, in addition to threatening the stability of the global finance structure, generated operating losses that could be used to offset future profits for tax purposes. This difference, among other departures and inconsistencies between tax accounting and GAAP accounting, is a secondary effect of this legislation that should be analyzed in future research.

These operating losses, created previously, add value to the firm since these losses can be used to reduce the tax liabilities and payments due, but said losses were initially recorded and booked at the higher associated rate of 35%. As the corporate rate was reduced, the projected future benefits of tax assets on the balance sheet of organizations are worth correspondingly less than currently documented. Writing down the value of these assets, in the period in which the legislation became law (2017), is mandated by accounting regulations, and can result in large non-cash charges being pushed through the income statement. Said losses, although paper and non-cash in nature, which contrasts the cash payments due associated with overseas earnings, may very well change management communication and disclosures. Complicating this debate and analysis further is the effect that deferred tax liabilities will have on both the balance sheet and income statement of organizations.

Just like deferred tax assets that will decrease in value due to the reduction in corporate rates, the deferred tax liabilities on balance sheets of organizations will also be marked down. Simply, deferred tax liabilities are amounts that, due to differences between GAAP and income accounting, will be payable after period in which they were reported for financial reporting purposes. Since the rate has been reduced, the amount of taxes that will eventually be paid and owed to the IRS will decrease in value. Additionally, since taxes are eventually owed in the form of cash transfers to the IRS, this change will have a 2017 impact on net income figures, and cash flow figures in future periods. Prior to conducting an analysis of existing literature and research on the topic of tax reform and economic growth, it appears logical to have reviewed these concepts and terminology. Since large corporations and businesses account for both the majority of tax related headlines, and are receiving a substantive percentage of the changes embedded within this legislation, concluding this analysis is an important first step.

Moving forward, and expanding this analysis, a review of existing literature and research is a logical next step to performing a comprehensive analysis of tax reform and legislation.

Literature review

The economic impact and influence of tax reform and tax legislation represents a convergence of several different fields of economic and financial theory. Since tax legislation, or any such wide ranging legislation, will have an impact on multiple facets of the economy, as well as the individual decision makers, relevant literature touches on several areas. Behavioral economics, or the theory underlying why certain economic actors behave in certain way, financial theory, macroeconomics, and accounting machinations all play a role in the relevant analysis of this topic. In addition to these factors, however, there are also political realities and beliefs underpinning the enthusiasm with which certain tax reforms and tax cuts are embraced by political parties. This topic, the underlying logic behind tax reforms, provides a logical place from which this analysis can begin.

The discussion on reforming the way businesses are assessed taxes in the United States has been on the table for quite some time. The last significant revision in the U.S. tax code happened almost 32 years with the Reagan's Tax Cuts. Since then, there have been no major restructures/reforms and only short lived tax cuts. The premise behind a tax reform combined with a tax cut is simple, by simplifying the tax system, by removing loopholes and lowering the tax rates and allowing companies to write off immediately certain capital purchases, leads companies to have less to pay in taxes, reinvest their money, create jobs and boost wages. In addition, the saved money could be reinvested and used to increase production and hire more workers. When employees, whom are also consumers, pay less in taxes, they are more likely to spend. This link or assertion between taxes and economic growth is unambiguous and it has been demonstrated repeatedly, both theoretically and through numerous empirical studies [(Easterly and Rebelo, 1993), (Helms, 1985), (Lee and Gordon, 2005)].

The acceleration of economic growth by the reducing the tax burden on businesses comes from several places. First, by lowering taxes mean higher disposable income for individuals and businesses, more opportunities for consumption and savings. People have a higher, on average, likelihood of being employed, and working becomes more desirable. This is because people would be able to save more as their pay would not be taxed by the government. As the result, more people would be employed (as they would be making more money) and the more people with high take away pay, the more money to spend, the better for the economy. Another way to present this argument is that taxation deprives companies and their people of the opportunity to take advantage of the fruits of their labor as their state takes a large part of the earned income. In this way, they have less incentives to work and take risks and hence - to add value to the economy. In general, taxes effects labor decisions by reducing the labor supply of workers. That is, this leads to lower economic activity and fewer available jobs. The logical consequence of the above arguments is that taxes contribute to lower employment and respectively higher unemployment. Taxes also hinder free trade, which is one of the main factors for growth. Since Adam Smith, it has been known that exchange is a game of a positive amount. In taxing tax transactions, the benefits to the individuals who implement them are reduced and so they become poorer than they would have been if there were no taxes.

