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The U.S. tax and financial reporting treatment of foreign earnings and U.S. multinational companies' payout policies

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THE U.S. TAX AND FINANCIAL REPORTING TREATMENT OF FOREIGN EARNINGS AND U.S. MULTINATIONAL COMPANIES' PAYOUT POLICIES

by

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PH.D. THESIS

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ABSTRACT

This paper examines the impact of the U.S. tax and financial reporting treatment of foreign earnings on the payouts to shareholders of U.S. multinational companies (MNCs). I find the U.S. tax and financial reporting treatment of foreign earnings weakens the otherwise strong, positive association between foreign earnings and the probability and level of dividend payments, but I do not observe an effect on the probability or level of share repurchases or on the level of total payout. I also find U.S. MNCs with tax and/or financial reporting incentives to keep their foreign profits reinvested abroad make more extensive use of repurchases than dividends when making distributions to shareholders. This study contributes to our understanding of the impact of the current U.S. worldwide tax system on U.S. MNCs' real decisions.

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Dependent Variables:

$Dividends_{it}$ = dividends paid to common shareholders (dvc) by firm *i* in year *t*.
$DivInd_{it}$ = 1 if $Dividends_{it} > 0$, and 0 otherwise.
$DivLev_{it} = Dividends_{it}$, scaled by total assets (at) at the end of year *t-1*.

$Repurchases_{it}$ = purchases of common and preferred stock by firm *i* in year *t* (prstkc) less any decrease in the redemption value of preferred stock from year *t-1* to year *t* (pstkrv), or less any decrease in preferred stock (pstk) from year *t-1* to year *t* if the redemption value of preferred stock is missing.
$RepInd_{it}$ = 1 if $Repurchases_{it} > 0$, and 0 otherwise.
$RepLev_{it} = Repurchases_{it}$, scaled by total assets (at) at the end of year *t-1*.

$PayInd_{it}$ = 1 if $Dividends_{it}$ or $Repurchases_{it} > 0$, and 0 otherwise.
$PayLev_{it}$ = sum of $Dividends_{it}$ and $Repurchases_{it}$, scaled total assets (at) at the end of year *t-1*.

$RepMix_{it} = Repurchases_{it}$ minus $Dividends_{it}$, scaled by total assets (at) at the end of year *t-1* if $PayInd_{it} = 1$, and missing otherwise.
$RepRatio_{it} = Repurchases_{it}$ divided by total payout ($Dividends_{it}$ plus $Repurchases_{it}$) if $PayInd_{it} = 1$, and missing otherwise.

Primary Independent Variables of Interest:

$LowFETR5_{it}$ = 1 if $FETR_{it}$ is five or more percentage points below the U.S. statutory tax rate in year *t*, and 0 otherwise. $FETR_{it}$ equals current foreign tax expense of firm *i* (txfo) summed over years *t-2* to *t* divided by foreign pre-tax income (pifo) summed over years *t-2* to *t* for firms with positive three-year cumulative foreign pre-tax income and is winsorized to lie between zero and one. If firm *i*'s three-year cumulative foreign pre-tax income is zero or negative, $LowFETR5_{it}$ equals zero.
$LowFETR10_{it}$ = 1 if $FETR_{it}$ is ten or more percentage points below the U.S. statutory tax rate in year *t*, and 0 otherwise. If firm *i*'s three-year cumulative foreign pre-tax income is zero or negative, $LowFETR10_{it}$ equals zero.
$eFOR_{it}$ = foreign pre-tax income (pifo) of firm *i* in year *t*, scaled by total assets (at) at the end of year *t-1*.
eUS_{it} = domestic pre-tax income (pidom) of firm *i* in year *t*, scaled by total assets (at) at the end of year *t-1*. If domestic pre-tax income is missing, it is set equal to the difference between total pre-tax income and foreign pretax income.

Control Variables:

AGE_{it} = natural logarithm of the number of years since the earliest date firm *i* appears on CRSP.

$CAPEX_{it-1}$ = capital expenditures (capx) scaled by total assets (at) of firm *i* for year *t-1*.

$CASH_{it-1}$ = cash and short-term investments (che) scaled by total assets (at) of firm *i* at the end of year *t-1*.

$DivHist_{it}$ = natural logarithm of one plus the number of years firm *i* has paid a dividend between 1982 and year *t*.

LEV_{it-1} = sum of long-term debt (dltt) and the current portion of long-term debt (dlc) scaled by total assets (at) of firm *i* at the end of year *t-1*.

MTB_{it-1} = market value of equity (csho*prcc_f) divided by book value of common equity (ceq) of firm *i* at the end of year *t-1*.

$Options_{it}$ = annual percentage change in total diluted shares outstanding of firm *i* as-if no repurchases were made during year *t*. Specifically, following Cuny, Martin, and Puthenpurackal (2009), it is calculated as total diluted shares outstanding (cshfd) of firm *i* at the end of year *t* plus the number of shares repurchased by firm *i* during year *t* less total diluted shares outstanding at the end of year *t-1*, divided by total diluted shares outstanding at the end of year *t-1*. The number of shares repurchased is estimated as $Repurchases_{it}$ divided by the average monthly closing stock price of firm *i* during year *t*. If total diluted shares outstanding is missing, common shares used to calculate basic earnings-per-share is used (cshpri). If common shares used to calculate basic earnings-per-share is also missing, common shares outstanding is used (csho). The Compustat adjustment factor (ajex) is used to adjust for stock splits.

$PastStockRet_{it}$ = firm *i*'s stock return compounded monthly for the two year period ending at the end of year *t*.

$PayLevInd_{it}$ = 1 if $PayLev_{it}$ is greater than the sample median, and 0 otherwise.

RE/TE_{it-1} = retained earnings (re) divided by book value of common equity (ceq) of firm *i* at the end of year *t-1*.

$\sigma(eUS)_{it}$ = standard deviation of *eUS* over years *t-4* through *t*, requiring at least three non-missing values of *eUS*.

$\sigma(eFOR)_{it}$ = standard deviation of *eFOR* over years *t-4* through *t*, requiring at least three non-missing values of *eFOR*.

SGR_{it} = total sales (sale) of firm *i* in year *t* less total sales in year *t-1*, divided by total sales in year *t-1*.

$SIZE_{it-1}$ = natural logarithm of total assets (at) of firm *i* at the end year *t-1*.

Additional Variables Used in Additional Analyses:

$ACQUIS_{it}$ = acquisitions (acq) scaled by total assets (at) of firm *i* for year *t*. If acquisitions is missing, it is set equal to zero.

$\Delta CASH_{it}$ = *CASH* of firm *i* in year *t* less *CASH* in year *t-1*.

$DCAPX_{it+1}$ = capital expenditures (capxs) of domestic geographic segments of firm *i* in year *t+1* from the Compustat Segment file, scaled by worldwide total assets (at) in year *t* from the Compustat Fundamentals Annual file.

CFO_{it} = net cash flow from operating activities of firm *i* in year *t*, scaled by total assets (at) of firm *i* at the end of year *t-1*.

$DCFO_{it}$ = domestic pretax income (pidom) less domestic current tax expense (txfed) from the Compustat Fundamentals Annual file plus depreciation expense (dps) of domestic geographic segments from the Compustat Segment file of firm *i* in year *t*, scaled by worldwide total assets (at) in year *t-1* from the Compustat Fundamentals Annual file.

$DOver_{it+1}$ = absolute value of the residual from the estimation of Equation (5a) of firm *i* for year *t+1*, if the residual is positive.

$DOverInd_{it+1}$ = 1 if the residual from the estimation of Equation (5a) of firm *i* for year *t+1* is in the top quartile of residuals, and zero otherwise. Quartiles were formed by year.

$DOverRank_{it+1}$ = decile rank of $DOver_{it+1}$, with observations in the lowest decile coded as zero and observations in the highest decile coded as 9, divided by 9. Deciles were formed by year.

$DSGR_{it}$ = sales (sales) of domestic geographic segments from the Compustat Segment file of firm *i* in year *t* less sales of domestic geographic segments in year *t-1*, divided by sales of domestic geographic segments in year *t-1*.

$DUnder_{it+1}$ = absolute value of the residual from the estimation of Equation (5a) of firm *i* for year *t+1*, if the residual is negative.

$DUnderInd_{it+1}$ = 1 if the residual from the estimation of Equation (5a) of firm *i* for year *t+1* is in the bottom quartile of residuals, and zero otherwise. Quartiles were formed by year.

$DUnderRank_{it+1}$ = decile rank of $DUnder_{it+1}$, with observations in the lowest decile coded as zero and observations in the highest decile coded as 9, divided by 9. Deciles were formed by year.

$DebtIss_{it}$ = net debt issuance (long-term debt issuance (dltis) less long-term debt reduction (dltr)) scaled by total assets (at) of firm *i* for year *t*. If long-term debt issuance or long-term debt reduction is missing, it is set equal to zero.

$EquityIss_{it}$ = net equity issuance (sale of common and preferred stock (sstk) less purchase of common and preferred stock (prstkc)) scaled by total assets (at) of firm *i* for year *t*. If sale of common and preferred stock or purchase of common and preferred stock are missing, it is set equal to zero.

$FCAPX_{it+1}$ = capital expenditures (capxs) of foreign geographic segments of firm *i* in year *t+1* from the Compustat Segment file, scaled by worldwide total assets (at) in year *t* from the Compustat Fundamentals Annual file.

$FCFO_{it}$ = foreign pretax income (pifo) less foreign current tax expense (txfo) from the Compustat Fundamentals Annual file plus depreciation expense (dps) of foreign geographic segments from the Compustat Segment file of firm *i* in year *t*, scaled by worldwide total assets (at) in year *t-1* from the Compustat Fundamentals Annual file.

$FOver_{it+1}$ = absolute value of the residual from the estimation of Equation (5b) of firm *i* for year *t+1*, if the residual is positive.

$FOverInd_{it+1}$ = 1 if the residual from the estimation of Equation (5b) of firm *i* for year *t+1* is in the top quartile of residuals, and zero otherwise. Quartiles were formed by year.

$FOverRank_{it+1}$ = decile rank of $FOver_{it+1}$, with observations in the lowest decile coded as zero and observations in the highest decile coded as 9, divided by 9. Deciles were formed by year.

$FSGR_{it}$ = sales (sales) of foreign geographic segments from the Compustat Segment file of firm *i* in year *t* less sales of foreign geographic segments in year *t-1*, divided by sales of foreign geographic segments in year *t-1*.

$FUnder_{it+1}$ = absolute value of the residual from the estimation of Equation (5b) of firm *i* for year *t+1*, if the residual is negative.

$FUnderInd_{it+1}$ = 1 if the residual from the estimation of Equation (5b) of firm *i* for year *t+1* is in the bottom quartile of residuals, and zero otherwise. Quartiles were formed by year.

$FUnderRank_{it+1}$ = decile rank of $FUnder_{it+1}$, with observations in the lowest decile coded as zero and observations in the highest decile coded as 9, divided by 9. Deciles were formed by year.

ΔLEV_{it} = *LEV* of firm *i* in year *t* less *LEV* in year *t-1*.

$LOSS_{it}$ = 1 if income before extraordinary items (ib) of firm *i* in year *t* is negative, and 0 otherwise.

$LowFETR0_{it}$ = 1 if $FETR_{it}$ is below the U.S. statutory tax rate in year *t*, and 0 otherwise. If firm *i*'s three-year cumulative foreign pre-tax income is zero or negative, $LowFETR0_{it}$ equals zero.

$LowFETR15_{it}$ = 1 if $FETR_{it}$ is fifteen or more percentage points below the U.S. statutory tax rate in year *t*, and 0 otherwise. If firm *i*'s three-year cumulative foreign pre-tax income is zero or negative, $LowFETR15_{it}$ equals zero.

$LowFETR20_{it}$ = 1 if $FETR_{it}$ is twenty or more percentage points below the U.S. statutory tax rate in year *t*, and 0 otherwise. If firm *i*'s three-year cumulative foreign pre-tax income is zero or negative, $LowFETR20_{it}$ equals zero.

$LowFETRC_{it}$ = the U.S. statutory tax rate in year *t* less *FETR* of firm *i* in year *t* if *FETR* is below the U.S. statutory tax in year *t*, and 0 otherwise. If firm *i*'s three-year cumulative foreign pre-tax income is zero or negative, $LowFETRC_{it}$ equals zero.

$MktLev_{it}$ = market leverage (dltt/(dltt + csho*prcc_f)) if firm *i* at the end of year *t*.

ΔMTB_{it} = *MTB* of firm *i* in year *t* less *MTB* in year *t-1*.

$NegDSGR_{it}$ = 1 if $DSGR_{it}$ is less than zero, and 0 otherwise.

$NegFSGR_{it}$ = 1 if $FSGR_{it}$ is less than zero, and 0 otherwise.

$PROA_{it}$ = worldwide pretax income (pi) of firm *i* in year *t*, scaled by average total assets (at) at the end of years *t-1* and *t*.

ROA_{it} = worldwide pretax income (pi) less worldwide total tax expense (txt) of firm *i* in year *t*, scaled by average total assets (at) at the end of years *t-1* and *t*.

$R\&D_{it}$ = research and development expense (xrd) scaled by total assets (at) of firm *i* for year *t*. If research and development expense is missing, it is set equal to zero.

$\Delta R\&D_{it}$ = *R&D* of firm *i* in year *t* less *R&D* in year *t-1*.

$Sale_{it}$ = total sales (sale) of firm *i* in year *t*, scaled by total assets (at) of firm *i* at the end of year *t-1*.

$\Delta Size_{it}$ = *Size* of firm *i* in year *t* less *Size* in year *t-1*.

$SLACK_{it}$ = cash and cash equivalents (che) divided by total net property, plant, and equipment (ppent) of firm *i* at the end of year *t*.

$\sigma(CFO)_{it}$ = standard deviation of *CFO* over years *t-4* through *t*, requiring at least three non-missing values of *CFO*.

$\sigma(Invest)_{it}$ = standard deviation of *Invest* over years *t-4* through *t*, requiring at least three non-missing values of *Invest*. *Invest* equals the sum of research and development expenses (xrd), capital expenditures (capx), and acquisitions (acq) less sales of property, plant, and equipment (sppe) of firm *i* in year *t*, scaled by total assets (at) of firm *i* at the end of year *t-1*.

$\sigma(Sales)_{it}$ = standard deviation of *Sales* over years *t-4* through *t*, requiring at least three non-missing values of *Sales*.

$TANG_{it}$ = total net property, plant, and equipment (ppent) of firm *i* at the end of year *t*, scaled by total assets (at) of firm *i* at the end of year *t-1*.

$ZScore_{it}$ = measure of financial distress computed as 3.3*(oiadp/at) + 1.0*(sale/at) + 1.4*(re/at) + 1.2*(wcap/at) + 0.6*((prcc_f*csho)/lt)

CHAPTER 1

INTRODUCTION

This study examines whether and to what extent the U.S. tax and financial reporting treatment of foreign earnings is associated with U.S. multinational companies' (MNCs) payout policies. U.S. non-financial companies held a record level of $1.45 trillion in cash at the end of 2012, with an estimated $840 billion held overseas (Moody's 2013). The U.S. tax and financial reporting treatment of foreign earnings is often claimed to be a driver of these large foreign cash balances and a reason foreign profits cannot be distributed to shareholders (e.g. Jannarone and Silver [2009], Casselman and Lahart [2011], Winkler [2011], Zweig [2011], Denning [2012], Murphy [2012]). However, lawmakers and the financial press have countered these claims by drawing attention to structures and transactions used by U.S. MNCs to bring their foreign earnings back to the U.S. without triggering U.S. taxes (e.g. Bulkeley [2007], Drucker [2010], U.S. PSI [2012], Linebaugh [2013]).[1] In addition, U.S. MNCs can issue debt to fund payouts to shareholders. For example, Apple Inc. completed a $17 billion bond offering in 2013 as part of a plan to return capital to shareholders because much of its cash is held overseas (Apple [2013a]; Burne and Cherney [2013]). At the time of the bond offering, Apple held $144.7 billion in cash, cash equivalents, and marketable securities, with $102.3 billion held by its foreign subsidiaries (Apple [2013b]). If U.S. MNCs are able to obtain the economic use of their foreign profits without incurring U.S. taxes, then the U.S. tax and financial reporting treatment of foreign earnings would not prevent U.S. MNCs from distributing their foreign profits to shareholders.

