

***THE IMMEDIATE IMPACT OF TAX REFORM ON CORPORATE EARNINGS:
INVESTOR EXPECTATIONS AND REACTIONS***

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How quickly did investors react to the transitory earnings impact of the Tax Cuts and Jobs Act (TCJA)? We examine this question by considering whether investors could anticipate TCJA's transitory earnings impact and if investors use those estimates to re-assess stock valuations for S&P 500 corporations. We also quantify TCJA's material impact on corporate earnings and find significant variation. Approximately half of firms in the S&P 500 had earnings increases due to the enactment of TCJA, and approximately half had earnings decreases. Among firms that receive an increase to earnings, 75 percent of net earnings were attributable to TCJA. For firms that recorded decreases in net earnings, the negative amount attributable to TCJA turned cumulative pretax profits into after-tax losses. Using publicly disclosed amounts for deferred tax balances and permanently reinvested earnings, we show investors could estimate TCJA's earnings effect. Consistent with investor anticipation, we find investors react to the immediate earnings impact of TCJA at its passage in Congress. However, we also find some delayed investor reaction because investors reacted to the earnings impact of TCJA at its ultimate enactment.

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I. INTRODUCTION

The Tax Cuts and Jobs Act (TCJA) was enacted on December 22, 2017 and is the most extensive reform of the U.S. corporate tax code since 1986.¹ Although many changes will not become effective until 2018, TCJA had an immediate impact on 2017 financial statement earnings under U.S. generally accepted accounting principles (GAAP). The materiality of these immediate effects generated significant interest in the business press, especially when the TCJA-related impact decreased net earnings (Appendix A lists examples of news articles on TCJA's impact on corporate earnings). While informative, these news summaries lack comprehensive analyses of TCJA's effects, including shareholder anticipation. We quantify the materiality of TCJA's immediate earnings effect on S&P 500 corporations and examine investor reactions to it.

Under GAAP, firms must recognize the effects of a tax law change in tax expense during the quarter the law is enacted. Two major changes of TCJA to the corporate tax code are (1) a top statutory tax rate reduction from 35% to 21% effective for taxable years beginning after December 31, 2017 (IRC § 11) and (2) deemed repatriation of previously untaxed foreign earnings during the last taxable year beginning before January 1, 2018 (IRC § 965). Under Accounting Standards Codification (ASC) 740, corporations must record both effects in the fiscal quarter of enactment, which is the fourth quarter of 2017 for calendar year corporations. The tax rate reduction decreases U.S. deferred tax liabilities (DTL), decreasing tax expense and increasing earnings. Conversely, the rate reduction decreases U.S. deferred tax assets (DTA), increasing tax expense and decreasing earnings. The deemed repatriation also increases tax

¹ Although the law passed in the House under the name "Tax Cuts and Jobs Act," Senate rules required a name change to "An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018." Following the financial press and for simplicity, we refer to the law as TCJA.

expense in 2017 if firms did not previously record tax expense for unrepatriated earnings.² As many corporations have substantial deferred tax assets, deferred tax liabilities, and previously untaxed foreign earnings, TCJA had a substantial and immediate impact on corporate earnings. For purposes of our analysis of financial reporting earnings, we refer to both the remeasurement of deferred tax balances and the deemed repatriation as “transition tax effects.”

To quantify the transition tax effects, we examine nonrecurring income taxes recorded in the fiscal quarter in which TCJA was enacted. We collect nonrecurring income taxes from Compustat (item NRTAX) for 438 U.S. corporations in the S&P 500 on December 22, 2017.³ We assume nonrecurring income taxes reported in the enactment quarter of TCJA (the fourth quarter of 2017 for calendar year firms) are primarily attributable to TCJA. We validate our use of Compustat’s nonrecurring income taxes for TCJA’s transition tax effects by confirming it matches TCJA earnings effect disclosed by firms for 19 out of 20 randomly selected firms (one firm had additional nonrecurring income taxes in the quarter, which Compustat aggregated with the effect of TCJA).

We document that the effect of TCJA is material to cumulative corporate earnings in 2017. Approximately half of firms (212 out of 438) had substantial increases to net earnings and the other half experienced reductions to earnings due to TCJA. When TCJA increased earnings, the aggregate earnings increased from \$79 billion by \$235 billion to \$315 billion, equaling 75 percent of the cumulative net earnings. In contrast, when TCJA reduced earnings, aggregate

² Firms accrue tax expense on some or all of their foreign earnings. For example, in their 2017 annual financial statements, Apple, Inc. reported \$36.3 billion of U.S. DTL on non-Ireland foreign earnings, but Apple did not accrue as estimated \$42.2 billion of U.S. DTL for its unrepatriated earnings in Ireland. The deemed repatriation under TCJA will have a varied impact on Apple’s earnings. For U.S. DTLs recorded for non-Ireland earnings, Apple records an earnings increase by writing down the DTL. In contrast, Apple records an earnings decrease to record the deemed repatriation tax on Irish earnings.

³ Our sample starts with 499 firms of the S&P 500 because we exclude C.R. Bard, Inc., which did not issue financial statements as Becton Dickinson completed their acquisition of C.R. Bard, Inc. in the fourth quarter of 2017. We also exclude 30 foreign corporations and 31 real estate investment trusts for a final sample of 438 corporations.

earnings fell from \$160 billion in profits by a charge for TCJA of \$231 billion resulting in a net earnings loss of \$71 billion.

In terms of earnings per share, TCJA raised earnings for the average firm in the S&P 500 by 19 cents per share and the median firm reported a reduction to earnings of 2.6 cents per share. In absolute value terms however, the average change is \$1.8 dollars (median of 87 cents) per share change in net earnings.

The effect of TCJA also varied significantly by industry. The TCJA had the largest absolute effect on firms in the telecommunications industry with a mean absolute impact on earnings of \$4.9 billion and a median of \$1.2 billion (the telecommunications industry had total absolute pretax earnings of \$846 million with a median of \$431 million). In contrast, TCJA had a smaller influence on earnings for firms in the industries of consumer non-durables, manufacturing, chemicals, utilities, and retail with mean absolute earnings effect attributable TCJA less than \$750 million and medians less than \$350 million. The influence of TCJA to firms by industry is similar when considering the absolute earnings attributable to TCJA as a percent of firm market value of equity. Considering the net effects (not absolute) of TCJA, we still find most firms in the telecommunications industry benefited from the enactment of TCJA with an average benefit to earnings of \$4.9 billion and median increase of \$1.2 billion. In general, these firms have large net deferred tax liabilities, which were re-measured at a lower tax rate. In contrast, 70 percent of firms in the business equipment industry recorded large income-decreasing effects due to TCJA with an average charge of \$1.5 billion and median charge of \$289.5 million.

We also consider whether firms have permanently reinvested earnings (PRE) or not, and whether they had net DTL or DTA positions. Firms with PRE (298 firms) have average earnings

decreasing effects of \$320 million and median decreasing effects of \$51 million, likely due to the sizable deemed repatriation tax. The firms that do not have PRE (140 firms) have income increasing effects on average of \$713 million (median of \$100 million), consistent with 73 percent of firms in our sample having net deferred tax liability positions and the re-measurement of deferred taxes increasing earnings.

These descriptive statistics suggest that it is important to examine the degree to which investors react to TCJA's immediate effects on earnings. We start by considering whether financial information available to investors prior to TCJA's enactment predicts the nonrecurring income tax amount. Next, we examine whether shareholders react to the transition tax effect – assuming perfect foresight, or based on predicted amounts – while controlling for aspects of TCJA's effect on future earnings.

The immediate impact of TCJA to corporate earnings should be predictable, albeit with noise. We test the predictive power of PRE and the gross deferred tax asset and liability amounts for nonrecurring income taxes in the enactment quarter of TCJA. Consistent with the anticipated effect of a tax rate reduction, we find deferred tax assets are associated with income-decreasing nonrecurring income taxes and deferred tax liabilities are associated with income-increasing nonrecurring income taxes. In addition, permanently reinvested earnings are associated with income-decreasing nonrecurring income taxes. These findings further suggest Compustat's nonrecurring income tax is a useful proxy for the impact of TCJA to corporate earnings.