To best satisfy individual needs, people ultimately need to consume goods or services. That is, people consume or save part of their income whenever it usefulness from future consumption is greater than the current one. However, taxing companies perverts these opportunities. That is, higher taxes lead to a smaller amount of direct investment and total capital flows to the economy. As a result of this, companies will have smaller savings and are actually poorer than they would have been if the taxes were at a lower rate (Poterba, 1987).

In the US, there are historical episodes that support the idea that lowering taxes leads to growth, most notably with President Reagan’s tax cuts of 1986. These tax cuts and the accompanied tax restructures were one of the most important tax legislations of the current economic era. Its main premise was to create a more fair and simple tax system. A system with lower tax rates and less loopholes for individuals and corporation and more importantly no further increases in the budget deficit. This tax act reformed the personal and corporate tax rates while keeping the tax revenue neutral by eliminating many of the tax loopholes that have previously existed. In regard to tax rates, it lowered the corporate tax rates by nearly 30%. In order to pay for it and keep it budget neutral, legislators eliminate some of the corporate tax breaks by reducing some of the deductions companies were allowed to take. After these tax cuts were approved, the economy in the US started to expand for the next several initial years (Blanchard and Perotti, 2002). A major recession had been overcome and the years of high inflations were in their last leg. Looking at the federal revenues, they rose significantly in the high teens as a percentage since Reagan was first inaugurated. In addition, these tax cuts laid the foundation for future GDP growths. However, there are many that argue that the tax cut is only partially to “blame” for the success of the economy (Ayres and Braithwaite, 1994). Others believe that the trigger was the deregulatory effort or the effort of reducing regulations such as the burden on major industries such as the railroads, airlines and telecommunications were in fact the significant contributor. Regardless, this period showed that tax cut and deregulation could actually work and force prolonged GDP growth.

Following suit, after years of economic recession, in 2001, President Bush signed into law what is known as the Economic Growth and Tax Relief Reconciliation Act. This legislation act lowered the income tax rates across the board with average of 3 percentage points. In addition for individuals, it was extended the child credit and the Earned Income Tax Credit and as well as it reduced some of the marriage penalties. It also created incentives for individuals to further save for retirement and education. Initially, this act, similar in nature to the Reagan era tax cut, was seen as an opportunity to restart the economy and create incentives for companies and individuals to reinvest "tax savings" into the economy. However, there is an evidence that the opposite may have occurred, as the trade deficits rose, and income inequality continued to rise (Bartels, 2005). Based on the reviews by William Gale and Andrew Samwick, both senior economists found that "a cursory look at growth between 2001 and 2007 that overall growth rate was mediocre" (Gale and Samwick, 2016). In addition, they have supported the conclusion that the tax cut did not show cause and effect on the generated growth of the economy (Gale and Samwick, 2016).

Economic Benefits of Tax Legislation

In 2004, President George W. Bush signed into law the America Jobs Creation Act ("AJCA"). This law, among other items permitted United States Corporations and repatriate income that was essentially "parked" overseas back to the United States at the low federal income tax rate of 5.25%. Keeping in mind that the usual federal corporate tax rate was at 35%, this reduction effectively provided large multinational corporations with a 85% reduction in applicable tax rates. The intention of this law was to "encourage U.S. multinational companies to expatriate income held offshore in order to make investments in the United States that will create jobs." (150 Cong. REC. H8704 (2004). (Statement of Rep. Phil English). As we will see in this article AJCA did not necessarily fulfill its intended purposes. Most of that repatriated money went to stock buybacks and dividend increases. According to a US Senate Permanent Subcommittee on Investigations report dated October 11, 2011, the AJCA cost the US taxpayers and treasury $3.3 Billion in lost tax revenue over a decade of time and "produced no appreciable increase in U.S. jobs or research investments, and led to U.S corporations directing more funds offshore." In fact, approximately 850 U.S.-based multinationals brought back $362 billion in overseas profits, further highlighting the extreme failure of the AJCA.