In light of these conflicting claims, I provide empirical evidence regarding the association between the U.S. tax and financial reporting treatment of foreign earnings and

[1] In Appendix A, I explain two examples of strategies that U.S. MNCs have used to transfer foreign profits to the U.S. without incurring U.S. taxes.

the probability a U.S. MNC pays a dividend or repurchases shares, the level of dividends and repurchases, and the relative use of repurchases and dividends to make distributions to shareholders. Understanding how the U.S. tax and financial reporting treatment of foreign earnings affects U.S. MNCs' payout policies is important because a firm's payout policy interacts with many of its investment and financing decisions (Allen and Michaely [2003]). In addition, as lawmakers consider potential reforms to the U.S. tax system, it is important to understand how the current system impacts investment in the U.S. One way the foreign profits of U.S. MNCs could be reinvested in the U.S. is by distributing them to shareholders, who could then invest the proceeds in other U.S. assets.

The U.S. government taxes the earnings of foreign subsidiaries of U.S. MNCs when those earnings are repatriated (i.e. paid as a dividend) to the U.S. parent.[2] As a result, some U.S. MNCs have tax incentives to delay the repatriation of their foreign earnings in order to defer payment of the U.S. tax. In addition, some firms have financial reporting incentives to keep foreign earnings reinvested abroad. By designating foreign earnings as permanently reinvested,[3] firms are able to report higher after-tax net income in their financial statements. Existing research provides evidence the U.S. tax and financial reporting treatment of foreign earnings impacts some U.S. MNCs' repatriation decisions (Hines and Hubbard [1990]; Altshuler and Newlon [1993]; Desai, Foley, and Hines [2001]; Desai, Foley, and Hines [2007]; Graham, Hanlon, and Shevlin [2011]; Blouin, Krull, and Robinson [2012]).

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2 Throughout the remainder of the paper, I will use the term "dividend" when referring to dividends paid by a U.S. parent to its shareholders, and "repatriation" when referring to dividends paid (or deemed paid) by a foreign subsidiary to its U.S. parent.

3 FASB ASC 740-30-25-17 (hereafter referred to as the Indefinite Reversal Exception) defines permanently reinvested earnings as the earnings of foreign subsidiaries that have been invested abroad indefinitely or will be remitted in a tax-free liquidation.

The U.S. tax and financial reporting treatment of foreign earnings has implications for understanding firms' payout policies because worldwide earnings are an important driver of payouts to shareholders (e.g. Lintner [1956]; Fama and Babiak [1968]; DeAngelo, DeAngelo, and Skinner [2004]; Skinner [2008]). If the U.S. tax and financial reporting treatment of foreign earnings discourages some U.S. MNCs from repatriating their foreign profits, those profits are not necessarily available to U.S. parents to distribute to shareholders. Thus, I hypothesize that the U.S. tax cost of repatriations affects U.S. MNCs' distributions to shareholders by weakening the otherwise strong, positive association between foreign profits and dividends, share repurchases, and total payouts (dividends plus share repurchases). If, however, U.S. MNCs are able to obtain the economic use of their foreign profits without triggering U.S. taxes, the U.S. tax and financial reporting treatment of foreign earnings would not discourage U.S. MNCs from distributing their foreign profits to shareholders.

I also examine whether U.S. MNCs facing significant potential U.S. repatriation tax costs utilize repurchases to a greater extent than dividends to make distributions to shareholders. Repurchases are a more flexible payout vehicle than dividends (Brav, Graham, Harvey, and Michaely [2005]). Dividend payments are accompanied by an implicit commitment to similar, recurring future dividends, but repurchases do not implicitly commit the firm to future payouts.[4] If U.S. MNCs undertake tax planning strategies that allow them to minimize the U.S. repatriation tax cost or achieve *de facto* repatriations of foreign profits without triggering U.S. taxes, then the flexibility of repurchases potentially enables U.S. MNCs to better match the timing of payouts to shareholders with tax-efficient repatriations.

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[4] Special dividends, like repurchases, offer more flexibility than regular dividends. Special dividends were relatively rare during my sample period. See footnote 20 for additional discussion.

I test my hypotheses using a sample of U.S. MNCs over the period 1987 through 2004. The sample period ends in 2004 to avoid any possible impact of the temporary repatriation tax holiday provided by the American Jobs Creation Act of 2004 (AJCA).[5] Several studies have examined how firms used funds repatriated under the AJCA (Blouin and Krull [2009]; Graham, Hanlon, and Shevlin [2010]; Dharmapala, Foley, and Forbes [2011]; Faulkender and Petersen [2012]; Brennan [2013]) and have reached differing conclusions about the extent to which repatriations under the AJCA led to increases in shareholder payouts.[6] My objective is to understand whether, in the absence of a temporary repatriation tax holiday, the U.S. tax and financial reporting treatment of foreign earnings discourages U.S. MNCs from distributing their foreign profits to shareholders, or whether, on average, U.S. MNCs are able to obtain the economic use of their foreign profits without incurring U.S. repatriation taxes to fund shareholder distributions. I also examine the post-AJCA period in sensitivity analyses.

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[5] The AJCA effectively reduced the maximum tax rate on repatriations from 35 percent to 5.25 percent during the years 2004 and 2005 to encourage U.S. MNCs to bring funds held in foreign subsidiaries back to the U.S. While the AJCA allowed firms to take the 85 percent dividends received deduction on eligible repatriations in either 2004 or 2005, Redmiles (2008) finds that less than 8 percent of firms that claimed the special deduction did so in 2004.

[6] While Blouin and Krull (2009), Graham, Hanlon, and Shevlin (2010), and Dharmapala, Foley, and Forbes (2011) conclude U.S. MNCs significantly increased payouts to shareholders as a result of the AJCA, Faulkender and Petersen (2012) conclude the AJCA had minimal impact on distributions to shareholders. Faulkender and Petersen (2012) attribute the differences in their results and the results in Blouin and Krull (2009) and Dharmapala et al. (2011) to differences in how sample firms are classified into treated and untreated groups in the difference-in-difference research designs used in the three studies. Faulkender and Petersen (2012) describe the sample as consisting of three groups of firms: (A) firms with a low probability of repatriating under the AJCA, because, for example, they do not have foreign earnings in low-tax jurisdictions, (B) firms that could have repatriated low-tax foreign earnings under the AJCA but chose not to do so, and (C) firms that chose to repatriate foreign earnings under the AJCA. They characterize the Blouin and Krull (2009) research design as comparing Group C to Groups A and B, and the Dharmapala et al. (2011) research design as comparing Groups B and C to Group A. Faulkender and Petersen (2012) assert, however, that in order to test whether, conditional on being able to take advantage of the AJCA tax holiday, firms increase shareholder payouts if they repatriate under the AJCA, it is necessary to first differentiate Groups B and C from Group A, and then to differentiate Group C from Group B.

To test my first hypothesis, I regress measures of payout on domestic and foreign earnings, controlling for other determinants of payouts to shareholders. I interact an indicator variable that identifies U.S. MNCs facing significant potential U.S. repatriation tax costs, and thus with tax and/or financial reporting incentives to keep their foreign profits reinvested abroad, with foreign earnings. The first hypothesis predicts that the effect of foreign earnings on distributions to shareholders differs for U.S. MNCs with and without tax and/or financial reporting incentives to keep their foreign profits reinvested abroad.

To test my second hypothesis, I regress a measure of U.S. MNCs' relative use of repurchases and dividends on an indicator variable that identifies U.S. MNCs facing significant potential U.S. repatriation tax costs, controlling for other determinants of shareholder payouts. The second hypothesis predicts that U.S. MNCs with tax and/or financial reporting incentives to keep their foreign profits reinvested abroad make more extensive use of repurchases relative to dividends when making distributions to shareholders.

I find evidence the U.S. tax and financial reporting treatment of foreign earnings influences the dividend payments, but not share repurchases, of U.S. MNCs by weakening the otherwise strong, positive association between foreign earnings and payouts. While dividend payments are increasing in foreign earnings for U.S. MNCs that do not face significant potential U.S. repatriation tax costs, dividend payments do not change with foreign earnings for U.S MNCs that have tax and/or financial reporting incentives to retain their foreign earnings abroad. In contrast, the relation between foreign earnings and share repurchases does not differ for U.S. MNCs with and without tax and/or financial reporting incentives to retain foreign earnings abroad. When I examine the total payout of U.S. MNCs, I find the U.S. tax and financial reporting treatment of foreign earnings weakens the positive association between foreign earnings

and the probability of payout (dividend and/or repurchase), but the effect on the level of total payout (dividends plus repurchases) is not statistically significant.

I also find that the level of repurchases relative to dividends is higher for U.S. MNCs with tax and/or financial reporting incentives to retain their foreign earnings abroad, which is consistent with U.S. MNCs facing significant potential U.S. repatriation tax costs making more extensive use of repurchases relative to dividends to make distributions to shareholders. One possible explanation for this result is that the flexibility of repurchases allows U.S. MNCs to better match the timing of distributions to shareholders with tax-efficient or *de facto* repatriations of foreign profits achieved through tax planning strategies.

The findings that dividend payments do not change with foreign earnings for U.S MNCs facing significant potential U.S. repatriation taxes and that these U.S. MNCs make more extensive use of repurchases relative to dividends when making distributions to shareholders, suggest the U.S. tax and financial reporting treatment of foreign earnings creates frictions in U.S. MNCs' internal capital markets. Thus, in additional analyses, I examine the association between the U.S. tax and financial reporting treatment of foreign earnings and U.S. MNCs' domestic and foreign investment.[7]

The results of the investment analyses provide some evidence consistent with the U.S. tax and financial reporting treatment of foreign earnings generating frictions in U.S. MNCs' internal capital markets. I find the U.S. tax and financial reporting treatment of foreign earnings is associated with an increased sensitivity of domestic investment to domestic cash flows. However, I do not find an effect on the responsiveness of domestic investment to proxies for domestic investment opportunities. In addition, I find some evidence the U.S. tax and financial reporting treatment of foreign earnings is associated

[7] I utilize geographic segment reporting data in these tests. I discuss the limitations of using geographic segment reporting data in Chapter 5.3.3.

with foreign over-investment. However, the foreign over-investment results do not necessarily indicate U.S. MNCs facing significant potential U.S. repatriation tax costs make suboptimal investment decisions abroad. I do not find consistent evidence of a relation with domestic under-investment.

This study makes several contributions to the literature. First, I contribute to our understanding of the effects of the U.S. tax and financial reporting treatment of foreign earnings on U.S. MNCs' decisions. Prior research has found the U.S. tax and financial reporting treatment of foreign earnings is associated with higher levels of cash holdings (Foley, Hartzell, Titman, and Twite [2007]), higher likelihood of issuing domestic debt (Albring [2006]), and decreased profitability of foreign acquisitions (Edwards, Kravet, and Wilson [2013]; Hanlon, Lester, and Verdi [2012]). I add to this literature by documenting the impact of the U.S. tax and financial reporting treatment of foreign earnings on U.S. MNCs' payout policies, which is important because payout policy interacts with firms' other investing and financing decisions. Understanding how the U.S. tax and financial reporting treatment of foreign earnings affects U.S. MNCs' decisions is important as policymakers consider reforms to the current U.S. worldwide tax system.

Second, I contribute to the literature that examines the determinants of firms' payout policies. This study provides evidence of the importance of the U.S. tax and financial reporting treatment of foreign earnings in explaining the incidence, amount, and form of payouts to shareholders by U.S. MNCs. In addition, while repurchases have traditionally been viewed as a vehicle for distributing transitory earnings (e.g. Guay and Harford [2000]; Jagannathan, Stephens, and Weisbach [2000]), research indicates repurchases have begun to be used to distribute permanent earnings (e.g. Dittmar and Dittmar [2004]; DeAngelo, DeAngelo, and Skinner [2008]; Skinner [2008].) In light of the increasing globalization of U.S. firms and decreases in foreign tax rates relative to the U.S. statutory tax rate, my findings suggest the U.S. tax and financial reporting treatment

of foreign earnings could be contributing to this shift. Finally, because repurchases provide managers more flexibility in their payout policy than do regular dividends, they are potentially less effective than regular dividends at mitigating the agency costs of free cash flow (Allen and Michaely [2003]; DeAngelo et al. [2008]). Thus, my findings suggest it is possible the U.S. tax and financial reporting treatment of foreign earnings fosters agency costs of free cash flow, which is consistent with the evidence in Edwards et al. (2013) and Hanlon et al. (2012) that the U.S. tax cost of repatriating foreign earnings is associated with decreased profitability of foreign acquisitions.

CHAPTER 2

RELATED LITERATURE AND HYPOTHESIS DEVELOPMENT

2.1 U.S. Tax and Financial Reporting Treatment of Foreign Earnings

Under the U.S. worldwide tax system, all income of a U.S. corporation is subject to U.S. taxation, regardless of where the income is earned. In general, the U.S. tax on the foreign earnings of a U.S. corporation is deferred until those earnings are repatriated.[8] When foreign earnings are repatriated, they are taxed at the same tax rate as U.S. domestic income. Foreign earnings have already been taxed in the country in which they were earned, so the U.S. grants foreign tax credits for foreign taxes paid to mitigate double taxation.[9] The foreign tax credit is limited to the amount of tax that would have been paid if the income had been earned in the U.S. The foreign tax credit limitation is calculated on a worldwide basis, which enables U.S. MNCs to use excess credits associated with repatriations of profits earned by foreign subsidiaries in high-tax jurisdictions to reduce the U.S. tax due on repatriations of profits earned in low-tax jurisdictions.[10] As a result, U.S. corporations with average foreign tax rates below the

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[8] Deferral is not provided if (1) if the foreign source income is subject to the provisions of Subpart F or (2) the foreign operations of a U.S. MNC are conducted through a branch. The Subpart F provisions apply to income generated from passive assets. Branches are not organized as legal entities separate from their U.S. parents, and are used primarily in the banking and insurance industries.

[9] The foreign tax credit has two components. A direct credit is provided for foreign taxes paid directly on income as it is received by the U.S. parent, such as withholding taxes imposed by the source country. An indirect or deemed-paid credit is provided for foreign income taxes paid on the income that is distributed to the U.S. parent.

[10] Separate foreign tax credit limitations must be calculated for different "baskets," or types, of income. The Tax Reform Act of 1986 required separate limitation calculations for nine baskets of income. The AJCA reduced this to two baskets (active and passive income).

U.S. tax rate generally owe U.S. tax upon repatriation of foreign earnings at a rate approximately equal to the difference between the foreign and U.S. tax rates. [11]

The U.S. tax law discussed above determines when firms must pay the U.S. tax due on their foreign earnings. U.S. financial reporting rules determine when firms must record this U.S. tax as income tax expense in their financial statements. In general, for financial reporting purposes, U.S. firms are required to record deferred tax expense for the estimated U.S. tax that will be due upon the repatriation of foreign profits in the period the foreign profits are earned. However, the Indefinite Reversal Exception provides an exception for foreign earnings that are designated as "permanently reinvested" abroad.[12] By designating foreign earnings as permanently reinvested, U.S. firms with average foreign tax rates below the U.S. tax rate are able to report lower tax expense in their financial statements because they avoid recording the deferred tax expense associated with their foreign earnings. By not recording this deferred tax expense, firms are able to report higher after-tax net income.

2.2 Impact of the U.S. Taxation of Foreign Earnings on Firms' Repatriation Decisions

Because payment of the U.S. tax on U.S. MNCs' foreign earnings is deferred until the earnings are repatriated, and the Indefinite Reversal Exception allows firms to avoid recording the deferred tax expense associated with permanently reinvested earnings in

[11] U.S. corporations with average foreign tax rates above the statutory U.S. tax rate are generally in an excess credit position and do not owe U.S. tax upon the repatriation of earnings from foreign subsidiaries. These excess foreign tax credits may be carried forward (back) to offset (recover) taxes due (paid) in future (prior) years. Currently, excess foreign tax credits may be carried back one year and carried forward ten years. Prior to the AJCA, the carryback period was two years and the carryforward period was five years.