We examine the association between transition tax effects and stock returns in two trading windows: at its Senate passage and its enactment. In both trading windows, we find a positive and statistically significant association between stock returns and nonrecurring income taxes. However, the actual amount of nonrecurring income taxes would not be known to

investors until later when firms report quarterly earnings. Thus, investors reacted to their approximation of the impact of TCJA to corporate earnings. Consistent with this perspective, we find a significant association between stock returns and the predicted transition tax effect. When considering the material components of TCJA, investors appear to react positively to income-increases attributable to the re-measurement of U.S. gross deferred tax liabilities and negatively to income-decreases attributable to the transition tax on permanently reinvested earnings. We do not find investors react to the re-measurement of U.S. gross deferred tax assets. In general, these findings suggest that investors estimate the immediate earnings effects of TCJA at its Senate passage and used those estimates to value the firm. However, delayed investor reaction at the enactment of TCJA suggests that some investors did not correctly estimate the effects of TCJA.

We believe these findings are useful to financial statement users and tax authorities. Although TCJA will materially influence future corporate earnings, deferred tax revaluations generated a substantial TCJA-related 2017 earnings effect. Laux (2013) finds deferred taxes provide limited additional information for future tax payments, but his analysis used 1994-2007, a period of stable U.S. tax rates. Given how large the U.S. rate decrease is, near-term reversals will affect cash taxes paid quickly. For example, many DTAs relate to short-term expense accruals like warranty or obsolescence, for which the firm will now only receive a deduction at 21%, increasing government collections in the near term. However, for long-term deferred items like depreciation-related DTLs, the cash effect will be slower if the deferral reverses over a longer period. In contrast, firms with substantial permanently reinvested earnings will owe large deemed repatriation taxes. However, most firms will likely elect the deferred (non-interest-bearing) eight-year payment plan provided under IRC § 965(h). In addition, our findings suggest that investors could have predicted much of TCJA's impact on 2017 earnings, but investors

delayed some response until the enactment of TCJA.

II. TAX CUT AND JOBS ACT – A BRIEF REVIEW

In this section, we discuss TCJA’s legislative process and key changes in the tax law that generated immediate earnings effects in 2017. The discussion suggests why investors wait to react to TCJA’s immediate earnings effects at its Senate passage, despite having the ability to anticipate the law’s earnings effects.

TCJA advanced through Congress quickly, without bipartisan support.⁴ Representative Kevin Brady introduced the TCJA in the House of Representatives on November 2, 2017. In a 24-16 party-line vote, the bill passed the House Ways and Means Committee and advanced to the House floor on November 9, 2017. Seven days later, the House passed the bill 227-205 with 13 Republican Representatives joining all Democratic Representatives in voting against the bill. In the Senate, companion legislation to TCJA passed in the Senate Finance Committee and Senate Budget Committee on party-line votes. At 2 am on Saturday, December 2, 2017, the Senate passed the TCJA. The President signed the bill into law on December 22, 2017.

Nonpartisan federal agencies anticipate TCJA will substantially influence the U.S. economy. Over the next 10 years, the Congressional Budget Office and the Joint Committee on Taxation estimate TCJA adds \$1.5 trillion to national debt and increases GDP by 0.7 percent. Paul Ryan, Republican Speaker of the House of Representatives, proclaimed the tax reform as “one of the most important pieces of legislation that Congress has passed in decades.”⁵

TCJA incorporated long lasting and major changes to the U.S. corporate tax code. We

⁴ Kaplan, Thomas, and Rappeport, Alan, “Republican Tax Bill Passes Senate in 51-48 Vote,” *New York Times*, December 19, 2017. In contrast, the Tax Reform Act of 1986 moved slowly and carefully for several years while President Reagan, the Senate Finance Committee, and the House Ways & Means Committee worked to build bipartisan support.

⁵ “Sweeping GOP Bill Set to Revamp U.S. Tax Code, Slash Corporate Rate,” *PBS NewsHour*, December 19, 2017, <https://www.pbs.org/newshour/show/sweeping-gop-bill-set-to-revamp-u-s-tax-code-slash-corporate-rate>.

consider the impact of two major changes that had immediate effect on financial statements. First, TCJA changes tax rates from a graduated tax rate structure with a maximum statutory 35 percent to a single tax rate of 21 percent for taxable years beginning after December 31, 2017 (IRC § 11). Under ASC 740-10-25-47, firms must re-measure deferred tax liabilities and assets to consider enacted tax law. Thus, to the extent firms had recorded U.S. deferred tax balances at a 35% tax rate, they must write down the future benefit of deferred tax assets and the future cost of deferred tax liabilities to 21%.

Second, the TCJA changes the taxation of foreign income earned by U.S. corporations from a worldwide to a territorial tax system, where the U.S. only has jurisdiction to tax earnings that are sourced in the U.S. (IRC § 245A). Under the worldwide tax system effective through 2017, U.S. corporations paid U.S. tax (net of foreign tax credits) on all income regardless of where the income was earned. However, active earnings in controlled foreign corporations were not taxable until repatriated to the U.S., so the tax would not be paid as long as the earnings remained overseas. Under the new territorial tax system, U.S. corporations pay taxes only on income earned in the U.S., although the TCJA contains significant exceptions to curb erosion of the U.S. tax base.

As part of the transition from a worldwide to a territorial tax system, TCJA imposes a one-time mandatory deemed repatriation tax on previously untaxed foreign earnings, measured as of November 2, 2017 or December 31, 2017, whichever is greater (Section 965). Before considering any offsetting foreign tax credits, IRC § 965 imposes taxes on foreign earnings at 15.5 percent if they are held in cash. If held in non-cash assets, these earnings are taxed at 8 percent. Firms must include the deemed repatriation income in their 2017 tax return, but may spread the tax payment over the following eight years.

Financial reporting rules under ASC 740 (formerly Accounting Principles Board Opinion No. 23) permitted firms subject to a worldwide tax regime to defer recognition of unpaid incremental tax expense as long as management declared the foreign earnings “indefinitely reinvested” (also called permanently reinvested earnings, or PRE). Most firms with untaxed foreign earnings elected to treat them as PRE.⁶ In doing so, firms do not record tax expense on foreign earnings and thereby increase book income. As such, disclosed amounts of PRE provide, for most firms, a proxy for previously untaxed foreign earnings subject to the deemed repatriation tax.

If firms record deferred taxes for unrepatriated foreign earnings, then the U.S. DTL already recorded for such earnings will be re-measured at the tax rate applying to the deemed repatriation (15.5% or 8%, net of available foreign tax credits). We cannot distinguish between U.S. DTLs on temporary differences between U.S. book and taxable income and U.S. DTLs recorded for unrepatriated foreign earnings. Thus, an assumption that all U.S. DTLs should be written down from 35% to 21% understates the earnings increase to the extent the DTL should be written down to a lower rate.

Many other important provisions in TCJA take effect in the year beginning after December 31, 2017 but do not have immediate effects on financial statements in 2017. These effects are much harder to estimate and are outside the scope of our focus on the TCJA transition effects. Adding further uncertainty to stakeholders’ ability to estimate forward-looking effects, TCJA likely has unintended consequences that will require technical corrections or substantive legislation.⁷ For example, Rick Weller, chief financial officer of Euronet Worldwide Inc., said

⁶ “Indefinitely Reinvested Foreign Earnings Still on the Rise,” *Audit Analytics*, July 25, 2016, <https://www.auditanalytics.com/blog/indefinitely-reinvested-foreign-earnings-still-on-the-rise>.