Contrary to the Bush era tax cuts, Trump's tax reform will show vast differences. Firstly, there will be a mandatory repatriation. Under new Internal Revenue Code ("IRC") Section 965, corporations will have to pay a mandatory deemed repatriation tax of certain deferred foreign earnings. The tax rate will depend on what type of asset is being repatriated. For example, "Cash and Cash Equivalent assets" will be taxed at 15.5% and "non cash assets" will be taxed at 8%. Furthermore, corporations can elect to pay the tax in increasing installments over eight years. Under this new tax reform, the United States is moving away from a tax system where it taxes the earnings upon receipt of a dividend ("deferral system") to a system where corporations will be taxed based on foreign earnings reflected on their current tax returns. Additionally, numerous Fortune 500 companies have announced cash bonuses and higher wages to their employees. These companies credit the "tax reform and jobs act." Companies from banks and financial institutions such as Wells Fargo, and Bank of America, to manufacturing and telecom giants such as Boeing, and ATT respectively. The retail behemoth Walmart, announced on January 11, 2018, that they will raise workers' starting wage to $11 an hour and will pay them a $1,000 bonus as well. It would be logical to conclude that other companies will be announcing similar bonuses and increases in wages to keep up with their competitors.

Evidence from prior tax reform and legislation

The most recent example of tax reform and legislation in the United States is the report published by Permanent Subcommittee on Investigations of the U.S. Congress in 2011, which presented a quantitative analysis of the impact of prior tax legislation linked to repatriated earnings. In 2004, the America Jobs Creation Act (AJCA), permitted U.S. corporations to repatriate income and earnings held outside of the United States at an effective rate of 5.25% instead of the statutory rate of 35%, many multinational organizations were subjected to otherwise. Similar to some of the economic theory and underpinnings of the 2017 Tax Reform and Jobs Act, this prior tax repatriation holiday was envisioned to help spur economic stimulus and growth (Yagan, 2015). Drilling in specifically to actions undertaken by some of the largest corporate beneficiaries of this prior tax repatriation provides a possible baseline for actions to be taken by current corporations with large overseas earnings.

Beginning the analysis with top line figures, based on the 2004 ACJA, U.S. corporations repatriated $312 billion to the United States, and avoided paying an estimated $3.3 billion in taxes due to the lower 5.25% rate (U.S. Senate, 2004). Interestingly, and particularly worthy of note due to a prohibition on repatriated dollars used for this purposes, corporations involved in this process increased repurchases between 2004 and 2006. Specifically, the largest 15 organizations involved increased repurchases by 16% and 38% between 2004 to 2005, and 2005 to 2006, respectively (U.S. Senate, 2004). Generally speaking, when all 840 repatriating organizations were examined, for every extra dollar of repatriated earnings, there appeared a corresponding increase between 60 and 92 cents of payout to shareholders (U.S. Senate, 2004). Applying this figure to total cash that was repatriated, $312 billion, it would appear reasonable to estimate that between $187.2 and $280.8 billion in repatriated earnings were used for buybacks or dividends. This connection, and the emphasis on fulfilling or exceeding periodic earnings estimates put forth by analysts and other market participants, does not appear to have changed in the intervening years. With the percentage of Fortune 500 organizations that are not domiciled in the United States increasing during this period, pressure on profit margins and competitive activities does not appear to have decreased.

The timing of the repatriation also a factor that is worthy of mention and consideration when evaluating the comprehensive economic impact of the Tax Cuts and Jobs Act of 2017. While organizations have already published earnings results and information for the year ended 2017, as is required under U.S. GAAP, these amounts are assessed on both total earnings held overseas, and changes to deferred tax assets and liabilities based on prior performance. While certain non-cash aspects of this legislation have been reported in 2017 earnings figures, the cash implications and shareholder payout activities will impact 2018 earnings and beyond. Projections may vary between different analysts estimates, but there is evidence that prior research and analysis is focusing on the economic impact of tax legislation of tax reform (Kneller & Misch, 2017). At this point it appears logical to highlight that, based on the available economic information and market coverage, this prior pattern of activity appears to establish a foundation for projecting activity moving forward.