[12] A U.S. MNC's assertion that foreign earnings will be indefinitely reinvested abroad should be supported by specific plans for reinvestment in its foreign operations. A U.S. MNC may designate all or only a portion of its foreign earnings as indefinitely reinvested. The Indefinite Reversal Exception requires a U.S. MNC to continuously assert that foreign earnings are indefinitely reinvested, and thus it is possible that changes in facts and circumstances could lead to a change in the indefinitely reinvested designation.

their financial statements, the U.S. tax and financial reporting treatment of foreign earnings potentially discourages some firms from repatriating their foreign profits and encourages them to keep their foreign profits reinvested overseas. Numerous studies in accounting, finance, and economics have examined the impact of the U.S. taxation of foreign earnings on U.S. MNCs' repatriation decisions.

Hartman (1985) laid the foundation for much of the theoretical work that has examined the implications of the U.S. worldwide tax system for firms' investment decisions. Hartman (1985) considers the marginal investment decision of a mature foreign subsidiary that has one dollar of after-foreign tax earnings that it can either reinvest or repatriate to its U.S. parent and shows that the foreign subsidiary should reinvest (repatriate) if the after-foreign-tax rate of return is greater (less) than the domestic after-tax rate of return. Thus, Hartman (1985) concludes the U.S foreign subsidiary should invest abroad until the available after-foreign-tax return equals the available domestic after-tax return, and therefore the U.S. tax on foreign earnings should be irrelevant to the decision to reinvest or repatriate.

Contrary to the theoretical results of Hartman (1985), empirical research examining the repatriation behavior of U.S. MNCs finds that repatriations are sensitive to the U.S. tax and financial reporting treatment of foreign earnings. Based upon a survey of tax executives, Graham et al. (2011) report that U.S. cash and financial accounting expense deferral are both important factors in the decision to reinvest foreign earnings. In addition, prior studies have found a negative association between repatriations from foreign subsidiaries of U.S. MNCs and the estimated U.S. repatriation tax cost (Hines and Hubbard [1990]; Altshuler and Newlon [1993]; Desai et al. [2001]; Desai et al. [2007]) and between repatriations and financial reporting incentives (Blouin et al. [2012]).

Several important assumptions underlie the Hartman (1985) tax indifference result. First, in the Hartman (1985) model, the choice set of the foreign subsidiary is limited to reinvestment in its own operations or repatriation to the U.S. parent. Other

alternatives, such as the option to invest its active earnings in financial assets, are not considered.[13] Several papers analyze conditions under which it is optimal for a foreign subsidiary to reinvest its profits in financial assets abroad rather than repatriate to the U.S. parent (Hines and Rice [1994]; Altshuler and Grubert [2002]; DeWaegenaere and Sansing [2008]). Foley et al. (2007) provide empirical evidence that firms facing higher tax costs of repatriating earnings hold more cash abroad, which suggests U.S. MNCs do invest foreign earnings in financial assets rather than repatriate.

The Hartman (1985) model also assumes the U.S. repatriation tax is an unavoidable, fixed cost. Subsequent theoretical research has demonstrated, however, that variation over time in the U.S. tax cost of repatriations due to, for example, changes in the U.S. parent's foreign tax credit position (Altshuler and Fulghieri [1994]) or the arrival of a repatriation tax holiday (DeWaegenaere and Sansing [2008]; Blouin and Krull [2009]) affects U.S. MNCs' repatriation decisions. Studies of firms' responses to the temporary repatriation holiday under the AJCA provide evidence firms react to transitory variation in the U.S. tax cost of repatriating foreign earnings (Redmiles [2008]; Blouin and Krull [2009]; Graham et al. [2010]).

Altshuler, Newlon, and Randolph (1995) attempt to differentiate the effects of permanent and transitory components of the U.S. tax cost of repatriations on U.S. MNCs' repatriation decisions.[14] Altshuler et al. (1995) argue the tax cost of repatriation can vary over time for a particular firm, and that it is this variation in the repatriation tax cost over time that affects the firm's incentive to repatriate its foreign earnings, rather than the repatriation tax itself. Consistent with their predictions, Altshuler et al. (1995) find the

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[13] Even though the returns on passive investments are taxed by the U.S. as they are earned under Subpart F, investing in financial assets defers the U.S. tax on the foreign earnings that constitute the investment principal.

[14] Altshuler et al. (1995) characterize the permanent component of the U.S. repatriation tax cost as the normal or expected future tax cost, and the transitory component as the difference between the current tax cost and the permanent tax cost.

transitory tax cost is negatively associated with repatriations, but the permanent tax cost does not affect repatriations. Thus, Altshuler et al. (1995) conclude it is not the repatriation tax itself that affects firms' repatriation behavior, but rather the current level of the tax cost relative to its normal level.

Thus, while early theoretical analysis suggests repatriations of foreign earnings should be insensitive to the U.S. tax cost of repatriations (Hartman [1985]), empirical research provides evidence repatriations are sensitive to the U.S. tax and financial reporting costs of repatriations. Since the U.S. tax and financial reporting treatment of foreign earnings affects U.S. MNCs' internal capital markets, it potentially has implications for firms' investment and financing decisions.

2.3 Implications of the U.S. Taxation of Foreign Earnings for Firms' Payout Policies

A substantial body of research in finance has been devoted to understanding firms' payout policies.[15] Understanding payout policy is important because payout policy is related to many of the investment and financing decisions made by firms (Allen and Michaely [2003]). Optimal payout policy will distribute the full present value of free cash flow generated by investment policy. A comprehensive theory of payout policy must explain when firms make payouts, how much they pay out, and the form of those payouts (DeAngelo et al. [2008]).

Prior research that has investigated the determinants of whether and how much firms distribute to shareholders finds earnings are an important driver of payouts.[16] Most

[15] Surveys of the payout policy literature are provided in Allen and Michaely (2003); DeAngelo et al. (2008); and Farre-Mensa, Michaely, and Schmalz (2014).

[16] Aggregate earnings are positively associated with aggregate dividends (DeAngelo et al. [2004]) and aggregate repurchases (Dittmar and Dittmar [2004]). At the firm-level, earnings are positively associated with the propensity to pay a dividend (Fama and French [2001]; DeAngelo, DeAngelo, and Stulz [2006]), the propensity to distribute net cash to shareholders (Grullon, Paye, Underwood, and Weston [2011]), the

studies examine the relationship between firms' overall, worldwide profitability and payouts to shareholders. (Hines [1996] is one notable exception and is discussed below.) If, however, the U.S. tax and financial reporting treatment of foreign earnings discourages some U.S. MNCs from repatriating their foreign earnings, these foreign earnings are not necessarily available to the U.S. parent to distribute to shareholders. Thus, when analyzing the determinants of firms' payout policies, it is important to consider the impact of the U.S. tax and financial reporting treatment of foreign earnings on payouts to shareholders.

U.S. MNCs with an average foreign effective tax rate (FETR) below the U.S. statutory tax rate face potential U.S. repatriation tax liabilities, and therefore have tax and/or financial reporting incentives to keep their foreign earnings reinvested overseas. As a result, I expect the link between foreign profits and distributions to shareholders will be weaker for these firms. I expect this to be true for dividends, repurchases, and total payouts (dividends plus repurchases). This leads to my first hypothesis, stated in the alternative:

H1: The positive association between foreign earnings and distributions to shareholders is reduced when a firm's average foreign tax rate is below the U.S. statutory tax rate.

There are several reasons why I may not obtain results consistent with this hypothesis. First, Hines (1996) considers the differential impact of domestic and foreign earnings on the dividend payouts of a sample of U.S. MNCs for the year 1986 and does not find a significant association between the estimated U.S. tax cost of repatriations and the level of dividends paid. Hines (1996) does not consider, however, whether the U.S.

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level of dividends paid (Lintner [1956]); Fama and Babiak [1968]; Fama and French [2002]), and the level of repurchases (Skinner [2008]).

repatriation tax cost affects the association between foreign profits and dividend payments.

Second, U.S. MNCs have opportunities to engage in tax planning to minimize or even avoid the U.S. repatriation tax on foreign earnings. Edward Kleinbard, a law professor at the University of Southern California, asserts, "Sophisticated U.S. companies are routinely repatriating hundreds of billions of dollars in foreign earnings and paying trivially small U.S. taxes on those repatriations." (Drucker [2010]). Two examples of strategies that have enabled some U.S. MNCs to achieve the economic equivalent of tax-free repatriations are explained in Appendix A. Also, Altshuler and Grubert (2002) illustrate analytically several strategies U.S. MNCs might use to extract cash from low-tax foreign subsidiaries without triggering the U.S. repatriation tax. One of these strategies is for the foreign subsidiary to invest in passive assets, which the U.S. parent can borrow against. Microsoft and Apple are examples of companies that have recently issued bonds with the stated intention to use some of the proceeds to make distributions to shareholders because much of their cash is held abroad (Maheshwari [2010]; Apple [2013a]; Burne and Cherney [2013]). Thus, if U.S. MNCs are able to obtain the economic use of the earnings of their foreign subsidiaries without incurring the U.S. repatriation tax, these earnings would be available to the U.S. parent to distribute to shareholders.

Finally, prior research linking distributions to shareholders with repatriations from foreign subsidiaries have produced somewhat mixed results. While Hines and Hubbard (1990) find a strong, positive association between a U.S. parents' dividend payments to shareholders and repatriations from its foreign subsidiaries, Altshuler and Newlon (1993) find this association disappears when parent fixed effects are included. Altshuler and Newlon (1993) infer the results in Hines and Hubbard (1990) could have been due to omitted parent characteristics. Similarly, when Desai et al. (2007) examine the effect of

U.S. parents' dividend payments to shareholders on repatriations, the results are sensitive to the estimation method employed.

While these studies considered the impact of U.S. MNCs' dividend policy on repatriations from their foreign subsidiaries, another set of studies examines the effect of repatriations under the AJCA on firms' payouts to shareholders. Graham et al. (2010), Blouin and Krull (2009), and Dharmapala et al. (2011) find that repatriations under the AJCA were associated with increased payouts to shareholders, but Faulkender and Petersen (2012) find insignificant or minimal increases in distributions to shareholders.[17] Brennan (2013) also concludes that the degree to which funds repatriated under the AJCA were distributed to shareholders was much lower than indicated by the estimates obtained in Blouin and Krull (2009) and Dharmapala et al. (2011). Further, Blouin (2011) notes that unless a firm was already planning to repatriate in the near term, the AJCA would have had little impact on its decision to repatriate. This observation is consistent with the findings of Altshuler et al. (1995) that repatriation decisions are sensitive to the transitory component of the tax cost of repatriations, but makes it difficult to infer how the normal component of the U.S. repatriation tax cost affects payouts to shareholders.

The U.S. tax and financial reporting treatment of foreign earnings also has potential implications for the form of payouts to shareholders. Firms seek to maintain a stable or increasing stream of dividend payments and are reluctant to cut dividends (Lintner [1956]; Brav et al. [2005]). In a survey of financial executives, Brav et al. (2005) report 90 (94) percent of their respondents from dividend-paying firms agree or strongly agree that they try to maintain a smooth dividend stream from year to year (avoid reducing dividends). Dividend reductions are associated with significant declines

[17] Differences in the research designs used in the Blouin and Krull (2009), Dharmapala et al. (2011), and Faulkender and Petersen (2012) studies are discussed in footnote 6.

in a firm's stock price (e.g. Aharony and Swary [1980]; Michaely, Thaler, and Womack [1995]). As a result, dividends tend to be used to distribute permanent cash flows (Guay and Harford [2000]; Jagannathan et al. [2000]).

Repurchases, on the other hand, are more volatile than dividends (Allen and Michaely [2003]; DeAngelo et al. [2008]). Brav et al. (2005) find that managers view repurchases as more flexible than dividends. Unlike dividends, repurchases do not implicitly commit the firm to future payouts, so repurchases are useful for distributing transitory cash flows (Guay and Harford [2000]; Jagannathan et al. [2000]).

Because repurchases offer greater flexibility than dividends, I expect U.S. MNCs facing significant potential U.S. repatriation tax costs to utilize repurchases to a greater extent than dividends when making distributions to shareholders. If U.S. MNCs undertake tax planning strategies to achieve tax efficient or *de facto* repatriations, then using repurchases rather than dividends to make payouts to shareholders will better enable a U.S. MNC to match the timing of payouts to shareholders with tax efficient or *de facto* repatriations. This leads to my second hypothesis:

H2: The level of repurchases relative to the level of dividends is higher when a firm's average foreign effective tax rate is below the U.S. statutory tax rate.

CHAPTER 3

SAMPLE AND RESEARCH DESIGN

3.1 Sample Selection

The sample selection procedure is described in Table C1, Panel A. The sample consists of U.S. MNCs covered in the Compustat and Center for Research in Security Prices (CRSP) files between 1987 and 2004. The sample period begins in 1987 because of limitations on the availability of foreign pretax income data on Compustat and ends in 2004 to avoid the effects of the AJCA repatriation tax holiday.[18] To identify U.S. MNCs, I require firms to be incorporated in the U.S. and to have non-missing, non-zero values of foreign pretax income reported on Compustat.[19] Consistent with prior payout policy research, I exclude financial institutions and public utilities (Standard Industrial Classification codes 4900-4949 and 6000-6999) because these are regulated industries. Requiring non-missing values of the regression variables results in a sample of 12,444 firm-year observations for the tests of H1 (the Full Sample). As explained below, the tests of H2 require U.S. MNCs to have made a distribution to shareholders during the year, resulting in a sample of 8,412 firm-year observations for the tests of H2 (the Payout Sample).

Table C1, Panel B presents the number of observations for each year of the sample period. The number of U.S. MNCs increases over the sample period, which is consistent with the increasing globalization of U.S. firms. Panel B also provides the

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[18] I examine the post-AJCA period in sensitivity analyses. The results for the post-AJCA period are discussed in Chapter 5.1.3.

[19] The Compustat/CRSP universe of U.S. firms can be thought of as consisting of three groups of firms. Group 1 includes firms without foreign operations. Group 2 includes firms with relatively high-tax foreign operations. Group 3 includes firms with relatively low-tax foreign operations. In order for the U.S. tax and financial reporting treatment of foreign earnings to have the opportunity to affect a firm's payout policy, the firm must have foreign operations. Thus, my tests compare firms in Group 2 to firms in Group 3.

number and percentage of sample observations with payouts (dividends or repurchases), dividends, and repurchases in each year. The percentage of U.S. MNCs paying dividends declines over the sample period, which is consistent with prior research that has documented a decline in the propensity of U.S. firms to pay dividends (e.g. Fama and French [2001]; DeAngelo et al. [2006]). The incidence of repurchases does not exhibit an overall trend during the sample period.

3.2 Research Design to Test H1

H1 predicts that the positive association between foreign earnings and distributions to shareholders is reduced when a U.S. MNC faces significant potential U.S. repatriation tax costs. I investigate H1 in two ways. First, I examine whether facing significant potential U.S. repatriation tax costs reduces the otherwise positive association between foreign earnings and the incidence of payouts to shareholders. Specifically, I estimate the following logit regression on the Full Sample:

$$Prob(DistInd_{it} = 1) = F(a_0 + \beta_1 eUS_{it} + \beta_2 eFOR_{it} + \beta_3 LowFETR_{it} + \beta_4 eFOR_{it} * LowFETR_{it} + \beta_5 eUS_{it} * LowFETR_{it} + \sum \beta_j Controls_{it} + \sum \beta_k YearInd_{it} + \varepsilon_{it}) \quad (1)$$

where the dependent variable is either *DivInd*, *RepInd*, or *PayInd*, which are indicator variables equal to one if firm *i* makes a distribution to shareholders in year *t*. Specifically, *DivInd* equals one if *Dividends* is positive, and zero otherwise, where *Dividends* is dividends paid to common shareholders.[20] *RepInd* equals one if *Repurchases* is positive, and zero otherwise. I measure *Repurchases* as purchases of

[20] This measure captures regular and special dividends paid to common shareholders. Although special dividends are an alternative to repurchases for making transitory cash distributions, I do not attempt to differentiate regular from special dividends because special dividends were rare during my sample period. To illustrate, DeAngelo, DeAngelo, and Skinner (2000) find that during the 1980s (1990s through 1995) only 2.2 (1.8) percent of NYSE dividend-paying firms paid special dividends, and special dividends accounted for only 0.2 (0.1) percent of all dividends paid by NYSE firms.

common and preferred stock by firm *i* in year *t* less any decrease in the redemption value of preferred stock from year *t-1* to *t* (Dittmar [2000]; Grullon and Michaely [2002]; Kahle [2002]).[21] *PayInd* captures whether firm *i* made any distribution to shareholders in year *t*, and equals one if either *Dividends* or *Repurchases* is positive, and zero otherwise.