⁷ Sullivan, Martin A., “Economic Analysis: More Than Technical Corrections and Regulations Needed to Fix GILTI,” *Tax Notes*, May 15, 2018.

that the base erosion provisions incentivize his firm to ship jobs out of the U.S.⁸

III. SAMPLE AND DATA SOURCES

To quantify the impact of TCJA to corporate earnings, we examine nonrecurring income taxes recorded in the fiscal quarter TCJA was enacted. We collect nonrecurring income taxes from Compustat (item NRTAX) for the S&P 500. Compustat collects nonrecurring income taxes by examining amounts in income tax expense reported or described by the firm as nonrecurring. Donelson, Koutney and Mills (2018) examine nonrecurring income taxes prior to TCJA's enactment and show that analysts largely adjust for nonrecurring income taxes like they do for special items.⁹

Table 1 documents our sample selection process. We start with all firms in the S&P 500 on December 22, 2018, the enactment date of TCJA. We exclude C.R. Bard, Inc. because it did not issue financial statements for this period while Becton Dickinson completed its acquisition of the firm. We exclude 31 real estate investment trusts and 30 foreign corporations. We obtain 438 U.S. corporations, of which 431 have non-missing NRTAX in Compustat. We read earnings announcements and financial statements to obtain the net earnings effect of TCJA for the missing 7 firms.¹⁰

We assume nonrecurring income taxes reported in the enactment quarter of TCJA (the fourth quarter of 2017 for calendar year firms) are attributable to TCJA. To validate our use of

⁸ Rubin, Richard, "New Tax on Overseas Earnings Hits Unintended Targets," *Wall Street Journal*, March 26, 2018. On the other hand, Williams (forthcoming) finds that previously foreign lower tax rates help explain offshoring of U.S. jobs, implying that reducing U.S. tax rates could bring some jobs back to the U.S.

⁹ Donelson, Koutney, and Mills (2018) also validate that special items exclude nonrecurring income taxes and nonrecurring income taxes are not the tax effect of special items. As TCJA's rate reduction and deemed repatriation primarily affect only tax expense, Compustat should collect TCJA's earnings effects as nonrecurring income taxes and not as special items.

¹⁰ We find TCJA's net impact to earnings for M&T Bank, Ford Motor Company, and AbbVie Inc. were \$-85 million, \$398 million, and \$-1,242 million, respectively. For the remaining four firms, we set nonrecurring income taxes to zero because these firms either disclose they have immaterial TCJA earnings effects or do not disclose the earnings effect. For example, although Incyte Corporation decreased its balance in the net deferred tax assets by \$197 million, this increase to tax expense was fully offset by a corresponding reduction in its valuation allowance.

Compustat's nonrecurring income, we randomly select 20 U.S. corporations and match NRTAX to the earnings release disclosures about effects of TCJA. We obtain 19 out of 20 matches between firm disclosures of the impact of TCJA to tax expense and Compustat's nonrecurring income taxes. For the firm that did not match, Compustat aggregated other nonrecurring income taxes with the effect of TCJA.¹¹

We also use certain Compustat financial statement data for the most recent quarter and for the most recent year ending prior to the quarter of enactment, and the quarter of enactment. 352 firms have fiscal years that end during the quarter of TCJA's enactment (i.e. year-end dates of December 31, 2017, January 31, 2018, or February 28, 2018). Among the remaining 86 firms, TCJA impacts earnings in the first fiscal quarter for 37 firms, the second quarter for 26 firms, and the third quarter for 23 firms.

We obtain PRE disclosures for 211 firms from Audit Analytics as of the most recent fiscal year ending prior to TCJA enactment. Audit Analytics reports positive amounts of PRE for all 211 firms. Of the 227 firms for which Audit Analytics does not provide PRE amounts, 116 firms have positive cumulative pretax foreign income in Compustat in the prior three fiscal years. We read these firms' 10-Ks and obtain PRE amounts for 95 firms. The remaining 21 firms do not discuss PRE and we assume they did not have permanently reinvested earnings. We also assume no permanently reinvested earnings for the 111 firms with negative cumulative three-year pretax foreign income and missing PRE values in Audit Analytics.

Finally, we obtain cumulative stock returns from CRSP for returns around the 2 trading days around the Senate passage (December 2, 2017) and the 3 trading days centered at the enactment of TCJA (December 22, 2017). We also calculate cumulative stock returns for the

¹¹ Quanta Services Inc.'s net earnings increased by \$70.1 million due to TCJA, but Compustat's nonrecurring income taxes shows benefits of \$88.3 million with the difference due to other one-time tax items of \$18.2 million.

long-window trading beginning one trading day before the Senate passage and ending one trading day after the enactment of TCJA.

IV. ANALYSIS

How large and varied was the transition tax effect?

Table 2 describes nonrecurring income taxes for our sample in total, and partitioned by (1) whether TCJA resulted in an increase or decrease to earnings and (2) whether net earnings increased or decreased relative to four quarters prior to the enactment quarter of TCJA. Panel A and C describe the raw amounts in millions of dollars, and Panel B and D show earnings per share amounts.

We document that the effect of TCJA is material to cumulative corporate earnings. Approximately 1.75% of cumulative net earnings can be attributed to TCJA (\$4.2 billion out of net earnings excluding NRTAX of \$239.7 billion), but this effect nets earnings decreases against increases. Approximately half of firms (212 out of 438) received a benefit to net earnings while the other half had reductions to net earnings due to TCJA. When TCJA increased earnings, the aggregate increase totaled \$235.4 billion, equaling 75 percent of the cumulative net earnings. In contrast, when TCJA reduced earnings, the aggregate decrease totaled \$231 billion, reducing net earnings from positive net earnings of \$160 billion to a loss of \$71 billion.

Panel B shows that the cumulative effect to firms' earnings per share was also substantial. Firms receiving benefits due to TCJA had an aggregate increase to earnings per share of \$440.47 per share. In contrast, when TCJA reduced earnings, the aggregate reduction to earnings was \$352.07 per share.

Panel C and D show that the seasonal change in net earnings relative to four quarters prior to the enactment of TCJA is nearly all attributable to TCJA. When net earnings increased

relative to four quarters prior, 83.6 percent of the change was generated by TCJA (79 percent for aggregate earnings per share). When earnings decreased relative to four quarters prior, the earnings effect of TCJA contributed 91.7 percent of the change (98.8 percent for aggregate earnings per share).

Table 3 shows the average effect of TCJA to corporate net earnings. The average firm recorded a \$9.7 million benefit to net earnings (19 cents per share) and the median firm experienced an \$8.1 million reduction to earnings (2.6 cents per share). The average absolute earnings impact was \$1.81 dollars a share. For context, the net earnings per share in the period was \$1.23 dollars a share.

Panel A of Table 4 shows the effect of TCJA varies significantly by industry. The cumulative absolute dollar amount of TCJA influenced firms most in the telecommunications industry with a mean \$4.9 billion impact to net earnings and median \$1.2 billion. In contrast, firms recorded a mean absolute impact of less than \$750 million in the consumer non-durables, manufacturing, chemicals, utilities, wholesale, retail, and services industries. In Panel B, we partition firms based on whether the effect of TCJA increased or reduced earnings. 11 of the 13 firms in the telecommunications industry received increases in earnings due to TCJA. In contrast, 53 of the 73 firms in the business equipment industry had income-decreasing effects attributable to TCJA. We also examine the average effect of TCJA as a percent of market value of equity in Panel C and find that the large dollar amounts are not simply an artifact of large firms.

In Table 5, we consider a simple partition of the effect of TCJA by examining the net deferred tax balance and whether the firm has permanently reinvested earnings. Firms with net deferred tax assets reduced earnings by \$942 million due to TCJA, while firms with net deferred

tax liabilities increased earnings by \$360 million. Firms with permanently reinvested earnings reduced earnings by \$320 million, but firms without permanently reinvested earnings had a \$713 million benefit. The simple partition appears to explain whether TCJA increased net earnings or decreased net earnings.

Was the transition tax effect predictable?