Projections based on current legislation

The current legislation, the Tax Reform and Jobs Act of 2017, enacted two distinct rates for earnings and investments held overseas by U.S. organizations. For cash and cash equivalent earnings the applicable rate is 15.5% and the rate is 8% for illiquid assets, such as plant, property, and equipment invested overseas. Due to the difficulty in obtaining company by company breakdowns and allocations between cash and non-cash assets, this research focuses on the cash holdings of S&P 500 organizations. To concentrate the analysis, and generate projected findings that have the most impact for both academics and practitioners, the projected effects are limited to the 15 largest cash holdings held overseas by U.S. organizations. With nearly $900 billion, approximately, held overseas by these organizations at the end of 2017, the potential implications of this legislation are not insignificant.

Applying the project rate on overseas cash earnings of 15.5% to these overseas earnings, especially to the balances of the 15 corporations with the largest cash holdings held internationally, a high level projection becomes apparent. First, assuming that current Congressional projections, of $339 billion in taxes raised between 2018-2018, an approximate blend of total earnings repatriated to the United States is possible. For the purposes of this analysis, a banded range of estimates appears to be logical, since there remains significant uncertainty related to how much in terms of earnings will eventually be repatriated.

While the total taxes paid on repatriated earnings will inevitably include taxes paid on both cash and non-cash earnings, for the purposes of this research a graded scale will be implemented. Prior to this analysis, however, the first step is to estimate and project the total funds impacted by this repatriation and tax legislation.

Applying the 15.5% rate on cash earnings held overseas to the projected taxable funds returned as estimated by Congress, and 8% on non-cash earnings, the following analysis can be projected. While as of the writing of this research and analysis there is not yet a consensus as to either whether or not Congressional projections are accurate nor the breakdown and allocation of cash versus non-cash earnings that will be repatriated, a preliminary analysis is possible. Building on the table below, and relying on $339 billion cited by Congress, a weighted average estimate of cash repatriation is presented below. Assuming that 100% of all tax revenues are generated from cash earnings currently located overseas the total amounts repatriated total just slightly under $2.2 trillion USD. While this scenario is unlikely as 100% of organizations are unlikely to behave in an identical manner, this does provide a baseline for further examination and analysis.

Building on this initial analysis, several blended rates are prepared in Table 1 to illustrate the potential impact of tax legislation of total amounts of dollars repatriated over the equivalent 10-year period of the $339 billion revenue projection. To achieve this projection, the cash applicable tax rate and non-cash tax rate were weighted at three distinct levels, representing levels of repatriation that appear reasonable given the ease with which cash can be repatriated versus illiquid assets. The first alternative was an equal weighting of cash versus non-cash dollars to be repatriated, representing in a blended average tax rate of 11.75% and indicating that total dollars of approximately $2.8 trillion would be onshored by U.S. corporations. Further variations include a two-thirds to one-third cash to non-cash projection, generating an effective rate of 12.87% and repatriated earnings of $2.6 trillion, and 60/40 split generating a rate of 12.5% and repatriated amounts of $2.7 trillion. Regardless of the exact percentages of total dollars repatriated by U.S. corporations during the 10-year period aligned with the $339 billion projected revenue, the underlying implication remains unchanged.

Tax Revenues	Blended Rate	Total Repatriations
$339 Billion	**12.87%**	**$2.6 Trillion**
$339 Billion	**11.75%**	**$2.8 Trillion**
$339 Billion	**12.5%**	**$2.7 Trillion**

Table1. Projections of total possible cash repatriation

Perhaps more important, for the purposes of this research, than the total dollars repatriated over the projected 10-year period is the percentage of repatriated dollars that will be used for share repurchases or other activities. Based on prior evidence from earlier legislation and tax repatriation, specifically the range of between $0.60 and $0.92 of every repatriated dollar used for shareholder payment activities, it is possible to project some of the impact of this most recent legislation. Assuming the effect of prior legislation forms the foundation of current multinational activity, shareholder payout ratios appear to be worth analyzing and exploring further (Nessa, 2017). Based on the estimates presented in Table 1, the analysis below illustrates the potential dollar impact that repatriation can have in terms of dollars allocated for repurchases and other shareholder-oriented activities. Again, the range of activities included in this analysis is a projection, but is built upon prior quantitative evidence from earlier tax legislation linked to repatriation of earnings held overseas.