The variables *eUS* and *eFOR* are domestic pre-tax income and foreign pre-tax income of firm *i* in year *t*, scaled by lagged total assets. I expect that the probability of making a distribution to shareholders will be in increasing in *eUS* and *eFOR* (Fama and French [2001]; DeAngelo et al. [2006]; Skinner [2008]; Grullon et al. [2011]).

The variable *LowFETR* identifies firm-years in which the U.S. tax and financial reporting treatment of foreign earnings creates disincentives to repatriate foreign profits. *LowFETR5* (*LowFETR10*) is an indicator variable equal to one if firm *i*'s three-year foreign current effective tax rate is five (ten) or more percentage points below the U.S. statutory tax rate in year *t*, and zero otherwise. I require a five (or ten) percentage point differential to identify U.S. MNCs that face significant potential U.S. repatriation tax costs.[22] Because foreign tax credit calculations are based on a foreign subsidiary's pool of undistributed earnings and profits, I use a multi-year measure of the foreign current effective tax rate to better approximate a U.S. MNC's overall foreign tax credit position, and thus its normal or expected U.S. repatriation tax cost (Gentry [1995]; Klassen and Laplante [2012]). H1 predicts a negative coefficient on the interaction of *LowFETR* with *eFOR* ($\beta_4 < 0$).

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[21] Banyi, Dyl, and Kahle (2008) examine the accuracy of estimates of share repurchases and conclude this measure is the most accurate of the CRSP- and Compustat-based measures they consider. However, this measure potentially overestimates the dollar volume of cash payouts to investors by, for example, failing to adjust for repurchases undertaken to offset share issuance from stock option exercises. I include the variable *Options* in the vector of controls to proxy for firms' anti-dilution incentives.

[22] I acknowledge that the specific five (or ten) percentage point differential used to identify significant potential U.S. repatriation tax costs is arbitrary. In Chapter 5.1.1, I discuss results using alternative definitions of *LowFETR*.

I also include an interaction of *LowFETR* with *eUS* in Equation (1) as a falsification test of H1. I do not expect the U.S. tax and financial reporting treatment of foreign earnings to reduce the positive association between U.S. earnings and distributions to shareholders. Observing a negative coefficient on the interaction of *LowFETR* with *eFOR* ($\beta_4 < 0$) but not on the interaction of *LowFETR* with *eUS* ($\beta_5 \geq 0$) would be consistent with the negative coefficient on *eFOR*LowFETR* being associated with the U.S. tax and financial reporting treatment of foreign earnings rather than some other firm characteristic that differs between *LowFETR* = 0 and *LowFETR* = 1 firm-years and reduces the relation between earnings and distributions to shareholders.

Controls is a vector of control variables found in prior research to be associated with the propensity to pay a dividend or repurchase shares. Larger firms are more likely to make distributions to shareholders (Fama and French [2001], DeAngelo et al. [2006], Grullon et al. [2011]), so I include the natural logarithm of lagged total assets (*SIZE*) as a control for firm size. The annual percentage change in sales (*SGR*), lagged market-to-book ratio (*MTB*), and lagged capital expenditures scaled by total assets (*CAPEX*) are included to control for growth opportunities. Firms with greater growth opportunities are less likely to make distributions to shareholders (Fama and French [2001], DeAngelo et al. [2006], Grullon et al. [2011]). Because firms are more likely to make distributions to shareholders as they mature, I include firm age (*AGE*) and the lagged ratio of retained earnings to the book value of common equity (*RE/TE*) as controls for life-cycle stage (Grullon and Michaely [2002], DeAngelo et al. [2006], Grullon et al. [2011]). I also include the lagged leverage ratio (*LEV*) and expect highly-levered firms to be less likely to make distributions to shareholders (Dittmar [2000]; Lie [2005]). Because firms are expected to use distributions to shareholders to pay out excess cash, I control for lagged cash holdings (*CASH*) (Dittmar [2000], Lie [2000], DeAngelo et al. [2006]).[23]

[23] The variable *CASH* includes cash and short-term investments.

The remaining control variables have potentially differential effects on the probability of paying a dividend and the probability of repurchasing shares. First, the volatility of domestic earnings (*σ(eUS)*) and of foreign earnings (*σ(eFOR)*) are expected to have a stronger negative association with the probability of paying a dividend than of repurchasing shares (Jaganathan et al. [2000]; Grullon and Michaely [2002]; Lie [2005]). Second, I include the lagged value of the distribution indicator (*DistInd)* as a control, and I expect lagged *DivInd* to be positively associated with the probability of paying a dividend in year *t* (DeAngelo et al. [2006]). I include the firm's stock return over the current and prior year (*PastStockRet*) to control for firms' tendency to repurchase stock when it is undervalued (Stephens and Weisbach [1998], Brav et al. [2005]). Lastly, because prior research finds firms use repurchases to offset earnings-per-share dilution that results from stock option usage (Bens, Nagar, Skinner, and Wong [2003]), I follow Cuny, Martin, and Puthenpurackal (2009) and use the annual percentage change in total diluted shares outstanding as if no repurchases were made during the year (*Options*) to proxy for anti-dilution incentives. I expect *Options* to be positively associated with the probability of repurchasing shares.

Complete variable definitions are provided in the List of Abbreviations. Equation (1) also includes year fixed effects (*YearInd*). All continuous variables are winsorized at the 1st and 99th percentiles. I report robust standard errors clustered by firm.

In the second approach to testing H1, I examine whether facing significant potential U.S. repatriation tax costs reduces the otherwise positive association between foreign earnings and the level of payouts to shareholders. I estimate the following Tobit regression on the Full Sample:

$$DistLev_{it} = a_0 + \beta_1 eUS_{it} + \beta_2 eFOR_{it} + \beta_3 LowFETR_{it} + \beta_4 eFOR_{it} * LowFETR_{it} + \beta_5 eUS_{it} * LowFETR_{it} + \sum \beta_j Controls_{it} + \sum \beta_k YearInd_{it} + \varepsilon_{it} \quad (2)$$

where the dependent variable is firm *i*'s level of dividends (*DivLev*), repurchases (*RepLev*), or total payout (*PayLev*). Specifically, *DivLev* is *Dividends* scaled by lagged total assets, *RepLev* is *Repurchases* scaled by lagged total assets, and *PayLev* is the sum of *Dividends* and *Repurchases* scaled by lagged total assets. I use a Tobit model because *DistLev* must be greater than or equal to zero. Values of *DistLev* equal to zero do not represent censored data points, but rather represent corner solution outcomes. While the Tobit model was developed to address the problem of data censoring, it is also useful for examining corner solution models (Wooldridge [2002], pg. 518-527). Fenn and Liang (2001) and Cuny et al. (2009) are two examples of studies that have used Tobit regressions to examine determinants of firms' payouts to shareholders. The control variables in Equation (2) are identical to those included in Equation (1), except Equation (2) includes the lagged value of *DistLev* rather than the lagged value of *DistInd*. H1 predicts *LowFETR* will weaken the otherwise strong, positive association between foreign earnings and the level of shareholder distributions ($\beta_4 < 0$).

3.3 Research Design to Test H2

To test the prediction in H2 that the U.S. tax and financial reporting treatment of foreign earnings is associated with the form of payout, I estimate the following OLS regression on the Payout Sample:

$$RepMix_{it} = a_0 + \beta_1 eUS_{it} + \beta_2 eFOR_{it} + \beta_3 LowFETR_{it} + \sum \beta_j Controls_{it} + \sum \beta_k YearInd_{it} + \varepsilon_{it} \quad (3)$$

where the dependent variable *RepMix* captures the firm's relative use of repurchases and dividends. Specifically, *RepMix* is the difference between *Repurchases* and *Dividends*, scaled by lagged total assets, and is analogous to a payout mix variable used in Barclay, Holderness, and Sheehan (2009). Higher values of *RepMix* correspond to more extensive

use of repurchases relative to dividends.[24] Consistent with prior research examining payout mix (e.g. Fenn and Liang [2001]; John and Knyazeva [2006]; Blouin, Raedy, and Shackelford [2011]), Equation (3) is estimated on the subsample of firm-years with payout (*PayInd* = 1). H2 predicts a positive association between *LowFETR* and the extent of a firm's use of repurchases relative to dividends ($\beta_3 > 0$).

The control variables included in Equation (3) are similar to the controls in Equations (1) and (2). Instead of the lagged *DistInd* and *DistLev* included in Equations (1) and (2), I include the natural logarithm of the number of years firm *i* has paid a dividend since 1982 (*DivHist*) to capture a firm's dividend history (Skinner [2008]). I expect *DivHist* will be negatively associated with *RepMix*. I do not include the lagged value of *RepMix* because doing so would require firms to have made a payout in the current and prior year in order to be included in the sample. Also, because large payouts are more likely to be made in the form of repurchases rather than dividends (Jagannathan et al. [2000]), I include an indicator variable equal to one when total payout in a firm-year is greater than the sample median of total payout, and zero otherwise (*PayLevInd*).

[24] In Chapter 5.1.2, I discuss results of a supplemental test of H2 in which Equation (3) is estimated using the ratio of repurchases to total payout (*RepRatio*) as the dependent variable. I also explain why I focus on *RepMix* for my main test of H2.

CHAPTER 4

DESCRIPTIVE STATISTICS AND RESULTS

4.1 Descriptive Statistics

Descriptive statistics for the Full Sample are presented in Table C2, Panel A. Payouts were made in 67.60 percent of firm-years, with a dividend payment (share repurchase) occurring in 50.47 (46.42) percent of firm-years. The mean values of the level of total payouts (*PayLev*), dividends (*DivLev*), and share repurchases (*RepLev*) are 3.01 percent, 1.21 percent, and 1.75 percent of lagged total assets. The 25th percentile (75th percentile) of *RepMix* is -0.0166 (0.0175), indicating variation in the relative use of repurchases and dividends among firm-years with shareholder payouts. The mean value of *LowFETR5* (*LowFETR10*) indicates 30.01 (22.06) percent of firm-years have a three-year average foreign current effective tax rate that is five (ten) or more percentage points below the U.S. statutory tax rate.

Table C2, Panel B provides descriptive statistics of the regression variables for firm-years with (*LowFETR5* = 1) and without (*LowFETR5* = 0) significant potential U.S. repatriation tax liabilities. Panel B provides some initial univariate evidence related to the hypotheses. While *LowFETR5* = 1 firm-years have significantly higher foreign earnings (*eFOR*), mean and median *DivInd* and *DivLev* are significantly lower for *LowFETR5* = 1 firm-years. However, mean *PayInd* is not significantly different between the two groups, and mean *RepInd*, *RepLev*, and *PayLev* are significantly higher for *LowFETR5* = 1 firm-years. These univariate comparisons suggest it is possible the association between distributions to shareholders and the tax and/or financial reporting incentives to keep foreign earnings reinvested overseas differs for dividends and repurchases. As predicted in H2, mean and median *RepMix* are higher for *LowFETR5* = 1 firm-years, indicating more extensive use of repurchases relative to dividends when firms face significant potential U.S. repatriation tax costs.

Table C2, Panel B reveals significant differences in several of the regression variables between firms with and without significant potential U.S. repatriation tax liabilities. Observations with *LowFETR5* = 1 are larger (*SIZE*), have higher sales growth (*SGR*), market-to-book ratios (*MTB*), capital expenditures (*CAPEX*), cash holdings (*CASH*), volatility of pre-tax foreign earnings ($\sigma(eFOR)$), and raw stock returns over the prior and current year (*PastStockRet*). I control for these differences in the regression analyses.

Table C2, Panel C presents mean and median values of the regression variables for three groups in the Payout Sample that is used to test H2: (1) firm-years with dividends but no repurchases, (2) firm-years with dividends and repurchases, and (3) firm-years with repurchases but no dividends. As expected based upon H2, *LowFETR5* differs significantly across the groups, with the repurchase group having the highest percentage of *LowFETR5* = 1 firm-years, and the dividends group having the lowest percentage. The repurchases group also has the highest percentage of *LowFETR10* = 1 firm-years. Consistent with the expectation that repurchases tend to be used to make larger payouts, mean and median *PayLev* are significantly higher for the dividends and repurchases group and the repurchases group than for the dividends group.

The correlations among the regression variables are presented in Table C3. The correlations of *LowFETR5* with *DivInd* and *DivLev* are negative and significant, while the correlations with *RepInd* and *RepLev* are positive and significant. *LowFETR5* is also significantly, positively correlated with *RepMix*. Most of the control variables are significantly correlated with the payout variables in the expected directions. The market-to-book ratio (*MTB*) is one notable exception. While I include *MTB* to control for growth opportunities, and therefore expect *MTB* to be negatively correlated with payout, the correlations between *MTB* and all of the payout variables are positive and significant. One possible explanation is that the market-to-book ratio can also be used as a proxy for financial distress, with distressed firms having lower market-to-book ratios. Thus, the

positive correlations between *MTB* and the payout variables could reflect that less distressed firms are more likely to make payouts and make larger payouts. Thus, it is possible I will not observe a negative association between distributions to shareholders and *MTB* in the regression analyses.

4.2 Results of the Tests of H1

4.2.1 Results for the Incidence of Payout

Table C4 reports the results of estimating Equation (1) on the Full Sample to test whether the positive association between foreign earnings and distributions to shareholders is reduced when a U.S. MNC faces significant potential U.S. repatriation tax costs. Table C4, Panel A presents the results for the probability of paying a dividend, Panel B presents the results for the probability of repurchasing shares, and Panel C presents the results for the probability of payout (dividend or repurchase).

Columns (1) and (2) of Table C4, Panel A report the results of estimating Equation (1) with *DivInd* as the dependent variable and using *LowFETR5* to identify U.S. MNCs facing significant potential U.S. repatriation tax costs. Column (1) presents the results before the lagged value of *DivInd* is included as a control variable. As predicted in H1, the coefficient on *eFOR* is positive and significant, and the coefficient on *eFOR*LowFETR5* is negative and significant. A Wald test indicates the effect of *eFOR* on the probability of paying a dividend for firms with *LowFETR5* = 1 (*eFOR* + *eFOR*LowFETR5*) is not significantly different from zero (untabulated). The coefficient on *eUS*LowFETR5* is insignificant, which supports the inference that the significant negative coefficient on *eFOR*LowFETR5* is related to the U.S. tax and financial

reporting treatment of foreign earnings rather than some other firm characteristic that reduces the association between earnings and the probability of paying a dividend.[25]

The control variables in Column (1) of Table C4, Panel A are generally significantly related to the probability of paying a dividend in the expected directions. The coefficients on *eUS*, *SIZE*, *AGE*, and *RE/TE* are positive and significant, and the coefficients on *SGR*, *LEV*, *σ(eUS)*, and *σ(eFOR)* are negative and significant. While *MTB* is included as a control for growth opportunities, I observe a positive and significant coefficient on *MTB*, which is consistent with the univariate correlation evidence in Table C3 discussed above. One possible explanation is that *MTB* can also proxy for financial distress, with less distressed firms having lower *MTB*, and less distressed firms are more likely to pay dividends. I expect firms with higher cash holdings to be more likely to make distributions to shareholders, but I observe a negative and significant coefficient on *CASH*. One possible explanation is that because of the recurring nature of dividend payments, firms that pay a dividend in the current year also likely paid a dividend in the prior year(s), and thus have lower cash balances than firms that have not paid a dividend.

In Column (2) of Table C4, Panel A, the lagged value of *DivInd* is added as an explanatory variable. The coefficient on *eFOR* remains positive and significant, and the coefficient on *eFOR*LowFETR5* remains negative and significant, although their average marginal effects decrease considerably. The average marginal effects of the other independent variables also decline markedly, and *SGR* and *MTB* become insignificant. The coefficient on *eUS*LowFETR5* remains insignificant. Inferences are unchanged in Columns (3) and (4) when *LowFETR10* is used to identify U.S. MNCs facing significant potential U.S. repatriation tax costs. Thus, I find evidence consistent with H1 that the U.S. tax and financial reporting treatment of foreign earnings weakens the otherwise

[25] Alternatively, one might expect to observe a significant positive coefficient on *eUS*LowFETR* if the relation between dividends and worldwide earnings is fixed. I do not find evidence consistent with this expectation.

strong, positive association between foreign earnings and the probability of paying a dividend.