We examine whether investors could predict the immediate impact of TCJA to corporate earnings. Consistent with the simple partition in Table 5, we expect re-measurements of deferred taxes and the accrual of taxes for previously untaxed permanently reinvested earnings will explain most of the NRTAX amount. Thus, we examine the predictive power of such amounts recorded as of the most recent reporting period for NRTAX recorded in the enactment quarter of TCJA. We measure gross DTL and DTA using the ending balance sheet amounts reported by Compustat for the quarter prior to enactment. We use PRE as of the most recent fiscal year end prior to enactment, because PRE is only disclosed annually in the tax footnote.¹²

Panel A of Table 6 describes the determinants we propose. Gross deferred tax liabilities on average constitute 4.8 percent of market value of equity, while gross deferred tax assets on average constitute 1 percent of market value of equity. Permanently reinvested earnings constitute 9 percent of firm market value of equity. We also estimate U.S. portions of deferred tax assets and liabilities as 0.7 percent and 2.5 percent of firm market value of equity,

¹² We use the raw amount of PRE as the main variable in our regression to explain NRTAX. However, the tax on deemed repatriation depends on multiple complex factors. The maximum tax rate is 15.5% if the previously untaxed earnings are held in cash abroad, but only 8% if the earnings are reinvested in non-cash assets. Further, these maximum tax rates would apply to earnings with zero foreign tax previously paid. To the extent the taxpayer previously paid foreign taxes on those earnings, a foreign tax credit would reduce the deemed repatriation tax owed. However, IRC § 965(g) disallows 55.7% of foreign tax credits for income taxed at 15.5%, and 77.14% of foreign tax credits for income taxed at 8%. One could estimate potential foreign tax credits using an historical average of the foreign current tax rate. However, multinationals that regularly repatriate some of their foreign earnings would likely have repatriated higher-taxed earnings, asserting “indefinite reinvestment” on their lower-taxed foreign earnings. Thus, the foreign tax rate historically reported in the financial statement tax footnotes likely represents an upper bound on the gross foreign tax credit.

respectively. Finally, we tabulate control variables for our examination of market reaction. We lose 8 observations because these companies did not report cash taxes paid. We calculate a mean Cash ETR of 21.5 percent and a median of 20.4 percent, which is similar to the Cash ETR reported by Wagner, Zeckhauser, and Ziegler (2018) for firms in the Russell 3000 at TCJA's enactment.

Panel B estimates an ordinary least squares regression of NRTAX at enactment on prior period DTL, DTA and PRE. Prior period deferred tax balances and permanently reinvested earnings strongly explain the impact of TCJA to net earnings. Consistent with the anticipated effect of a tax rate reduction, Column 1 shows that deferred tax assets and permanently reinvested earnings are associated with income-decreasing nonrecurring income taxes while deferred tax liabilities are associated with income-increasing nonrecurring income taxes.

The estimated NRTAX amount sign matches the actual NRTAX sign for 313 firms (123 are correctly positive and 190 are correctly negative). The model incorrectly estimates the sign of actual NRTAX for 66 firms. For 58 of the 66 firms, we estimate NRTAX negative, but actual NRTAX is positive. Conversely, for 8 firms, we estimate NRTAX positive, but actual NRTAX is negative.¹³ The model also incorrectly estimates zero NRTAX when actual NRTAX is nonzero for 55 firms. Finally, for 4 firms where NRTAX is missing and we set it to zero, the model estimates zero NRTAX for 3 firms and a small NRTAX amount (\$3.3 million) for 1 firm.¹⁴

Our estimated coefficients are slightly smaller than expected, but economically reasonable. If all of the gross DTL and DTA amounts were related solely to U.S. differences

¹³ When firms have net U.S. DTLs (whose write-down increases earnings) and PRE (whose deemed repatriation decreases earnings), we expect more frequent misclassification of net increase or decrease. Our initial review of the data suggests this explanation is reasonable, but our work is ongoing.

¹⁴ For Eversource Energy, we estimate a large NRTAX benefit due to their substantial deferred tax liabilities, but Eversource reported no material impact generated by TCJA. As a regulated utility, Eversource's customers benefit from reductions in tax liabilities and so Eversource records liabilities for TCJA's one-time tax benefits. We assume special situations like Eversource are noise to our regression model.

between book and taxable income and were established at the top statutory rate, then the decrease in statutory tax rate from 35 percent to 21 percent would reduce the deferred tax balance by 14 percentage points. Thus, the maximum mechanical relation between NRTAX and DTL or DTA would be 40 percent (14/35). Our estimated coefficients on gross deferred taxes between 22 and 24 percent are substantially lower than this maximum, so we investigate further.

The gross DTL and gross DTA amounts in column 1 include domestic and foreign deferred tax balances. To the extent some of the DTL or DTA are related to foreign tax jurisdictions, the statutory tax rate decrease does not reduce those assets or liabilities, so the coefficient should be less than 40 percent.¹⁵ We adjust DTA and DTL by the absolute ratio of the prior three-year sum of U.S. deferred tax expense divided the prior three-year sum of total deferred tax expense to estimate the U.S. portions of DTA or DTL.¹⁶

In column 2, we substitute estimated domestic deferred tax assets and liability for the gross deferred tax assets and liabilities. Using the estimated domestic deferred tax assets and liabilities, the coefficient on deferred tax liabilities increases to 34.8 percent, which is much closer to the theoretical coefficient of 40 percent.

However, the coefficient on deferred tax assets increases in magnitude only slightly to 26.1 percent. Perhaps deemed repatriation absorbs U.S. net operating loss carryforwards that previously carried a valuation allowance, so there is less DTA at the end of the enactment quarter to write down. In addition, rather than absorb the write-down of a deferred tax asset, many firms

¹⁵ Some firms record DTLs for unrepatriated foreign earnings. As a result, our estimate of the nonrecurring income tax for the deemed repatriation tax effect derives from both the write-down of U.S. DTL from 35% to either 15.5% or 8% (net of FTC) and reclassifying that tax to current or non-current payment, net of the deemed repatriation tax on PRE. However, few companies record U.S. DTLs for unrepatriated foreign earnings, so our use of PRE to estimate the deemed repatriation tax should capture most of the effect.

¹⁶ When the ratio of absolute three-year cumulative U.S. deferred tax expense and absolute three-year cumulative total deferred tax expense is greater than one, we classify the deferred tax asset and liability as fully domestic. When we have zero values for three-year cumulative deferred tax expense, we also classify the deferred tax asset and liability as domestic. Ideally, we would separately estimate the U.S. versus foreign portions of gross DTAs and gross DTLs for each firm, but this is not feasible using only machine-readable data.

could choose to accelerate the deduction by paying (or otherwise meeting the economic performance test of IRC § 461) accrued expenses at quarter-end. Gaertner, Lynch and Vernon (2018) find, for example, that taxable firms accelerated defined benefit pension contributions at year-end in 2017 to reduce DTAs and shrink under-funded pension obligations.

We estimate a coefficient on PRE of 7 percent in Columns 1 and 2. The maximum coefficient should be 15.5 percent, given a maximum transition tax at that rate if all the previously untaxed earnings were held in cash. However, if all foreign earnings are invested in non-cash assets, the maximum transition tax would be an 8 percent rate. In addition, these maximum rates only apply if all the foreign earnings were subject to zero foreign tax rate. For example, if all the foreign profits were earned in a zero-rate tax haven, were held in cash, and had not previously been taxed through Subpart F or other base erosion provisions, the tax would be 15.5 percent. On the other hand, if all the profits had been taxed in a foreign country at 35 percent or higher, the deemed repatriation would result in no transition tax. Thus, our estimated coefficient of 7 percent is reasonably less than the theoretical maximum transition tax.

To consider the impact of having permanently reinvested earnings in cash versus non-cash assets and the foreign tax credit, we partition our sample into terciles using total cash per assets balance and the foreign tax rate in Panel C. We find the coefficient on PRE increases in magnitude monotonically from the lowest cash per assets tercile (-3.2% in Column 1 and not statistically significant) to the highest cash per assets tercile (-9.8% in Column 3 and statistically significant). We also find that firms with the lowest foreign ETRs have the highest coefficient on PRE (-13.2% in Column 4 and statistically significant), but firms with high foreign ETRs have the smallest coefficient on PRE (-1.7% in Column 6 and not statistically significant).