Building on earlier projections, based on a weighted average of effective tax rates differentiated by the weighting on cash versus non-cash dollars located overseas. Importantly, and echoing a point mentioned previously in this research, is that the taxes owed and payable to the U.S. Treasury will be payable regardless of whether the earnings are repatriated in one lump sum or over a period of time. While that distinction is less important for the total collection of taxes, and corresponding changes to deferred tax assets and tax liabilities, it will have an impact and influence decisions made regarding repurchasing and shareholder payout decisions. Linking back to projections, with total cash repatriations ranging between $2.6 trillion and $2.8 trillion, based on estimates of overseas cash holdings and the projected tax collections of $339 billion over a 10-year period, the following computation is possible. With the low end of possible shareholder payout totaling approximately $1.58 trillion and the high end including shareholder oriented payouts of $2.65 trillion the dollars and associated impact of these activities are not insignificant. Applying these same figures and ratios to U.S. corporations with the largest overseas cash holdings at the end of 2017 provides additional context to this projection and analysis.

At the end of 2017, and based on publicly available information available as of this research writing the U.S. corporations with the largest overseas cash holdings located overseas include the following corporations. Specifically, the 15 largest total overseas cash holdings belonged to Apple, Microsoft, Cisco, Oracle, Alphabet, J&J, Amgen, Gilead, Pfizer, Merck, Coca-Cola, Pepsico, P&G, Intel, and Priceline. The total cash held overseas, as of the end of 2017, by the organizations totaled approximately $773 billion dollars, or nearly a third of total earnings, cash and non-cash, held by U.S. corporations overseas. It is virtually impossible to project the future of economic indicators, much less vagaries of share prices in the stock market, but for the purposes of this analysis, share prices at end of 2017 are utilized. This is logical both because the cash figures and tax legislation existed and were enacted, respectively, at the end of 2017, and this provides conservative base from which an analysis can be conducted.

With most major markets, including the S&P 500, increasing during 2017 by nearly 20% during the course of the year, stock prices, on average, have increased for publicly traded organizations. While this may indicate some sort of excessive exuberance by certain financial shareholders and stakeholder groups, it also appears to be indicative of management professionals pricing in some of the impacts associated with tax legislation. Prepared below is a table documenting and illustrating the following data for the 15 largest organizations, in terms of cash balance, in the S&P 500 at the end of 2017. This data includes share price at the end of 2017, overseas cash balances at the end of 2017, and a projection on the total amount of shares that could, in theory, be repurchased using the net proceeds of repatriated cash
Projection of cash repurchases