The interpretation of interaction effects in non-linear models has generated debate among applied econometricians. Kolasinski and Siegel (2010) assert that it is appropriate to use the interaction term coefficient to assess interactive effects in non-linear models. However, Ai and Norton (2003) observe that evaluating an interaction effect in a non-linear model requires computing the cross-derivative, and the sign of the cross-derivative can be different for different observations. Greene (2010) argues that the results of the procedure developed by Ai and Norton (2003) are difficult to interpret and argues that graphical devices can be more informative about the relationships among the variables in a non-linear model.

In light of this debate, in addition to discussing the sign and statistical significance of the interaction term regression coefficient *eFOR*LowFETR*, I perform two additional sets of analyses to ensure the appropriateness of my inferences about the interactive effect of *LowFETR* with *eFOR* on the probability of paying a dividend. First, I implement the procedure developed by Ai and Norton (2003) and report the average marginal effect of the interaction term using this procedure in Table C4, Panel A. Figure B1, Panel A plots the z-statistics of the marginal effects for the sample observations computed using the Ai and Norton (2003) procedure based on the model in Column (1) of Table C4, Panel A. The z-statistics are significant at the ten percent level (two-tailed) for 93.91 percent of the observations. The sign and significance of the marginal effects computed following Ai and Norton (2003) are consistent with the inferences based upon the interaction term regression coefficient.

Second, I provide a graphical analysis of the interaction effect as advocated by Greene (2010). Figure B1, Panel B displays the relationship between *eFOR* and the estimated probability of paying a dividend for *LowFETR5* = 0 and *LowFETR5* = 1 based on the coefficient estimates reported in Column (1) of Table C4, Panel A. In Panel B, it

is evident the average partial effect of *eFOR* differs when *LowFETR5* = 0 and *LowFETR5* = 1, which is consistent with the inferences based upon the interaction term regression coefficient.

Table C4, Panel B presents the results of estimating Equation (1) with *RepInd* as the dependent variable. Column (1) presents the results using *LowFETR5* to identify U.S. MNCs with potential tax and financial reporting incentives to keep their foreign earnings reinvested abroad without the lagged value of *RepInd* included as a control variable. In Column (1), the coefficient on *eFOR* is positive and significant, as expected, but the coefficient on *eFOR*LowFETR* is insignificant, which is inconsistent with H1. Inferences are unchanged when the lagged value of *RepInd* is added in Column (2), and when *LowFETR10* is used to identify U.S. MNCs with potential tax and financial reporting incentives to keep their foreign earnings reinvested abroad in Columns (3) and (4). Thus, I do not find evidence consistent with H1 for repurchases.

The additional analyses recommended by Ai and Norton (2003) and Greene (2010) support the inferences based upon the interaction term regression coefficient. Figure B2, Panel A plots the z-statistics of the marginal effects for the sample observations computed using the Ai and Norton (2003) procedure based on the model in Column (1) of Table C4, Panel B. The z-statistics of only 9.92 percent of the observations are significant at the ten percent level (two-tailed). Figure B2, Panel B graphs the relationship between *eFOR* and the estimated probability of a repurchase for *LowFETR5* = 0 and *LowFETR5* = 1 based on the coefficient estimates reported in Column (1) of Table C4, Panel B. The average partial effect of *eFOR* does not appear to differ markedly when *LowFETR5* = 0 and *LowFETR5* = 1.

The final test of H1 using Equation (1) examines the probability of payout (dividend or repurchase). Table C4, Panel C reports the results of estimating Equation (1) with *PayInd* as the dependent variable. In Columns (1) through (4), the coefficients on *eFOR*LowFETR* are negative and significant, indicating that facing significant

potential U.S. repatriation taxes reduces the positive association between *eFOR* and the probability of making a distribution to shareholders. Wald tests indicate the effect of *eFOR* on the probability of making a distribution to shareholders for firms with *LowFETR* = 1 (*eFOR* + *eFOR*LowFETR*) is not significantly different from zero (untabulated). The coefficient on *eUS*LowFETR* is insignificant in Columns (1) through (4). The additional analyses presented in Panels A and B of Figure B3 are consistent with the inferences based upon the interaction term regression coefficient.

4.2.2 Results for the Level of Payout

Table C5 reports the results of the second approach to testing H1. Table C5, Panel A presents the results of estimating Equation (2) on the Full Sample for the level of dividends, Panel B presents the results for the level of repurchases, and Panel C presents the results for the level of payout (dividends plus repurchases).

Columns (1) and (2) of Table C5, Panel A present the results of estimating Equation (2) using *LowFETR5* to identify U.S. MNCs facing significant potential U.S. repatriation tax costs. Column (1) presents the results without the lagged value of *DivLev* included as a control variable. As predicted in H1, the coefficient on *eFOR*LowFETR* is negative and significant in Columns (1) and (2). Untabulated F-tests indicate the effect of *eFOR* on the level of dividends when *LowFETR* = 1 (*eFOR* + *eFOR*LowFETR*) is positive and significant based on the specification in Column (1), but is not significantly different from zero when the level of dividends paid in the prior year is taken into account in Column (2). This evidence is consistent with the U.S. tax and financial reporting treatment of foreign earnings affecting the level of dividends paid to shareholders by moderating the positive association between the level of dividend payments and foreign earnings. Inferences are unchanged in Columns (3) and (4) when Equation (2) is estimated using *LowFETR10*. The coefficient on *eUS*LowFETR* is insignificant in all four specifications.

The results of estimating Equation (2) with *RepLev* and *PayLev* are reported in Panels B and C of Table C5, respectively. The coefficient on *eFOR*LowFETR* is not significantly different from zero in any of the specifications. Thus, while I find evidence the U.S. tax and financial reporting treatment of foreign earnings affects the level of dividends paid, I do not observe an effect on the level of share repurchases or the level of total payout.

4.2.3 Summary of Results for H1

Overall, I find support for H1 with respect to dividend payments, but not repurchases. Facing significant potential U.S. repatriation tax costs weakens the otherwise strong, positive association between foreign earnings and the probability of paying a dividend and the level of dividend payments. In fact, for firm-years with average foreign effective tax rates substantially below the U.S. statutory tax rate, dividend payments are not increasing in foreign earnings (but are increasing in U.S. earnings). I do not find evidence the positive association between foreign earnings and either the probability or the level of share repurchases is reduced when U.S. MNCs face significant potential U.S. repatriation tax costs. Finally, I find facing significant potential U.S. repatriation tax costs weakens the otherwise, strong positive association between foreign earnings and the probability of shareholder payout (dividend and/or repurchase), but I do not find an effect with respect to the level of total payout (dividends plus repurchases). In the next section, I consider whether U.S. MNCs facing significant potential U.S. repatriation tax costs have higher levels of repurchases relative to dividends.

4.3 Results of the Tests of H2

Table C6 presents the results of estimating Equation (3) on the Payout Sample to test the prediction in H2 that the level of repurchases relative to the level of dividends is

higher for U.S. MNCs facing significant potential U.S. repatriation tax costs. The dependent variable *RepMix* in Equation (3) equals the difference between the dollar amount of repurchases and dividends paid during the year, scaled by lagged total assets. Higher values of *RepMix* indicate more extensive use of repurchases relative to dividends. H2 predicts a positive and significant coefficient on *LowFETR*.

Consistent with H2, the coefficient on *LowFETR* in Columns (1) and (3) is positive and significant, and remains positive and significant in Columns (2) and (4) when a control for the level of total payout is added. Based on the coefficient estimates in Column (1), *RepMix* is 0.0057 higher for firm-years when *LowFETR5* = 1 relative to when *LowFETR5* = 0, *ceteris paribus*. This effect represents 67 percent of the mean value of *RepMix* (0.0085).

The evidence in Table C6 provides support for H2 that the level of repurchases relative to dividends is higher for U.S. MNCs facing significant potential U.S. repatriation taxes. Since repurchases are a more flexible payout vehicle than dividends, it is possible U.S. MNCs facing significant potential U.S. repatriation tax costs utilize repurchases to a greater extent than dividends when making distributions to shareholders because the flexibility of repurchases enables U.S. MNCs to better match the timing of payouts with tax-efficient or *de facto* repatriations.

CHAPTER 5

ADDITIONAL ANALYSES

5.1 Sensitivity Analyses

5.1.1 Alternative Measures of *LowFETR*

In untabulated sensitivity analyses, I examine the sensitivity of the main results to alternative definitions of *LowFETR*. The additional *LowFETR* measures I consider are *LowFETR0*, which is an indicator variable equal to one if firm *i*'s three-year foreign current effective tax rate is below the U.S. statutory tax rate in year *t*, and zero otherwise, and *LowFETR15* (*LowFETR20*), which is an indicator variable equal to one if firm *i*'s three-year foreign current effective tax rate is fifteen (twenty) or more percentage points below the U.S. statutory tax rate in year *t*, and zero otherwise.

When Equation (1) is estimated with *DivInd* as the dependent variable, inferences are unchanged using these alternative thresholds to define *LowFETR*. When Equation (1) is estimated with *RepInd* as the dependent variable, the sign and significance of the regression coefficients and inferences from the Wald tests of the effect of *eFOR* on the probability of a share repurchase for firm-years with *LowFETR* = 1 (*eFOR* + *eFOR*LowFETR*) are unchanged.[26]

When Equation (1) is estimated with *PayInd* as the dependent variable, the coefficient on *eFOR*LowFETR0* is negative and significant. However, a Wald test indicates the effect of *eFOR* on the probability of making a distribution to shareholders

[26] When *LowFETR15* and *LowFETR20* are used to define *LowFETR*, the sign and significance of the marginal effects computed following Ai and Norton (2003) provide some weak evidence consistent with H1 with respect to share repurchases. For *LowFETR15*, 68.67 percent (34.32 percent) of the z-statistics of the marginal effects for the sample observations computed using the Ai and Norton (2003) procedure are significant at the ten percent level (two-tailed) when the lagged value of *RepInd* is not included (is included) in the regression. For *LowFETR20*, 67.51 percent (13.78 percent) of the z-statistics are significant at the ten percent level (two-tailed) when the lagged value of *RepInd* is not included (is included) in the regression.

for firm-years with *LowFETR0* = 1 (*eFOR* + *eFOR*LowFETR0*) is positive and significant. Thus, having a foreign effective tax rate below the U.S. statutory tax rate weakens the otherwise strong, positive association between foreign earnings and the probability of making a distribution to shareholders, but, on average, the probability of making a distribution to shareholders is still increasing in foreign earnings. A possible explanation for this result is that the *LowFETR0* = 1 group includes U.S. MNCs facing relatively small potential U.S. repatriation tax costs that are excluded from the *LowFETR5* = 1 and *LowFETR10* = 1 groups used in the main tests.[27] Inferences from the main tests are unchanged when *LowFETR15* is used to define *LowFETR*. Lastly, the coefficient on *eFOR*LowFETR20* is not significantly different from zero at conventional levels using a two-tailed test (coefficient = -2.9347 and p-value = 0.182 (two-tailed) without $PayInd_{t-1}$ included as a control; coefficient = -2.4414 and p-value = 0.237 (two-tailed) with $PayInd_{t-1}$ included as a control). However, as in the main results, a Wald test indicates the effect of *eFOR* on the probability of making a distribution to shareholders for firm-years with *LowFETR20* = 1 is not significantly different from zero.

When Equation (2) is estimated using the alternative thresholds to define *LowFETR*, the sign and significance of the regression coefficients are unchanged. The results of the F-tests are also unchanged with the exception of the tests of the effect of *eFOR* on the level of dividends for firms with *LowFETR0* = 1, which indicate the effect of *eFOR* on the level of dividends paid for firms with *LowFETR0* = 1 (*eFOR* + *eFOR*LowFETR0*) is positive and significant. This again reflects that the *LowFETR0* = 1 group includes some U.S. MNCs facing relatively small potential U.S. repatriation tax costs that are excluded from the *LowFETR5* = 1 and *LowFETR10* = 1 groups used in the main tests.

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[27] *LowFETR0* = 1 for 40.15 percent of firm-years, while only 30.01 (22.06) percent of firm-years have *LowFETR5* (*LowFETR10*) = 1 (untabulated).

Inferences are also unchanged when Equation (3) is estimated using the alternative thresholds to define *LowFETR*, and the magnitude of the coefficient on *LowFETR* generally increases as the differential between the average foreign effective tax rate and U.S. statutory tax rate increases. For example, the estimated *LowFETR* coefficient is 0.0039 (0.0036) using *LowFETR0*, and is 0.0070 (0.0076) using *LowFETR20* when the control for payout level is excluded from (included in) the model.

Lastly, I also consider a continuous measure of *LowFETR* that is equal to the difference between the U.S. statutory tax rate and firm *i*'s three year foreign current effective tax rate in year *t* if firm *i*'s average foreign effective tax rate is below the U.S. statutory tax rate, and zero otherwise (*LowFETRC*). The sign and significance of the estimated coefficients on *eFOR*LowFETR* are unchanged from the main tests when the regressions are estimated using *LowFETRC*. Thus, overall I find that the main results are robust to using alternative measures of *LowFETR*.

5.1.2 Supplemental Test of H2

As a supplemental test of the association between the U.S. tax and financial reporting treatment of foreign earnings and the form of payout, I also consider whether the ratio of repurchases to total payout differs for firm-years with and without significant potential U.S. repatriation tax liabilities. Specifically, I estimate Equation (3) with *RepRatio* as the dependent variable rather than *RepMix*, where *RepRatio* equals *Repurchases* divided by the sum of *Dividends* and *Repurchases*. [28]

I focus on *RepMix* rather than *RepRatio* in the main tests for two primary reasons. First, *RepMix* provides a measure of the magnitude of repurchases versus dividends relative to firm size. For example, if Firm A made a distribution to shareholders equal to

[28] The Pearson (Spearman) correlation between *RepMix* and *RepRatio* is 0.623 (0.790) and is significantly different from zero at the one percent level (Table 3).

0.5 percent of lagged total assets, and Firm B made a distribution of 2.5 percent, and both distributions were paid out entirely as dividends (repurchases), *RepRatio* would equal zero (one) for both firms, whereas *RepMix* would reflect the extent of the difference between repurchases and dividends relative to firm size (i.e. *RepMix* would equal -0.005 (0.005) for Firm A and -0.025 (0.025) for Firm B). Second, *RepRatio* is a proportion, and estimating a model with a proportion as the dependent variable poses econometric challenges, especially when the sample includes observations where the proportion takes on values of zero and/or one.

One possible approach to estimating a model with a proportion as the dependent variable is to use a Tobit model with censoring at zero and one. Two specification issues arise with a linear conditional expectation function such as the Tobit model. First, because the dependent variable (y) is bounded between zero and one, the expectation of y conditional on x must be a non-linear function of x. Second, the conditional variance must be a function of the conditional mean because the conditional variance must change as the conditional mean approaches either zero or one. Papke and Wooldridge (1996) develop an approach that has become known as fractional logit regression that uses a logit link function to address these two specification issues. A third specification issue not addressed by fractional logit regression is the process that gives rise to the boundary observations may differ from the process that gives rise to the observations within the (0,1) interval. Cook, Kieschnick, and McCullough (2008) develop a zero-one inflated beta model that allows for alternative models of behavior generating the limit values.

I estimate Equation (3) with *RepRatio* as the dependent variable using (1) double-censored Tobit, (2) fractional logit, (3) and zero-one inflated beta models and report the estimated average marginal effects in Table C7. The average marginal effects of *LowFETR5* are positive and significant in Columns (1) through (3) of Table C7. When *DivHist* is added as a control variable in Columns (4) through (6), the average marginal effect of *LowFETR5* is insignificant in the Tobit and fractional logit regressions, but

remains positive and significant in the zero-one inflated beta regression. Thus, I find some evidence firm-years facing significant potential U.S. repatriation tax costs make a greater proportion of their total payout in the form of repurchases, which complements the results reported in Table C6 using *RepMix* as the dependent variable.

5.1.3 Post-AJCA Period

The sample period in my main tests ends in 2004 to avoid any effects of the temporary repatriation tax holiday provided by the AJCA of 2004. In supplemental analyses, I examine the impact of the U.S tax and financial reporting treatment of foreign earnings on U.S. MNCs' payout policies in the post-AJCA period. Specifically, I estimate Equations (1), (2), and (3) for the years 2009 through 2012. I exclude the years 2005 through 2007 to avoid any shareholder distributions funded by repatriations under the AJCA,[29] and I exclude the year 2008 because of the financial crisis.