Table 6 suggests that we should consider both the cash holdings of the firm and the

average foreign tax rate in our initial model. In work still underway, we will incorporate these effects to better fit the multivariate model.

In summary, we conclude that investors could reasonably estimate the immediate impact of TCJA on earnings using financial statement information available to them prior to TCJA's Senate passage and enactment.

Did investors react consistent with predicted transition tax effects on earnings?

We next examine investor reaction to the earnings effects generated by TCJA at its Senate passage and ultimate enactment. Investor reaction should be cleanly associated with the *transition* tax effects on earnings if (1) the Senate passage or enactment is a surprise, (2) investors could estimate the transition tax effect, and (3) transition and long-run effects of the tax reform can be examined separately. As our primary question is how quickly investors react to the transition tax effects of TCJA, the surprise of TCJA's Senate passage and enactment is our primary focus. For the second assumption, we present evidence in Table 6 that investors could have reasonably estimated the transition tax effects. For the third assumption, we control for certain aspects of the long-run effects of TCJA following other studies (Wagner, Zeckhauser, and Ziegler 2018) examining TCJA's long-run earnings effect. Thus, an investor reaction to the transition tax effects suggests investors were surprised by TCJA's passage or enactment.

We argue that the Senate passage of TCJA was relatively surprising to the market. In the Fall of 2017, the business press expressed wide skepticism that tax reform would pass.¹⁷ Republican Senators Susan Collins, Bob Corker, Steve Daines, Jeff Flake, Ron Johnson, and James Lankford initially expressed doubts about the tax bill.¹⁸ As a result, the bill's future seemed doubtful because Republicans could not afford to lose more than three Republican votes

¹⁷ Paletta, Damian, and DeBonis, Mike, "Senate Tax Bill Hits New Snags," Washington Post, November 16, 2017.

¹⁸ Pramuk, Jacob, "Ron Johnson and Steve Daines, Two of the Last Senate GOP Holdouts, Will Back Tax Bill After Pass-through Tweak," CNBC, December 1, 2017.

with all Democratic Senators opposing the tax bill. Consistent with high uncertainty, the tax bill passed the Senate with only a 51-49 vote (Republican Senator Bob Corker, all 46 Democratic Senators, and 2 independent Senators who caucus with the Democrats voted against the tax bill).

However, Wagner, Zeckhauser, and Ziegler (forthcoming) find stock prices react to an increase in the probability of tax rate cuts with the surprise election of Donald Trump in 2016. It is unknown how much of this expectation was eroded during 2017 as the Republican Congress and President Trump had difficulty with other legislation such as their inability to repeal and replace the Affordable Care Act. Thus, to the extent the market already had a non-zero expectation of tax form, any market reaction will be less than 100% of the estimated effect on corporate assets and liabilities. Regardless, investors should react quickly to any surprise about the passage of tax law changes. For example, Doidge and Dyck (2015) find Canadian publicly traded firms dramatically fell in value after a surprise announcement of new corporate taxes.

In contrast to TCJA's Senate passage, TCJA's enactment should not have surprised investors. Although lacking detail in his proposals, President Trump campaigned on tax cuts in 2016. Consistent with President Trump certain sign tax legislation, he said after TCJA's enactment, "as I promised the American people [...] 11 months ago, we enacted the biggest tax cuts and reforms in American history."¹⁹

Our evidence in Table 6 confirms that NRTAX could be estimated with reasonable confidence given prior disclosures of deferred tax balances and permanently reinvested earnings. Thus, we assert that investors could reasonably estimate the immediate tax effect. And we believe it is reasonable to believe market participants understand that the NRTAX alone is transitory (Donelson, Koutney, and Mills 2018). Thus, if the only effect of TCJA is the transition

¹⁹ "President Donald J. Trump Achieved the Biggest Tax Cuts and Reforms in American History," White House, February 5, 2019, <https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-achieved-biggest-tax-cuts-reforms-american-history>.

tax, the theoretical market return should be a coefficient of one, because the stock price should increase or decrease by exactly the amount of the tax benefit or additional tax expense.²⁰

The market reaction to TCJA's increasing likelihood of enactment should also incorporate expectations of firm-level and economy-wide effects. Latter effects include expectations of global competitiveness and economic growth (promoted as a reason for the reform by President Trump and the Republican majority) versus fears higher long-term interest rates and other negative consequences from the estimated \$1.5 trillion deficit (emphasized by the Democrat minority). Firm-level effects include the benefits of the lower statutory tax rate applying to U.S. taxable income for all future years, five-year full-expensing of tangible personal property (IRC § 179), offset by the costs of interest expense deductions being limited to the sum of business interest income and 30% of earnings before interest, taxes and depreciation (EBITDA) for five years, then to EBIT (IRC § 163(j)), and numerous international tax provisions that on their face appear to exempt foreign profits, but not in full. We acknowledge that the market reaction to TJCA's increasing likelihood of enactment should incorporate all these factors and more, many of which cannot yet be reasonably estimated, even if we assigned perfect foresight to the market. Following Wagner, Zeckhauser, and Ziegler (2018), we control for some of estimable long-run effects of TCJA. They demonstrate that firms with high cash ETRs enjoy a larger positive market reaction, consistent with firms paying ETRs closer to the statutory rate enjoying a larger benefit from the rate reduction. However, firms with low cash ETRs likely achieved them in part due to low-tax international operations, and the complex tax reform has mixed effects on multinational firms. They also examine whether the market reacts to the percent

²⁰ Stock prices conceptually equal the sum of net assets and discounted future cash flows per share and so a \$1 per share increase in net assets should increase stock price by \$1. Thus, we scale TCJA's earnings effect in dollars by common shares outstanding and price. In other words, 1 percent change in market value of equity attributable to TCJA should be associated with a 1% stock return.

revenue from foreign sources, capital expenditure in percent of total assets and reduction of interest deductibility, but they do not find investors consistently react to these aspects of TCJA's long-run earnings effect.

Table 7 presents our examination of the market reaction to TCJA's transition tax effects. In Panel A, we examine the association between cumulative stock returns on the trading days before and after TCJA's Senate passage on Saturday, December 2, 2017 (specifically, we calculate cumulative stock returns for Friday, December 1 and Monday, December 4). We find a positive and statistically significant association between stock returns at TCJA's Senate passage and actual nonrecurring income taxes in Column 1. The actual amount of nonrecurring income taxes is only disclosed later in quarterly financial statement filings. Thus, this association assumes perfect foresight. The coefficient suggests that investors reacted to 18% of the actual change in market value of equity generated from TCJA's earnings effects at its Senate passage. We also control for the cash ETR, capital expenditures, and interest expense non-deductibility to control long-run earnings effects of TCJA as well as firm-level controls (size, revenue growth, and profitability).²¹ Similar to Wagner, Zeckhauser, and Ziegler (2018), we find that cash ETR is positively associated with market returns suggesting that high-tax corporations benefit more from TCJA in the long-run. As expected, we also find that investors reacted positively to firms with larger capital expenditures and negatively to the curtailment of interest expense.

In Column 2, we examine the association between stock returns and *estimated* NRTAX using the coefficient estimates from Table 6 to compute a predicted NRTAX for each firm. We

²¹ Wagner, Zeckhauser, and Ziegler (2018) also examine the percent of foreign revenue using data from Bloomberg. We do not have access to Bloomberg data and we do not control for the percent of foreign revenue. In untabulated analysis, we control for the percent of foreign pretax earnings and we find a statistically significant negative association between the percent of foreign pretax earnings and stock returns, consistent with Wagner, Zeckhauser, and Ziegler's (2018) finding that percent of foreign revenues are negatively associated with returns. In addition, the coefficients on NRTAX are similar to those discussed.

find a significant association between the predicted NRTAX and stock returns. Thus, investors appear to estimate and react to some of the earnings effects of TCJA.