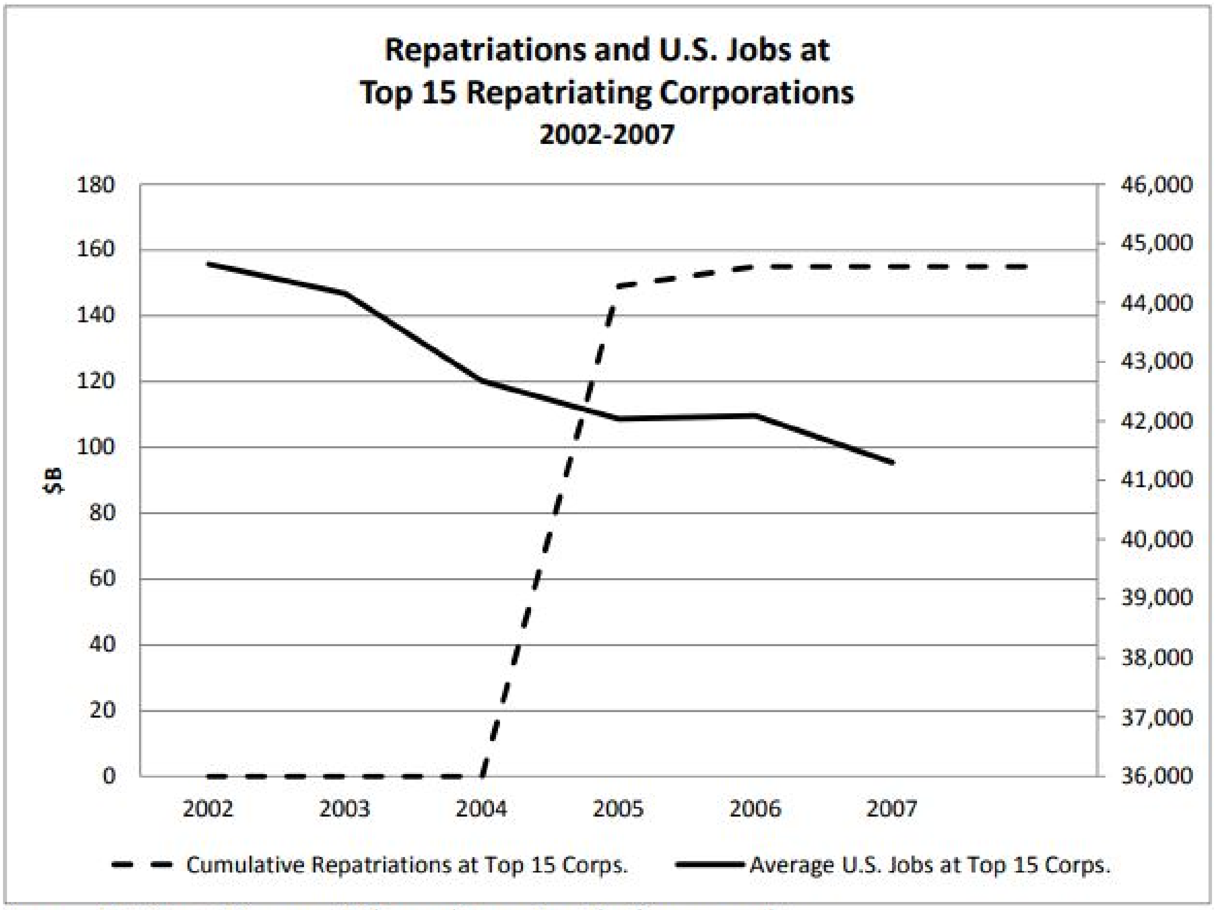
While these projections are just that, projections, the table below does illustrate and highlight some of the potential impacts in terms of share repurchases that tax legislation could cause moving forward. Once again, it is important to note that taxes are only due if earnings are repatriated and returned to the U.S. market, and that even with tax bills totaling billions of dollars, organizations are already announcing plans for repatriated cash. As indicated below, there are numerous U.S. corporations that have already announced certain activities as a result of tax legislation passing at the end of 2017. Details are provided below, and the occurrence of other activities and initiatives launched by U.S. corporations will continue to occur throughout 2018, but there are several trends that appear to be consistent across announcements. One-time bonuses paid out to certain employees, increases in employee training and development, increases for wages for certain employees, and other investments in operations have been documented and covered by media organizations and market analysts.

Economic benefits of tax reform

Another high profile example of the implications of tax repatriations is, in early 2018, Apple Inc. announcing a plan to invest $350 billion into the U.S. economy, and create over 20,000 jobs during the next decade. In addition to aligning with the projection of tax revenues published by Congress, this also indicates that both the costs and benefits associated with this tax legislation will continue to influence economic decision making moving forward. For example, Apple has published and disclosed an estimated tax payment of, between different estimates, approximately $36 and $39 billion. Extrapolating this figure, it is logical to conclude that the management team at Apple is planning to repatriate nearly its entire overseas earnings amounts, including cash and non-cash assets. For the purposes of this projection and analysis, acknowledging the reality that different organizations will repatriate different levels of earnings, and that cash earnings are simpler to repatriate that illiquid investments, cash and cash equivalents form the basis of this projection.