DeWaegenaere and Sansing (2008) demonstrate analytically that the possible arrival of a future repatriation tax holiday can impact U.S. MNCs' repatriation decisions. The AJCA was the first time the U.S. government granted a repatriation tax holiday. While I do not find evidence the U.S. tax and financial reporting treatment of foreign earnings impacted the probability of repurchases or the level of repurchases and total payout in the pre-AJCA period examined in the main tests, it is possible there will be an effect in the post-AJCA period if U.S. MNCs are anticipating a future tax holiday that will allow them to easily repatriate their foreign earnings without incurring the normal U.S. repatriation tax cost.

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[29] I exclude the years 2005 through 2007 from the post-AJCA period because the U.S. Senate report that investigated the consequences of the temporary repatriation tax holiday of the AJCA examined the use of funds through 2007 (U.S. PSI [2011]). The report also excluded the year 2008 because of the financial crisis.

The post-AJCA period results for the probability of paying a dividend reported in Table C8, Panel A are consistent with the findings in the main sample period. The results for the probability of repurchasing shares are reported in Panel B. Although the coefficient on *eFOR*LowFETR* is not statistically significant at conventional levels using a two-tailed test in any of the columns, Wald tests indicate the effect of *eFOR* on the probability of repurchasing shares for firms with *LowFETR* = 1 (*eFOR* + *eFOR*LowFETR*) is not significantly different from zero in any of the columns (untabulated). Panel C presents the results for the probability of payout (dividend or repurchase). The coefficient on *eFOR*LowFETR* is only significant at conventional levels using a two-tailed test in the specifications using *LowFETR15* and *LowFETR20*. However, Wald tests indicate the effect of *eFOR* on the probability of payout for firms with *LowFETR* = 1 (*eFOR* + *eFOR*LowFETR*) is not significantly different from zero using any of the *LowFETR* definitions, which is consistent with the findings in the pre-AJCA period (untabulated).

The results for the post-AJCA period with respect to the level of distributions to shareholders are largely consistent with the results for the pre-AJCA sample period used in the main tests. The results of estimating Equation (2) with *DivLev* as the dependent variable in the post-AJCA time period are reported in Table C8, Panel D. The coefficient on *eFOR*LowFETR* is statistically significant at conventional levels using a two-tailed test in the specifications that include *LowFETR15* and *LowFETR20*. In Panels E and F, when Equation (2) is estimated with *RepLev* or *PayLev* as the dependent variable, the coefficient on *eFOR*LowFETR* is insignificant in all specifications, which is consistent with the results of the main tests. Lastly, Panel G reports the results for the tests of the relative use of repurchases versus dividends in the post-AJCA period. The result using *LowFETR15* to identify U.S. MNCs facing significant potential U.S. repatriation taxes is consistent with H2.

Overall, inferences are strongest in the post-AJCA period when using larger differences between average foreign effective tax rates and the U.S. statutory tax rate to identify U.S. MNCs facing significant potential U.S. repatriation tax costs (i.e. *LowFETR15* and *LowFETR20*). One possible reason for this is that foreign tax rates are, in general, lower in the post-AJCA period than in the sample period examined in the main tests.[30] Because foreign statutory tax rates have fallen in recent years, using a three-year average foreign effective tax rate may overestimate the potential U.S. repatriation tax costs of some U.S. MNCs in the *LowFETR5* and *LowFETR10* groups because the foreign tax credit calculations are based on a foreign subsidiary's pool of post-1986 undistributed earnings and profits.[31]

5.2 Cash Holdings

I interpret the results of the main tests as indicating the U.S. tax and financial reporting treatment of foreign earnings impacts U.S. MNCs' payout policies. One possible alternative explanation is that U.S. MNCs facing significant potential U.S. repatriation tax costs also have greater potential foreign investment opportunities, and thus they do not pay out their foreign earnings as dividends. The insignificance of the interaction between *eUS* and *LowFETR* in the main tests helps address this concern because U.S. MNCs could also use their U.S. earnings to fund foreign investment opportunities. As an additional test of this alternative explanation, I examine whether the U.S. tax and financial reporting treatment of foreign earnings affects the relation between foreign earnings and cash levels or changes in cash levels. If this alternative explanation is true, facing significant potential U.S. repatriation tax costs should not affect the

[30] In the post-AJCA (main) sample period, 49.27 (30.01) percent of firm-years have *LowFETR5* = 1, 36.21 (22.06) percent of firm-years have *LowFETR10* = 1, 24.85 (16.01) percent of firm-years have *LowFETR15* = 1, and 17.23 (10.86) percent of firm-years have *LowFETR20* = 1.

[31] The pool of post-1986 undistributed earnings and profits is unobservable using publicly available data.

relation between foreign earnings and cash levels or changes in cash levels because foreign earnings should be used to fund investment. However, evidence that foreign earnings are more positively associated with cash levels or changes in cash levels when U.S. MNCs face significant potential U.S. repatriation tax costs would be consistent with these U.S. MNCs retaining their foreign earnings abroad, holding it as cash, and potentially borrowing to fund share repurchases.

Table C9 presents the results of examining the impact of the U.S. tax and financial reporting treatment of foreign earnings on U.S. MNCs' cash holdings. The results reported in Panel A examine the level of cash holdings, and the results reported in Panel B consider changes in cash holdings. The control variables are similar to the controls used in Foley et al. (2007), Bates, Kahle, and Stulz (2009), and Pinkowitz, Stulz, and Williamson (2013). As expected based upon inferences from the main tests, the coefficient on *eFOR*LowFETR* is positive and significant in all of the specifications. Furthermore, the insignificant coefficient on *eUS*LowFETR* addresses concerns that the significant, positive coefficient on *eFOR*LowFETR* is due to a greater demand for precautionary cash holdings among *LowFETR* = 1 firm-years. The results in Table C9 are consistent with the results in Foley et al. (2007) that firms facing repatriation taxes hold higher levels of cash.

5.3 Domestic and Foreign Investment

5.3.1 Responsiveness to Investment Opportunities and Sensitivity to Cash Flows

The findings in the main tests that the positive association between foreign earnings and dividend payments is reduced when U.S. MNCs face significant potential U.S. repatriation tax costs suggest the U.S. tax and financial reporting treatment of foreign earnings creates frictions in U.S. MNCs' internal capital markets. If the U.S. tax

and financial reporting treatment of foreign earnings generates frictions in U.S. MNCs' internal capital markets, U.S. MNCs' ability to respond to domestic investment opportunities could be impacted. In addition, U.S. MNCs' domestic investment could be more sensitive to domestic cash flows.

Thus, I examine whether the U.S. tax and financial reporting treatment of foreign earnings is associated with the responsiveness of domestic investment to domestic investment opportunities and cash flows. In these tests, I utilize data provided by U.S. MNCs' segment reporting to separate domestic and foreign investment and investment opportunities. (I discuss limitations of using segment reporting data for these tests in Chapter 5.3.3.) As in the main tests, the sample period includes the years 1987 through 2004. I estimate the following OLS regression:

$$DCAPX_{it+1} = a_0 + \beta_1 DSGR_{it} + \beta_2 DCFO_{it} + \beta_3 LowFETR5_{it} + \beta_4 DSGR_{it} * LowFETR5_{it} + \beta_5 DCFO_{it} * LowFETR5_{it} + \beta_6 FCFO_{it} + \beta_7 FCFO_{it} * LowFETR5_{it} + \sum \beta_j YearInd_{it} + \sum \beta_k FF48Ind_{it} + \varepsilon_{it+1} \quad (4a)$$

The dependent variable *DCAPX* equals domestic capital expenditures in year *t+1*, scaled by worldwide total assets at the end of year *t*. The percentage change in domestic sales from year *t-1* to *t* (*DSGR*) proxies for domestic investment opportunities. I estimate domestic cash flow (*DCFO*) as after-tax domestic income plus domestic depreciation expense, and foreign cash flow (*FCFO*) as after-tax foreign income plus foreign depreciation expense. *DCFO* and *FCFO* are both scaled by lagged worldwide total assets. Equation (4a) also includes year controls and industry controls (based on Fama and French 48-industry classifications).

I expect domestic capital expenditures to be responsive to domestic investment opportunities ($\beta_1 > 0$) and sensitive to domestic cash flows ($\beta_2 > 0$). If the U.S. tax and financial reporting treatment of foreign earnings creates frictions in U.S. MNCs' internal capital markets that impact their domestic investment, then I expect domestic investment to be less responsive to domestic investment opportunities ($\beta_4 < 0$) and more sensitive to

domestic cash flows ($\beta_5 > 0$) when U.S. MNCs face significant potential U.S. repatriation tax liabilities (*LowFETR5* = 1). If foreign cash flows are a source of funds for U.S. MNCs' domestic investment, but the U.S. tax and financial reporting treatment of foreign earnings inhibits U.S. MNCs' domestic operations from accessing those funds, then I expect to observe ($\beta_7 < 0$).

I also estimate an analogous regression for foreign investment:

$$FCAPX_{it+1} = a_0 + \beta_1 FSGR_{it} + \beta_2 FCFO_{it} + \beta_3 LowFETR5_{it} + \beta_4 FSGR_{it} * LowFETR5_{it} + \beta_5 FCFO_{it} * LowFETR5_{it} + \beta_6 DCFO_{it} + \beta_7 DCFO_{it} * LowFETR5_{it} + \sum \beta_j YearInd_{it} + \sum \beta_k FF48Ind_{it} + \varepsilon_{it+1} \quad (4b)$$

where the dependent variable *FCAPX* equals foreign capital expenditures in year *t+1*, scaled by worldwide total assets at the end of year *t*, and the percentage change in foreign sales from year *t-1* to *t* (*FSGR*) proxies for foreign investment opportunities. I expect foreign capital expenditures to be responsive to foreign investment opportunities ($\beta_1 > 0$) and sensitive to foreign cash flows ($\beta_2 > 0$). I do not expect the U.S. tax and financial reporting treatment of foreign earnings to impact the responsiveness of foreign investment to foreign investment opportunities (β_4) or sensitivity to foreign cash flows (β_5). Finding $\beta_4 < 0$ and/or $\beta_5 > 0$ in Equation (4a) but not in Equation (4b) would support the conclusion that the results with respect to domestic investment are attributable to the U.S. tax and financial reporting treatment of foreign earnings and not to some other characteristic of firms with low foreign effective tax rates that affects the responsiveness of their investments to investment opportunities and cash flows.[32]

Table C10, Panel A provides descriptive statistics for the variables used to estimate Equations (4a) and (4b) for firm-years with (*LowFETR5* = 1) and without

[32] Blouin, Krull, and Robinson (2013) investigate the relation between permanently reinvested earnings and domestic investment by estimating a regression similar to Equation (4a) using data from the Bureau of Economic Analysis. Blouin et al. (2013) do not include foreign cash flow in their model as a potential source of funds for domestic investment. Blouin et al. (2013) also do not estimate a model of foreign investment (e.g. Equation (4b)).

(*LowFETR5* = 0) significant potential U.S. repatriation tax liabilities. *LowFETR5* = 1 firm-years have significantly higher mean domestic capital expenditures (*DCAPX*) and mean and median foreign capital expenditures (*FCAPX*). They also have significantly higher median foreign sales growth (*FSGR*), mean and median domestic sales growth (*DSGR*), and mean and median foreign cash flows (*FCFO*). The domestic cash flows (*DCFO*) of firm-years with and without significant potential U.S. repatriation tax liabilities are not significantly different.

Table C10, Panel B report the results of estimating Equation (4a). As expected, domestic investment is significantly positively associated with domestic investment opportunities (*DSGR*) and domestic cash flow (*DCFO*). In both Columns (2) and (4), the coefficient on the interaction of *DSG* and *LowFETR5* is insignificant, which indicates the U.S. tax and financial reporting treatment of foreign earnings does not affect the responsiveness of U.S. MNCs' domestic investment to domestic investment opportunities. The coefficient on the interaction of *DCFO* and *LowFETR5* is positive and significant, which suggests the sensitivity of domestic investment to domestic cash flows is higher when U.S. MNCs face significant potential U.S. repatriation tax liabilities. Blouin, Krull, and Robinson (2013) also find a higher sensitivity of domestic investment to domestic cash flows when U.S. MNCs have permanently reinvested earnings, but only in the years 2006 through 2009 of their sample period.

Table C10, Panel C reports the results of estimating Equation (4b). As expected, foreign investment is significantly positively related to foreign cash flow (*FCFO*), but it is only significantly positively related to foreign sales growth in Columns (1) and (3) when *LowFETR5* and its interactions are excluded from the regression. The interactions of *LowFETR5* with *FSGR*, *FCFO*, and *DCFO* are all insignificant. The insignificance of the coefficient on *FCFO*LowFETR5* in Panel C suggests the significant positive coefficient observed in Panel B is not due to an overall higher sensitivity of investment to

cash flows for firms with low foreign effective tax rates relative to the U.S. statutory tax rate.

5.3.2 Investment Efficiency

Next, I examine whether the U.S. tax and financial reporting treatment of foreign earnings is associated with domestic and foreign under- or over-investment. Following Biddle, Hilary, and Verdi (2009) and Chen, Hope, Li, and Wang (2011), I begin by estimating models of expected investment:

$$DCAPX_{it+1} = a_0 + \beta_1 DSGR_{it} + \beta_2 NegDSGR_{it} + \beta_3 DSGR_{it} * NegDSGR_{it} + \varepsilon_{it+1} \quad (5a)$$

$$FCAPX_{it+1} = a_0 + \beta_1 FSGR_{it} + \beta_2 NegFSGR_{it} + \beta_3 FSGR_{it} * NegFSGR_{it} + \varepsilon_{it+1} \quad (5b)$$

where *DCAPX*, *DSGR*, *FCAPX*, and *FSGR* are as defined above. I include an indicator variable equal to one when domestic or foreign sales growth is negative (*NegDSGR* and *NegFSGR*) and interact it with sales growth. I estimate Equations (5a) and (5b) by industry (based on Fama and French 48-industry classifications) for all industries with at least ten observations.

I use the residuals from estimating Equation (5a) to define measures of domestic under- and over-investment, and the residuals from Equation (5b) to define measures of foreign under- and over-investment. First, as in Biddle et al. (2009), I sort the residuals by year and classify firm-year observations in the bottom quartile as under-investing (*DUnderInd* and *FUnderInd*) and firm-years in the top quartile as over-investing (*DOverInd* and *FOverInd*). To test whether the U.S. tax and financial reporting treatment of foreign earnings affects U.S. MNCs' investment efficiency, I estimate the following logistic regression:

$$Prob(InvEffInd_{it+1} = 1) = F(a_0 + \beta_1 LowFETR_{it} + \sum \beta_j YearInd_{it} + \varepsilon_{it+1}) \quad (6)$$

In Equation (6), the dependent variable is either *DUnderInd, FOverInd, DOverInd*, or *FUnderInd*.[33] If the U.S. tax and financial reporting treatment of foreign earnings creates frictions in U.S. MNCs' internal capital markets that leads to under-investment in the U.S., I expect to observe $\beta_1 > 0$ when Equation (6) is estimated with *DUnderInd* as the dependent variable. If the U.S. tax and financial reporting treatment of foreign earnings leads to over-investment outside of the U.S., I expect to observe $\beta_1 > 0$ when Equation (6) is estimated with *FOverInd* as the dependent variable.