In Column 3, we include gross deferred tax assets and liabilities and permanently reinvested earnings, which we show are the components of TCJA's earnings effect. We find investors react positively to deferred tax liabilities and negatively to permanently reinvested earnings. These findings suggest that investors anticipated much of the immediate and transitory effects of TCJA at its Senate passage and reacted quickly.

However, we do not find investors react to deferred tax assets. Recall NRTAX is less related to DTAs than to DTLs, as shown previously. To the market participants expected that firms could accelerate deduction of accrued expenses during the enactment quarter, the non-reaction to prior quarter's DTA is reasonable.

In Panel B, we examine the investor reaction to TCJA's transition tax effects around TCJA's enactment date (specifically, we calculate cumulative stock returns for the three trading days of Thursday, December 21, Friday, December 22, and Tuesday, December 26). In Column 1 and 2, we find a significant positive association between stock returns and actual and estimated nonrecurring income taxes. These coefficients suggest investors reacted to about 13-23% of TCJA's earnings effect at enactment. In Column 3, we find that investors reacted positively to gross deferred tax liabilities, but investors do not appear to react to deferred tax assets or permanently reinvested earnings at enactment. Given that TCJA's enactment was widely expected following the Senate passage, investor reaction at TCJA's enactment to its transitory earnings effects suggests investors delayed their reaction.

We also find investors do not react to cash ETR, capital expenditures, and the curtailment of interest expense deductibility at TCJA's enactment, consistent with Wagner, Zeckhauser, and

Ziegler (2018). In contrast to investors' continued reaction to transitory tax effects, investors appear to have fully incorporated the majority of long-run effects by TCJA's enactment.

For completeness, in Panel C, we present a long-window stock return beginning one day before TCJA's Senate passage and ending one day after TCJA's enactment. As expected, we find investors react positively to the one-time earnings generated from TCJA and that investors primarily focused on TCJA's earning effects generated from gross deferred tax liabilities and permanently reinvested earnings. While the coefficients are larger than those presented in the short trading windows, column 2 shows that investors reacted to about 72% of the estimated transitory tax effect. While the coefficient is smaller than 1, investors appear to have incorporated the majority of transition tax effects into stock valuation during TJCA's legislative process.

V. CONCLUSION

In conclusion, TCJA had an immediate material impact to U.S. corporate cumulative net earnings. However, the aggregate net impact to earnings is not representative of the law's material impact to firm earnings because some firms received large positive impacts and other firms had large negative impacts. Despite the variation, we find investors could predict the impact of TCJA to net earnings using previous disclosures of deferred tax balances and permanently reinvested earnings. Consistent with their anticipation, we also find investors react to estimates of TCJA's earnings impact at the law's Senate passage. We also find investor reaction to TCJA's earnings effect at its ultimate enactment, suggesting that investors did not fully incorporate the earnings effect at Senate passage. As TCJA's enactment was a virtual certainty following its Congressional approval, it is not clear why investors did not fully incorporate transition tax effects at its Senate approval. Despite the delay in market reaction to

Senate passage, significant trading returns related to transition tax effects do not appear to be available for investors because investors appear to revise stock valuations for the majority of transition tax effects. In summary, in the 17 trading days beginning December 1 and ending December 26, investors were able to anticipate TCJA's transitory impact on earnings and accordingly re-value stocks in the S&P 500.

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APPENDIX A: NEWS ARTICLES ON TCJA AND CORPORATE EARNINGS

1. Badkar, Mamta, “American Express Sees \$2.4 billion Hit from US Tax Legislation,” Financial Times, January 3, 2018.
2. Fox, Justin, “Tax Bill Will Deliver a Corporate Earnings Gusher,” Bloomberg, December 27, 2017.
3. Katz, David A., “Deferred Taxes Could Drive Big Earnings Swing,” CFO.com, December 22, 2017.
4. McCoy, Kevin, “Citigroup Posts \$18.3B Fourth-quarter Loss, Its Earnings Erased by Federal Tax Overhaul,” USA Today, January 16, 2018.
5. McKenna, Francine, “These Companies Will Take a Huge Profit Hit from Lower Tax Rates,” MarketWatch, December 28, 2017.
6. Reilly, Peter J., “Earnings Havoc Unleashed by Tax Act,” Forbes, December 31, 2017.
7. Saxena, Aparajita, “Goldman Warns of \$5-billion Earnings Hit from U.S. Tax Law,” Reuters, December 29, 2017.

APPENDIX B: VARIABLE DEFINITIONS

CapEx	Capital Expenditures (CAPX) divided by Total Assets (AT)
Cash ETR	Taxes Paid (TXPD) divided by the difference of Pretax Income (PI) and Special Items (SPI)
DTA	Noncurrent Deferred Tax Asset (TXDBAQ), scaled by market value of equity two days before TCJA Senate Passage
DTL	Noncurrent Deferred Tax Liability (TXDBQ), scaled by market value of equity two days before TCJA Senate Passage
Enactment Return	Cumulative 3 trading day stock return centered at TCJA Enactment starting Thursday, 12/21/17 and ending Tuesday, 12/26/17
Est. U.S. Deferred Taxes	Ratio of absolute cumulative three-years of U.S. deferred taxes to absolute cumulative three-years of total deferred taxes
Est. U.S. DTA	Estimate of U.S. portion of deferred tax assets equal to DTA times Est. U.S. Deferred Taxes
Est. U.S. DTL	Estimate of U.S. portion of deferred tax liabilities equal to DTL times Est. U.S. Deferred Taxes
Interest Nondeductible	Indicator variable equal to 1 if Interest Expense (XINT) is greater than interest income (IDIT) plus 30% of EBIT (EBIT) and 0 otherwise.
Long-window Return	Cumulative stock return starting one day before TCJA Senate Passage (Friday, 12/1/17) and ending one day after TCJA enactment (Tuesday, 12/26/17)
MVE	Market value of equity equals common shares outstanding (CSHOQ) times stock price measured two days before TCJA Senate passage
Net DTA	Equals DTA minus DTL
Net DTL	Equals DTL minus DTA
Net Earnings	Income before extraordinary items (IBQ)
Net Earnings per share	Income before extraordinary items (IBQ) divided by common shares outstanding (CSHOQ)
NRTAX	Nonrecurring income taxes (NRTXTQ)
NRTAX as % of MVE	Nonrecurring income taxes (NRTXTQ) divided by market value of equity

NRTAX per share	Nonrecurring income taxes (NRTXTQ) divided by common shares outstanding (CSHOQ)
PRE	Permanently reinvested earnings (FOREIGN_EARNINGS in millions from Audit Analytics or as collected from financial statements)
Pretax Earnings	Pretax income (PIQ)
Pretax Earnings per share	Pretax income (PIQ) divided by common shares outstanding (CSHOQ)
Senate Return	Cumulative 2 trading day stock return centered at TCJA Senate Return starting Friday, 12/1/17 and ending Monday, 12/4/17
Tax Expense per share	Income taxes (TXTQ) divided by common shares outstanding (CSHOQ)

Table 1: Sample Selection

Firms in the S&P 500 on December 22, 2017	500
Minus firms acquired before issuing financial statements	(1)
Minus real estate investment trusts	(31)
Minus foreign corporations	<u>(30)</u>
Sample of U.S. corps in S&P 500 to estimate TCJA transition tax	438
Minus firms missing Compustat cash tax paid	<u>(8)</u>
Sample of U.S. corps in S&P 500 for investor reaction tests	430

Table 2, Panel A: Cumulative Effect of TCJA on S&P 500 Earnings (\$ millions)

	N	Pretax Earnings	Net earnings excluding NRTAX	NRTAX	Net Earnings
NRTAX > 0	212	114,855.31	79,731.77	235,424.63	315,156.40
NRTAX ≤ 0	226	193,897.88	160,034.56	-231,134.77	-71,100.21
Total	438	308,753.20	239,766.32	4,289.87	244,056.19