Returning to the example of Apple Inc, appropriate since the organization does have currently have the largest, among non-financial S&P 500 companies, cash and cash related earnings held overseas. Applying the closing price at the end of 2017, $170.52 dollars, a variety of different options are available to the management team. Assuming, and using existing market information as a foundation for these estimates, that Apple will repatriate nearly all of overseas earnings, and using the 60% to 92% of amounts used for shareholder payouts that occurred in prior tax holidays, estimates include the following (Dharmapala, 2011). At the low end, estimates of repatriated funded shareholder payouts might total $151.3 billion, with the high end of projections totaling nearly $232 billion, this could potentially have a significant impact on outstanding shares. Mirroring the projecting cash repatriation and shareholder payout ratios of prior effects of tax legislation with embedded repatriation holidays appears a logical foundation to construct an analysis. That said, the effects of the TCJA will not be limited to the shareholder oriented activities, but will expand to at least some extent, to broader areas of the economy. Additional information on the possible dollar impact of repatriated cash is included in Table 2, included at the conclusion of this research.
Employment

At this point, and utilizing available public information available at the time of this research, there do appear to be several data points worth considering. First, while the tax repatriation and reduction in rates present in the TCJA of 2017 resemble prior tax holidays and repatriation initiatives, differences do exist. The tax holiday and rate reductions embedded in the TCJA are both permanent and mandatory, which solidifies management confidence in making long term decisions based on this legislation. Second, and in contrast to prior activity based on prior legislation, numerous organizations, including but not limited to the organizations mentioned in this research, proactive management professionals are allocating tax-induced returns to employee initiatives. Such activity appears to be both in alignment with the stated goals of this legislation, and also set the landscape for ancillary and related economic benefits. Increased funds available to employees. As stated throughout this research, and numerous economic studies, the connection between increased compensation, economic growth, and long term viability of economic legislation is clear. That said, at this point in the available research and information, there does not appear to be a statistically significant correlation between tax legislation and employment growth. While this information and findings will inevitably evolve and change over time, it does not appear that there is a definitive connection between prior, negative, correlations between employment and tax repatriations. Figure 1 is included to illustrate potential impacts of the TCJA on employment, using available information from prior tax legislation. While there is no evidence that organizations are planning on reducing employment due to this legislation it is important to acknowledge that similar effects are possible.



Source: U.S. Senate Permanent Subcommittee on Investigations survey data.

Figure 1 – Tax Repatriation and Employment

Findings

At the conclusion of this research and analysis, and utilized within the framework of the hypotheses stated at the beginning of this research, findings and applications are evident for both academics and practitioners. There does appear, based on the currently available data and research, to be a strong connection between tax legislation, the largest overseas holdings of S&P 500 corporations at the end of 2017, and projected shareholder oriented activities. This finding, and confirmation of the first hypothesis, is based upon both an analysis of prior tax oriented legislation and current levels of activity and management responsibility in the environment within which the TCJA was enacted. That said, however, there does not appear to be, at this point in time, a significant indication in either a positive or negative direction with regards to the TCJA and its future impact on employment statistics. While numerous organizations have announced investment plans, including those taking the form of salary raises, bonuses, and increases for R&D initiatives, announcements related to increasing headcount are not yet evident. There does not appear to be a significant connection as of yet, this remains an area of analysis worthy of additional research by both practitioners and academic members of the financial community.

Conclusions and Future Directions

Based on this analysis of the recently passed tax legislation there are several findings and areas of interest that are applicable to both practitioners and academic researchers. First, and based on the projections of earnings repatriation compared with stock prices at the time of the passage of this legislation, the economic implications are readily apparent. Whether an analysis is conducted on large multinational organizations, small to medium size entities, or the proposed actions of management at these entities as they pertain to employees, the ripple effects of this legislation will be felt for years moving forward. While the current evidence and information appear to support one hypothesis, that organizations will leverage tax repatriation to participate in shareholder oriented activities and repurchases, while not providing evidence linked to the second hypothesis of increased employment, this research generates findings for both practitioners and academics. Building on the quantitative analysis embedded within this research, and leveraging information as it becomes available to market participants, the effects of the TCJA can, and should be, examined for years to come.

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