Second, following Chen et al. (2011), I define measures of under- and over-investment using the values of the residuals from estimating Equations (5a) and (5b). Specifically, for firm-years with a negative (positive) residual from estimating Equation (5a), *DUnder* (*DOver*) equals the absolute value of the residual. Thus, *DUnder* (*DOver*) is increasing in the degree of domestic under- (over-) investment. Similarly, for firm-years with a positive (negative) residual from estimating Equation (5b), *FOver* (*FUnder*) equals the absolute value of the residual. Thus, *FOver* (*FUnder*) is increasing in the degree of foreign over- (under-) investment. Then, I estimate the following OLS regression:

$$InvEff_{it+1} = a_0 + \beta_1 LowFETR_{it} + \sum \beta_j YearInd_{it} + \sum \beta_k FF48Ind_{it} + \varepsilon_{it+1} \quad (7)$$

where the dependent variable *InvEff* is either *DUnder, FOver, DOver*, or *FUnder*. If the U.S. tax and financial reporting treatment of foreign earnings is associated with greater domestic under-investment, I expect to find $\beta_1 > 0$ when Equation (7) is estimated with *DUnder* as the dependent variable. If the U.S. tax and financial reporting treatment of

[33] I do not include industry controls in Equation (6) because the of the problems described in Greene (2004) regarding the inclusion of fixed effects in non-linear models when there are a small of number of observations within each group. In untabulated sensitivity analyses, I include industry controls defined using Fama and French 48-industry classifications. When industry controls are included, *LowFETR5* is negative and significant in Table C11, Panel F, Columns (1) and (2), where *FUnderInd* is the dependent variable. All other inferences are unchanged.

foreign earnings is associated with greater foreign over-investment, I expect to find $\beta_1 > 0$ when Equation (7) is estimated with *FOver* as the dependent variable. I estimate Equation (7) using the raw values of *InvEff* and scaled ranks of *InvEff*.[34]

Finally, I incorporate firm-year-level (i.e. worldwide) control variables into Equations (6) and (7) to test whether the relation between the U.S. tax and financial reporting treatment of foreign earnings and domestic or foreign under- or over-investment is incremental to worldwide firm characteristics associated with under- or over-investment. (Requiring non-missing values of these control variables reduces the sample size by approximately 30 percent.[35]) The control variables are based on Biddle et al. (2009). The worldwide control variables include the natural logarithm of total assets (*SIZE*); market-to-book ratio (*MTB*); operating cash flows, scaled by lagged total assets (*CFO*); sales, scaled by lagged total assets (*Sale*); Altman Z-Score (*ZScore*); ratio of property, plant, and equipment, scaled by lagged total assets (*TANG*); market leverage (*MktLev*); the ratio of cash and cash equivalents to property, plant, and equipment (*SLACK*); an indicator variable equal to one for firm-years with negative income before extraordinary items (*LOSS*); firm age (*AGE*); the standard deviation of operating cash flows ($\sigma(CFO)$); the standard deviation of sales ($\sigma(Sales)$); and the standard deviation of total investment ($\sigma(Invest)$). The standard deviations are computed over years *t-4* through *t*. Total investment includes capital expenditures, research and development expenditures, and acquisitions, less cash received from the sale of property, plant, and equipment, and is scaled by lagged total assets.

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[34] Specifically, I rank *InvEff* by deciles for each year. I code firm-year observations in the lowest decile as zero and firm-year observations in the top decile as nine, and divide the raw ranks by nine to obtain the scaled decile ranks.

[35] I re-estimate Equations (5a) and (5b) on this reduced sample and define *InvEffInd* and *InvEff* using those residuals for the tests that include the control variables measured at the worldwide level.

Table C11 presents the results of the investment efficiency tests. Panel A presents descriptive statistics of the investment efficiency variables for the sample that does not require non-missing values of all of the worldwide control variables. The mean of *DUnderInd* is not significantly different for firm-years with (*LowFETR5* = 1) and without (*LowFETR5* = 0) significant potential U.S. repatriation tax liabilities. Mean *FOverInd* (*FUnderInd*) is significantly higher (lower) for *LowFETR5* = 1 firm-years, indicating U.S. MNCs facing significant potential U.S. repatriation tax liabilities are more (less) likely to over- (under-) invest outside of the U.S. The mean and median value of *FOver* is also significantly greater for *LowFETR5* = 1 firm-years, indicating a greater degree of foreign over-investment. Panel B presents the descriptive statistics for the sample that requires non-missing values of all of the worldwide control variables.

The results of estimating Equations (6) and (7) with respect to domestic under-investment are presented in Table C11, Panel C. The coefficient on *LowFETR5* is insignificant in Columns (1) through (4) when *DUnderInd* and *DUnder* are used as the dependent variables. The coefficient on *LowFETR5* is positive and significant in Column (5) when Equation (7) is estimated using the scaled rank of *DUnder* (*DUnderRank*) as the dependent variable, but is insignificant in Column (6) when worldwide control variables are included. Thus, I do not find consistent evidence that on average the U.S. tax and financial reporting treatment of foreign earnings is associated with domestic under-investment.

Table C11, Panel D reports the results of estimating Equations (6) and (7) with respect to foreign over-investment. The coefficient on *LowFETR5* is positive and significant in Columns (1), (3), and (5) when the worldwide control variables are not included in the regression. When the worldwide control variables are included, the coefficient on *LowFETR5* is not significantly different from zero at conventional levels using a two-tailed test in Columns (2) and (4) but remains positive and significant in Column (6). Thus, I do find some evidence the U.S. tax and financial reporting treatment

of foreign earnings is associated with foreign over-investment. The evidence suggestive of a relation between the U.S. tax and financial reporting treatment of foreign earnings and foreign over-investment with respect to capital expenditures is consistent with prior research that finds the U.S. tax cost of repatriating foreign earnings is associated with decreased profitability of foreign acquisitions (Edwards et al. [2013]; Hanlon et al. [2012]).

The foreign over-investment results do not necessarily indicate U.S. MNCs facing significant potential U.S. repatriation tax costs invest in negative net present value projects abroad. Specifically, the foreign over-investment proxies identify U.S. MNCs with higher foreign capital expenditures than expected based upon their foreign sales growth. Prior research suggests the U.S. tax and financial reporting treatment of foreign earnings create frictions in U.S. MNCs' internal capital markets that lead U.S. MNCs facing significant potential U.S. repatriation tax costs to invest foreign earnings in financial assets rather than repatriate to the U.S. parent (e.g. Foley et al. [2007]). Therefore, if internal financing is less costly than external financing, foreign subsidiaries of U.S. MNCs facing significant potential U.S. repatriation tax costs potentially face a lower cost of capital that allows them to invest in lower net present value projects than foreign subsidiaries of other U.S. MNCs (Edwards et al. [2013]). Thus, the foreign-over-investment results do not necessarily indicate suboptimal investment decisions by managers of U.S. MNCs with low foreign effective tax rates.

It is possible the foreign over-investment results in Panel D are due to an overall greater tendency for over-investment or inefficient foreign investment among U.S. MNCs with low foreign effective tax rates relative to the U.S. statutory tax rate. If that is the case, I should also observe a significant positive coefficient on *LowFETR5* in the domestic over-investment or foreign under-investment regressions. The results for domestic over-investment are reported in Table C11, Panel E, and the results for foreign under-investment are reported in Panel F. The coefficient on *LowFETR5* is not positive

and significant in any of the specifications. These results complement the foreign over-investment results and indicate the foreign over-investment results do not reflect a general proclivity towards over-investment or inefficient foreign investment among U.S. MNCs with low foreign effective tax rates relative to the U.S. statutory tax rate.

5.3.3 Caveats and Limitations Related to the Use of Segment Reporting Data

The U.S. tax and financial reporting treatment of foreign earnings has potentially different implications for U.S. MNCs' domestic and foreign investment. As a result, in order to test the relation between the U.S. tax and financial reporting treatment of foreign earnings and U.S. MNCs' investment, it is important to be able to separate domestic and foreign investment and investment opportunities. Therefore, in the tests discussed above, I utilize data provided by U.S. MNCs' segment reporting. As a result, the findings of the tests should be interpreted in light of the following caveats and limitations.

During my sample period, Statement of Financial Accounting Standard No. (SFAS) 14 and later SFAS 131 governed firms' segment reporting. Under SFAS 14, firms were required to disclose segment information by both line-of-business and geographic area. Firms were required to disclose revenues, assets, capital expenditures, depreciation, and earnings by line-of-business if the revenues, assets, or earnings of the line-of-business were greater than ten percent of the consolidated amounts. In addition, firms were required to disclose revenues, assets, and earnings by geographic segment if the revenues or assets of the geographic segment were greater than ten percent of the consolidated amounts.

SFAS 131, effective for fiscal years beginning after December 15, 1997, adopted a new approach to segment reporting. Under SFAS 131, firms disclose revenues, assets, capital expenditures, depreciation, and earnings for each operating segment. Operating segments are defined based upon the way management organizes the firm for internal

decision-making purposes. SFAS 131 also requires supplemental enterprise-wide disclosures when they are not already included as part of the operating segment disclosures. For example, firms that do not define their operating segments geographically are required to disclose the revenues and long-lived assets for each material country.

As a result, the use of data provided by U.S. MNCs' geographic segment reporting to examine the relation between the U.S. tax and financial reporting treatment of foreign earnings and U.S. MNCs' investment is subject to several limitations. During the SFAS 14 period, firms were not required to disclose capital expenditures (or depreciation) by geographic area. In the post SFAS 131 period, only U.S. MNCs that define operating segments geographically are required to disclose capital expenditures (or depreciation) for geographic segments. Herrmann and Thomas (2000) report that only 12 of their 100 sample firms defined their operating segments by geographic area under SFAS 131, and 17 firms used a combination of products and services and geographic areas to define their operating segments. Thus, disclosures of capital expenditures (or depreciation) for geographic segments are infrequent, and the results of the tests using these data may not generalize to U.S. MNCs that do not disclose this information as a part of their segment reporting.

Several other limitations exist with respect to the use of geographic segment data. First, the geographic sales figures are based on the location of external customers, not the geographic location of the legal entity that made the sales. Second, the sum of domestic and foreign segment figures from the Compustat Segment file are not always approximately equal to the consolidated totals from the Compustat Annual file. Third, the definition of geographic segment assets that is reported varies across the segment reporting regimes and within firms within a regime.

5.4 Overall Profitability

In the main tests, I find evidence the U.S. tax and financial reporting treatment of foreign earnings impacts U.S. MNCs' payout policies. Because payout policy interacts with a firm's other investing and financing decisions (Allen and Michaely [2003]), it is possible the U.S. tax and financial reporting treatment of foreign earnings has implications for overall firm performance. Thus, I adapt the research design of Atwood, Huston, and Wallace (2013) and investigate the association between U.S. tax and financial reporting incentives to keep foreign earnings reinvested abroad and the overall profitability of U.S MNCs. The profitability measures I consider are pre- and after-tax return-on-assets (ROA) and cash flow from operations.

The results with pre-tax ROA (*PROA*) as the dependent variable are reported in Table C12, Panel A, and results with after-tax ROA (*ROA*) are reported in Panel B.[36] In Panel A, the coefficient on *LowFETR* is negative and significant in all specifications except Column (1), indicating U.S. MNCs facing significant potential U.S. repatriation tax costs have lower pre-tax ROA than other U.S. MNCs. However, in Panel B, the coefficient on *LowFETR* is not significant in any of the specifications when after-tax ROA is the dependent variable.[37] One possible explanation for these findings that U.S. MNCs with average foreign tax rates substantially below the U.S. statutory tax rate have significantly lower pre-tax ROA but similar after-tax ROA compared to other U.S. MNCs is that U.S. MNCs bear implicit taxes when investing in low-tax foreign jurisdictions (e.g. Scholes et al. [2009]).

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[36] These tests are conducted on the subsample of firm-years in the Full Sample with cumulative three-year foreign pretax income greater than zero and non-missing values of the regression variables. In the Full Sample, firm-years with cumulative three-year pretax foreign income less than or equal to zero are all coded as *LowFETR* = 0. Removing them from the sample used in these tests avoids bias that would be induced as a result of the construction of the *LowFETR* variable.

[37] In additional untabulated analyses, I examine specifications using profit margin as the dependent variable. The coefficient on *LowFETR* is not significant in any of these specifications.

Table C12, Panel C presents the results with cash flow from operations (*CFO*) as the dependent variable. The coefficient on *LowFETR* is negative and significant in Columns (5) and (6) in which *LowFETR5* and *LowFETR10* are used as the *LowFETR* measure and lagged value of *CFO* is included in the regression. The coefficient on *LowFETR* is negative but not significantly different from zero at conventional levels using a two-tailed test in the remaining specifications. Thus, I find weak evidence that the U.S. tax and financial reporting treatment of foreign earnings is associated with lower cash flow from operations.

CHAPTER 6

CONCLUSION

In this paper, I examine the association between the U.S. tax and financial reporting treatment of foreign earnings and the incidence, level, and form of payouts to shareholders by U.S. MNCs. I find the U.S. tax and financial reporting treatment of foreign earnings affects the incidence and level of dividend payments by weakening the otherwise strong, positive link between U.S. MNCs' foreign earnings and dividend payments. For U.S. MNCs without tax and/or financial reporting incentives to keep foreign earnings reinvested abroad, the probability and level of dividend payments is increasing in foreign earnings, but for U.S. MNCs with such incentives, the probability and level of dividend payments do not change with foreign earnings. I do not, however, find evidence the U.S. tax and financial reporting treatment of foreign earnings impacts the probability or level of share repurchases by U.S. MNCs. When I examine total payout (dividends plus repurchases), I find the association between foreign earnings and the probability of payout is reduced when a U.S. MNC has tax and/or financial reporting incentives to keep foreign earnings reinvested abroad, but the effect on the level of total payout is not statistically significant.

I also consider whether the U.S. tax and financial reporting treatment of foreign earnings is related to the form of payouts to shareholders. I find the level of repurchases relative to dividends is higher for U.S. MNCs with tax and/or financial reporting incentives to retain their foreign earnings abroad. Since repurchases are a more flexible payout vehicle than dividends, it is possible U.S. MNCs make more extensive use of repurchases to make distributions to shareholders because their flexibility enables U.S. MNCs to better match the timing of distributions with tax-efficient or *de facto* repatriations.

The evidence discussed above suggests the U.S. tax and financial reporting treatment of foreign earnings creates frictions in U.S. MNCs' internal capital markets. In additional analyses examining U.S. MNCs' domestic and foreign investment, I find some evidence in support of this conclusion. Specifically, I find the U.S. tax and financial reporting treatment of foreign earnings is associated with increased sensitivity of domestic investment to domestic cash flows, which is consistent with the presence of frictions in U.S. MNCs' internal capital markets. I do not find an effect on the responsiveness of domestic investment to proxies for domestic investment opportunities. In addition, I find some evidence the U.S. tax and financial reporting treatment of foreign earnings is associated with foreign over-investment, which does not necessarily indicate suboptimal investment decisions by managers of U.S. MNCs facing significant potential U.S. repatriation tax costs due to their potentially lower cost of foreign capital (Edwards et al. [2013]). I do not find consistent evidence of a relation with domestic under-investment.

These results are of interest to policymakers and accounting and finance scholars. As policymakers consider significant reforms to the current U.S. tax system, it is important to understand how the current system affects U.S. MNCs' decisions in order to evaluate the potential impact of proposed reforms. The results indicate that, after taking into account other determinants of firms' distributions to shareholders, the relationship between foreign earnings and the level of total payouts to shareholders does not differ for U.S. MNCs with and without significant potential U.S. repatriation tax liabilities. Thus, proposed reforms to the current U.S. worldwide tax system might not have a large impact on the extent to which U.S. MNCs distribute their foreign profits to shareholders. In addition, the finding that U.S. MNCs facing significant potential U.S. repatriation tax costs utilize repurchases to a greater extent than dividends when making distributions to shareholders has tax revenue implications if shareholders' capital gains from share repurchases are subject to a lower tax rate than shareholders' dividend income. The

results are also of interest to accounting researchers because they add to the existing evidence on the impact of tax and financial reporting rules on firm's real decisions. Finally, they contribute to the finance literature by increasing our understanding of the determinants of firms' payout policies.