Table 2, Panel B: Cumulative Effect of TCJA on S&P 500 Earnings Per Share

	N	Pretax Earnings	Net earnings excluding NRTAX	NRTAX	Net Earnings
NRTAX > 0	212	277.77	188.15	440.47	628.62
NRTAX ≤ 0	226	332.05	262.38	-352.07	-89.69
Total	438	609.82	450.52	88.40	538.93

Table 2, Panel C: Cumulative Effect of TCJA on S&P 500 Earnings (\$ millions) by Change in Seasonal Net Earnings

	N	Change in Pretax Earnings	NRTAX	Change in Net Earnings	NRTAX / Change in Net Earnings
Net earnings increase	241	38,998.91	216,464.74	258,966.48	83.6%
Net earnings decrease	197	-25,815.58	-212,174.87	-231,443.34	91.7%
Total	438	13,183.33	4,289.87	27,523.14	15.6%

Table 2, Panel D: Cumulative Effect of TCJA on S&P 500 Earnings Per Share by Change in Seasonal Net Earnings

	N	Change in Pretax Earnings	NRTAX	Change in Net Earnings	NRTAX / Change in Net Earnings
Net earnings increase	241	112.72	406.79	513.96	79.1%
Net earnings decrease	197	-6.84	-318.39	-322.30	98.8%
Total	438	105.89	88.40	191.65	46.1%

Table 3: Average Effect of TCJA on Corporate Earnings

	N	Mean	SD	P25	P50	P75
NRTAX (\$ millions)	438	9.7942	2922.072	-231.3	-8.1	297.0
NRTAX per share	438	0.1990	3.5348	-0.8283	-0.0266	1.0380
Abs(NRTAX) per share	438	1.8128	3.0399	0.3126	0.8697	2.2249
Tax Expense per share	438	0.1390	3.6024	-0.6575	0.2675	1.1431
Pretax Earnings per share	438	1.3923	1.8468	0.5641	1.1365	1.9733
Net Earnings per share	438	1.2304	3.3504	-0.0426	0.8420	2.0302

Table 4, Panel A: Average Absolute Effect (\$ millions) of TJCA by Fama-French 12 Industry

	N	\$ millions		% of MVE	
		Mean	P50	Mean	P50
Consumer Non-durables	34	740.45	264.15	1.828%	1.577%
Consumer Durables	10	1018.98	227.40	3.163%	0.796%
Manufacturing	34	538.40	233.25	1.612%	1.143%
Energy	25	1018.19	625.00	3.181%	2.127%
Chemicals	18	357.96	327.45	1.625%	0.875%
Business Equipment	74	1262.51	209.70	1.835%	1.018%
Telecom	13	4973.65	1200.00	4.302%	2.245%
Utilities	31	507.62	206.70	2.144%	0.997%
Wholesale, Retail, & Services	44	281.01	138.98	1.261%	0.646%
Healthcare, Medical, & Drugs	36	1553.70	324.10	2.139%	1.475%
Finance	69	1113.00	264.00	2.340%	1.004%
Other	50	1241.53	251.80	2.099%	1.363%

Table 4, Panel B: Average Effect (\$ millions) of TJCA on Corporate Earnings by Fama-French 12 Industry

	Income-increasing			Income-decreasing		
	N	Mean	P50	N	Mean	P50
Consumer Non-durables	19	793.95	297.00	15	-672.67	-231.30
Consumer Durables	4	508.03	285.70	6	-1359.62	-181.60
Manufacturing	11	391.74	147.10	23	-608.54	-299.00
Energy	20	1124.64	604.00	5	-592.40	-645.00
Chemicals	9	398.88	339.00	9	-317.04	-315.90
Business Equipment	21	546.43	133.00	53	-1546.25	-289.50
Telecom	11	5856.18	1335.00	2	-119.75	-119.75
Utilities	14	711.87	516.50	17	-339.42	-148.00
Wholesale, Retail, and Services	27	361.24	156.00	17	-153.59	-127.00
Healthcare, Medical, and Drugs	8	1714.92	424.10	28	-1507.64	-319.90
Finance	35	763.43	495.00	34	-1472.85	-187.50
Other	33	1571.63	297.03	17	-600.77	-128.00

Table 4, Panel C: Average Effect (% of MVE) of TJCA on Corporate Earnings by Fama-French 12 Industry

	Income-increasing			Income-decreasing		
	N	Mean	P50	N	Mean	P50
Consumer Non-durables	19	1.837%	1.569%	15	-1.816%	-1.586%
Consumer Durables	4	2.904%	0.756%	6	-3.335%	-1.614%
Manufacturing	11	1.755%	0.961%	23	-1.543%	-1.786%
Energy	20	3.110%	2.036%	5	-3.465%	-2.130%
Chemicals	9	2.174%	1.808%	9	-1.075%	-0.864%
Business Equipment	21	1.422%	0.629%	53	-1.999%	-1.389%
Telecom	11	4.936%	5.017%	2	-0.816%	-0.816%
Utilities	14	2.722%	1.258%	17	-1.668%	-0.997%
Wholesale, Retail, and Services	27	1.559%	0.913%	17	-0.787%	-0.380%
Healthcare, Medical, and Drugs	8	4.354%	3.032%	28	-1.506%	-1.146%
Finance	35	2.495%	1.405%	34	-2.181%	-0.724%
Other	33	2.364%	1.913%	17	-1.584%	-0.600%

Table 5: Average Effect of TCJA by PRE and Deferred Tax Asset or Liability Balances

		PRE > 0	PRE = 0	Total
Net DTA	Mean (Median) \$	-1,151 (-231.30)	-162.19 (-58.00)	-942.09 (-172.05)
	[# of obs.]	[93]	[25]	[118]
Net DTL	Mean (Median) \$	56.43 (44.00)	903.37 (200.00)	360.80 (77.28)
	[# of obs.]	[205]	[115]	[320]
Total		-320.61 (-51.49)	713.09 (100.10)	
		[298]	[140]	

Table 6, Panel A: Summary Statistics

	N	Mean	SD	P25	P50	P75
$NRTAX_i$	438	0.0023	0.0307	-0.0104	-0.0002	0.0130
DTA_{iq-1}	438	0.0109	0.0320	0	0	0.0049
DTL_{iq-1}	438	0.0489	0.0846	0	0.0077	0.0558
Est. U.S. DTA_{iq-1}	438	0.0078	0.0245	0	0	0.0027
Est. U.S. DTL_{iq-1}	438	0.0251	0.0522	0	0.0002	0.0245
PRE_{iy-1}	438	0.0901	0.1285	0	0.0358	0.1430
Cash ETR_{iy-1}	430	0.2157	0.1674	0.10232	0.2046	0.3072
$CapEx_{iy-1}$	430	0.0366	0.0331	0.01193	0.0262	0.0539
Interest Nondeductible $_{iy-1}$	430	0.1698	0.3759	0	0	0
$\ln(\text{Assets})_{iy-1}$	430	10.0198	1.3340	9.02582	9.8784	10.8342
Profitability $_{iy-1}$	430	0.0806	0.0887	0.0266	0.0708	0.1272
Growth $_{iy-1}$	430	1.0469	0.1543	0.97772	1.0345	1.0888
Senate Return $_i$	430	0.0120	0.0261	-0.0029	0.0129	0.0272
Enactment Return $_i$	430	0.0042	0.0226	-0.0071	0.0010	0.0135

Table 6, Panel B: Predictiveness of Deferred Taxes and Permanently Reinvested Earnings for Nonrecurring Income Taxes

$$NRTAX_i = \beta_1 DTA_{iq-1} + \beta_2 DTL_{iq-1} + \beta_3 PRE_{iy-1} + \gamma_i + \varepsilon_i$$

	(1)	(2)
DTA_{iq-1}	-0.221*** (-2.9)	
DTL_{iq-1}	0.245*** (10.7)	
PRE_{iy-1}	-0.073*** (-4.9)	-0.076*** (-5.3)
Est. U.S. DTA_{iq-1}		-0.261*** (-3.3)
Est. U.S. DTL_{iq-1}		0.348*** (20.1)
Observations	438	438
R-squared	0.544	0.591

Table 6, Panel B presents the predictiveness of deferred taxes and permanently reinvested earnings for nonrecurring income taxes. Deferred tax assets and liabilities are measured at the beginning of the quarter and permanently reinvested earnings (PRE) are measured at the end of the prior year. Estimated U.S. DTA/DTL are gross DTA/DTLs multiplied by the summed three year domestic deferred tax expense divided by summed three year total tax expense. All variables are scaled by beginning of quarter market value of equity. Fama-French 12 Industry Fixed Effects are included. Robust t-statistics are presented in parentheses with ***, **, * denoting statistical significant at the 0.01, 0.05, and 0.10 levels (two-tail), respectively.

Table 6, Panel C: Predictiveness of Permanently Reinvested Earnings for Nonrecurring Income Taxes

$$NRTAX_i = \beta_1 Est. U.S. DTA_{iq-1} + \beta_2 Est. U.S. DTL_{iq-1} + \beta_3 PRE_{iy-1} + \gamma_i + \varepsilon_i$$

	Total Cash Balance			Foreign ETR		
	Low (1)	Medium (2)	High (3)	Low (4)	Medium (5)	High (6)
Est. U.S. DTA_{iq-1}	-0.273*** (-3.0)	-0.380*** (-3.8)	-0.099 (-0.6)	-0.335*** (-5.2)	-0.324* (-1.9)	-0.315*** (-4.8)
Est. U.S. DTL_{iq-1}	0.340*** (17.1)	0.301*** (6.8)	0.775*** (4.3)	0.471*** (6.6)	0.362*** (4.8)	0.295*** (4.0)
PRE_{iy-1}	-0.032 (-1.5)	-0.064*** (-2.9)	-0.098*** (-5.1)	-0.132*** (-7.0)	-0.094*** (-2.9)	-0.017 (-0.9)
Observations	146	146	146	72	73	72
R-squared	0.638	0.578	0.475	0.830	0.580	0.701

Table 6, Panel C presents the predictiveness of permanently reinvested earnings for nonrecurring income taxes depending on the firm's total cash balance and foreign ETR. Deferred tax assets and liabilities are measured at the beginning of the quarter and permanently reinvested earnings (PRE) are measured at the end of the prior year. We sort firms into terciles of total cash balances scaled by total assets and foreign ETRs (foreign tax expense divided by pretax foreign income). Regression variables are scaled by beginning of quarter market value of equity. Fama-French 12 Industry Fixed Effects are included. Robust t-statistics are presented in parentheses with ***, **, * denoting statistical significant at the 0.01, 0.05, and 0.10 levels (two-tail), respectively.

Table 7, Panel A: Association between 2-day Stock Return around December 2, 2017 (Senate Passage of TCJA) and Nonrecurring Income Taxes

$$Senate\ Return_{i(-1,+1)} = \beta_0 + \beta_1 NRTAX_{iq} + \beta_j Controls + \varepsilon_i$$

	(1)	(2)	(3)
NRTAX _{iq}	0.180*** (5.2)		
Est. NRTAX _{iq}		0.258*** (4.7)	
Est. U.S. DTA _{iq-1}			-0.017 (-0.3)
Est. U.S. DTL _{iq-1}			0.076*** (3.3)
PRE _{iy-1}			-0.037*** (-3.9)
Cash ETR _{iy-1}	0.029*** (3.2)	0.029*** (3.3)	0.030*** (3.3)
CapEx _{iy-1}	0.094* (1.9)	0.087* (1.8)	0.079 (1.6)
Interest Nondeductible _{iy-1}	-0.016*** (-4.0)	-0.018*** (-4.5)	-0.018*** (-4.5)
Intercept	0.016 (0.9)	0.021 (1.3)	0.024 (1.4)
Firm Controls?	Yes	Yes	Yes
Observations	430	430	430
R-squared	0.164	0.169	0.178

Table 7, Panel A presents the association between nonrecurring income taxes (NRTAX) and the 2-day stock return beginning one day before Senate passage of the Tax Cuts and Jobs Act (Saturday, December 2, 2017) and ending one trading day after. Nonrecurring income taxes, DTA, DTL, and PRE are per share amounts and scaled by stock price two days before the . Robust t-statistics are presented in parentheses with ***, **, * denoting statistical significant at the 0.01, 0.05, and 0.10 levels (two-tail), respectively.

Table 7, Panel B: Association between 3-day Stock Return centered on December 22, 2017 (Enactment of TCJA) and Nonrecurring Income Taxes

	$Enactment\ Return_{i(-1,+1)} = \beta_0 + \beta_1 NRTAX_{iq} + \beta_j Controls + \varepsilon_i$		
	(1)	(2)	(3)
NRTAX _{iq}	0.132*** (3.3)		
Est. NRTAX _{iq}		0.235*** (4.3)	
Est. U.S. DTA _{iq-1}			0.029 (0.7)
Est. U.S. DTL _{iq-1}			0.109*** (4.8)
PRE _{iy-1}			-0.014 (-1.6)
Cash ETR _{iy-1}	0.008 (1.2)	0.009 (1.3)	0.009 (1.3)
CapEx _{iy-1}	0.049 (1.2)	0.039 (0.9)	0.040 (0.9)
Interest Nondeductible _{iy-1}	0.011*** (2.6)	0.009** (2.4)	0.008** (2.2)
Intercept	0.049*** (3.2)	0.054*** (3.8)	0.052*** (3.7)
Firm Controls?	Yes	Yes	Yes
Observations	430	430	430
R-squared	0.198	0.221	0.233

Table 7, Panel B presents the association between nonrecurring income taxes (NRTAX) and the 3-day stock return centered at the enactment of Tax Cuts and Jobs Act (December 22, 2017). Nonrecurring income taxes, DTA, DTL, and PRE are scaled by the beginning of quarter market value of equity. Robust t-statistics are presented in parentheses with ***, **, * denoting statistical significant at the 0.01, 0.05, and 0.10 levels (two-tail), respectively.

Table 7, Panel C: Association between Long-window Stock Return from Senate Passage to Enactment of TCJA and Nonrecurring Income Taxes

$$Long\text{-}window\ Return_i = \beta_0 + \beta_1 NRTAX_{iq} + \beta_j Controls + \varepsilon_i$$

	(1)	(2)	(3)
NRTAX _{iq}	0.361*** (3.9)		
Est. NRTAX _{iq}		0.721*** (5.2)	
Est. U.S. DTA _{iq-1}			0.073 (0.7)
Est. U.S. DTL _{iq-1}			0.311*** (4.8)
PRE _{iy-1}			-0.055*** (-2.6)
Cash ETR _{iy-1}	0.036 (1.5)	0.037 (1.6)	0.037 (1.6)
CapEx _{iy-1}	0.117 (1.1)	0.082 (0.7)	0.082 (0.7)
Interest Nondeductible _{iy-1}	0.002 (0.2)	-0.002 (-0.2)	-0.005 (-0.4)
Intercept	0.031 (1.0)	0.049 (1.5)	0.045 (1.3)
Firm Controls?	Yes	Yes	Yes
Observations	430	430	430
R-squared	0.053	0.093	0.105

Table 7, Panel C presents the association between nonrecurring income taxes (NRTAX) and the cumulative long-window stock return starting one day before the Senate passage of TCJA to one trading day after the enactment of Tax Cuts and Jobs Act (December 1 to December 26, 2017). Nonrecurring income taxes, DTA, DTL, and PRE are scaled by the beginning of quarter market value of equity. Robust t-statistics are presented in parentheses with ***, **, * denoting statistical significant at the 0.01, 0.05, and 0.10 levels (two-tail), respectively.