APPENDIX A

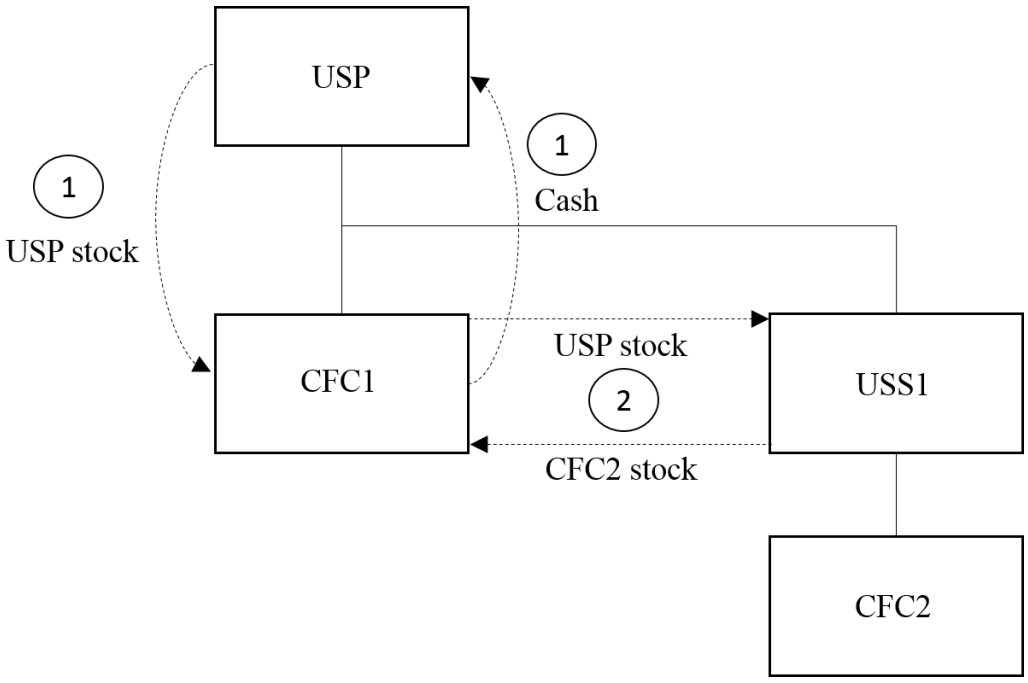
EXAMPLES OF TAX PLANNING STRATEGIES THAT ACHIEVE *DE FACTO* REPATRIATION

This Appendix illustrates two examples of tax planning strategies that have been used by U.S. MNCs to achieve *de facto* repatriations of foreign profits without triggering U.S. repatriation taxes.

Example 1: A "Killer B" transaction

A typical Killer B transaction involved a U.S. Parent (USP) that owned 100 percent of a foreign subsidiary (CFC1) with low-tax foreign earnings and a domestic subsidiary (USS1), which owned 100 percent of a second foreign subsidiary (CFC2). A regular dividend (i.e. repatriation) from CFC1 to USP would result in a substantial U.S. tax liability. A Killer B transaction took advantage of provisions in the U.S. tax code that grant tax-free treatment to certain types of corporate reorganizations. The transaction involved two steps. First, CFC1 purchased voting stock of USP from USP for cash. Then, CFC1 transferred the voting stock of USP to USS1 in exchange for the stock of CFC2.

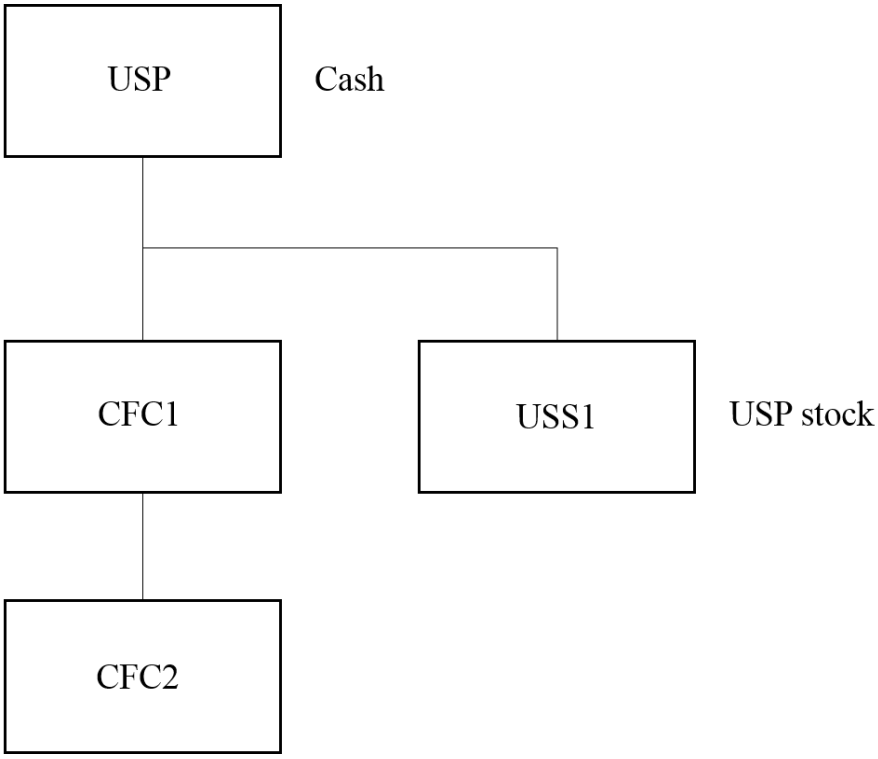
Illustration 1: Structure before and during the Killer B transaction.



Under the U.S. tax code, this transaction was viewed as an acquisition of CFC2 by CFC1 using the voting stock of a corporation with control over CFC1, and thus qualified as a

tax-free triangular “B” reorganization. At the completion of the transaction, CFC1 owned CFC2, USS1 owned voting stock in USP, and USP held cash transferred from CFC1, in effect “repatriating” the profits of CFC1 to USP without triggering any U.S. tax liability.

Illustration 2: Structure after the completion of the Killer B transaction



The Internal Revenue Service (IRS) constrained the use of this transaction by issuing Notice 2006-85. A variation of this transaction in which CFC1 purchased the USP voting stock from USP shareholders rather than from USP was shut down by the IRS with Notice 2007-48. (Hicks and Sotos [2008]).

Example 2: Hewlett-Packard’s alternating loan program

During a hearing in September 2012, the Permanent Subcommittee on Investigations of the U.S. Senate Homeland Security and Governmental Affairs Committee examined a structure used by Hewlett-Packard (HP) to obtain the economic use of its foreign profits without triggering U.S. taxes. In general, when a controlled foreign corporation (CFC) makes a loan to a related U.S. company, the U.S. tax code considers it a deemed dividend (i.e. treats it as if a repatriation occurred) that is subject to U.S. tax. Exceptions are provided for short term loans if they are repaid within 30 days and all of the loans made by the CFC over the course of the year are outstanding for less than a total of 60 days. Additional guidance issued by the Internal Revenue Service provided that loans would only be subject to an analysis of whether they were deemed dividends if they were

outstanding at the end of a CFC's fiscal quarter, and the limitations on the length of the loans would be applied separately to each CFC of a company.

HP used these exceptions to structure a staggered or alternating loan program that met these short-term lending requirements. The loan program enabled HP's internal treasury department to continuously obtain offshore loans for HP's U.S. operations without triggering a U.S. tax liability. Under the loan program, two CFCs with pools of foreign cash alternated making short-term loans to HP's U.S. operations according to the following schedule:

From CFC1	From CFC2
January 2 – February 17	February 17 – April 2
April 2 – May 17	May 17 – July 2
July 2 – August 17	August 17 – October 2
October 2 – November 17	November 17 – January 2

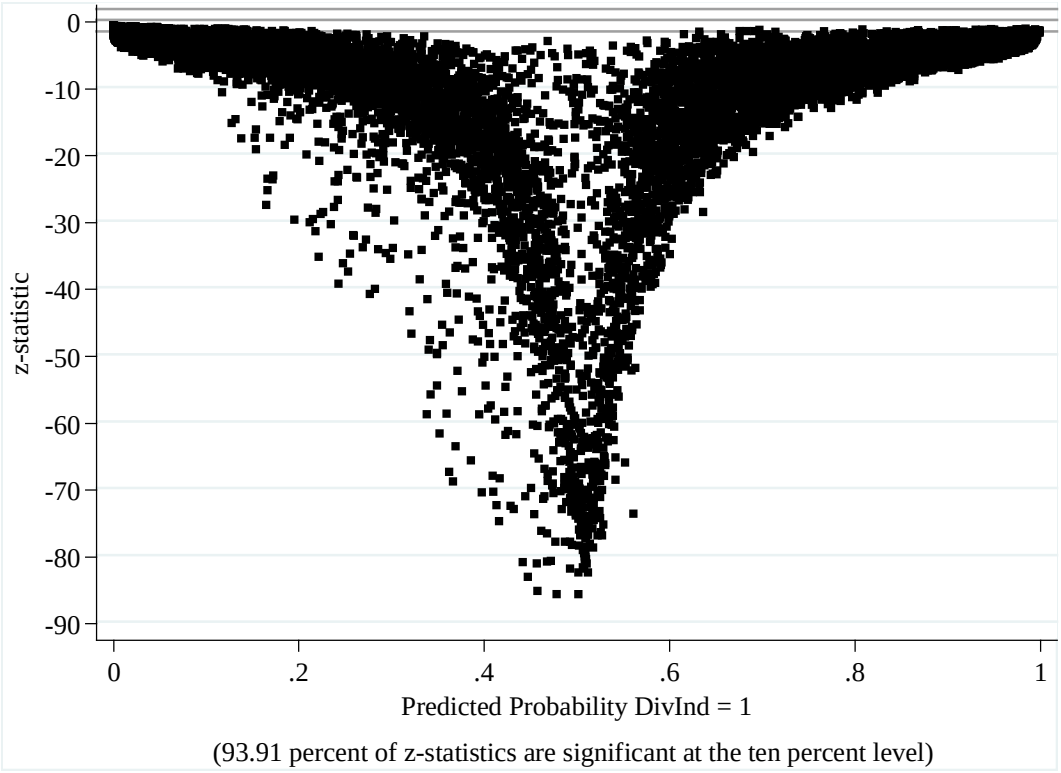
CFC1 and CFC2 have different fiscal quarters, and the loan schedule was structured so that the CFCs did not loan over their quarter ends. Because the loans were not outstanding at the CFCs' quarter ends, the loans were not subject to an analysis of whether or not they were deemed dividends. Internal HP documents characterized the alternating loan program as the most important source of U.S. liquidity for repurchases and acquisitions. The alternating loan program allows the U.S. parent to *de facto* repatriate its foreign profits without incurring U.S. taxes. (U.S. PSI [2012], Linebaugh [2013]).

APPENDIX B

FIGURES

Figure B1: Additional Supporting Analyses of *eFOR*LowFETR5* Interaction Effect – Probability of a Dividend Payment

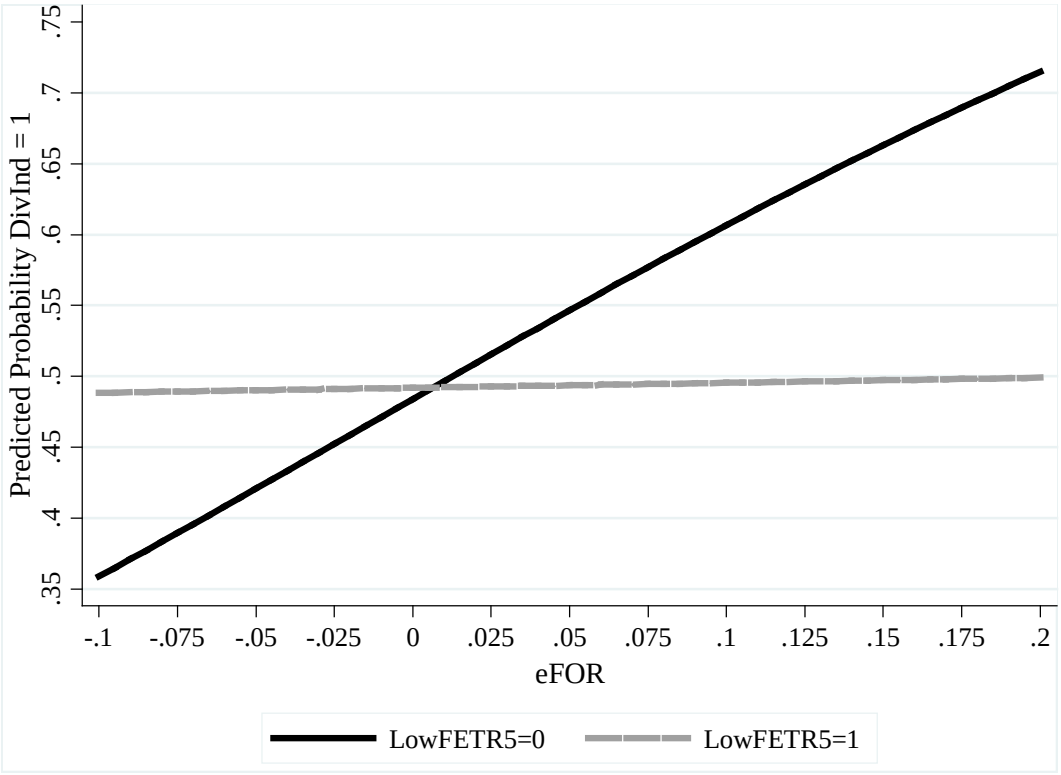
*Panel A: z-statistics for Ai and Norton (2003) eFOR*LowFETR5 Marginal Effects*



(93.91 percent of z-statistics are significant at the ten percent level)

Figure B1 Continued

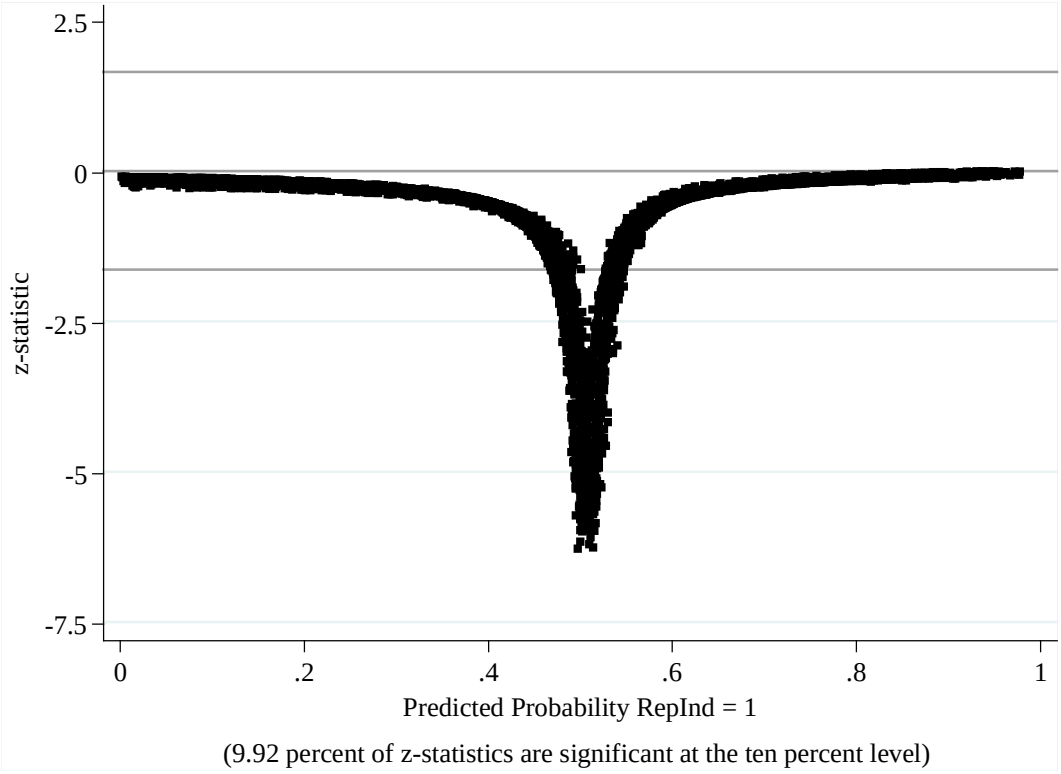
Panel B: Graphical Evidence of the Average Effect of eFOR on the Probability of a Dividend Payment (Greene [2010])



Note: Figure B1 is based on the regression results reported in Column (1) of Table C4, Panel A. Panel A is a scatter plot of the z-statistics of the marginal effect of *eFOR*LowFETR5* computed following Ai and Norton (2003). Panel B was constructed by computing the probability of a dividend payment for each sample observation for different values of *eFOR* (ranging from -0.10 to 0.20, incrementing by 0.005) first with *LowFETR5*=0 and then with *LowFETR5* = 1, using the actual values of the remaining control variables. Panel B plots the average predicted probability *DivInd* = 1 across the values of *eFOR* with *LowFETR5*=0 and with *LowFETR5*=1 for the sample observations.

Figure B2: Additional Supporting Analyses of *eFOR*LowFETR5* Interaction Effect – Probability of a Repurchase

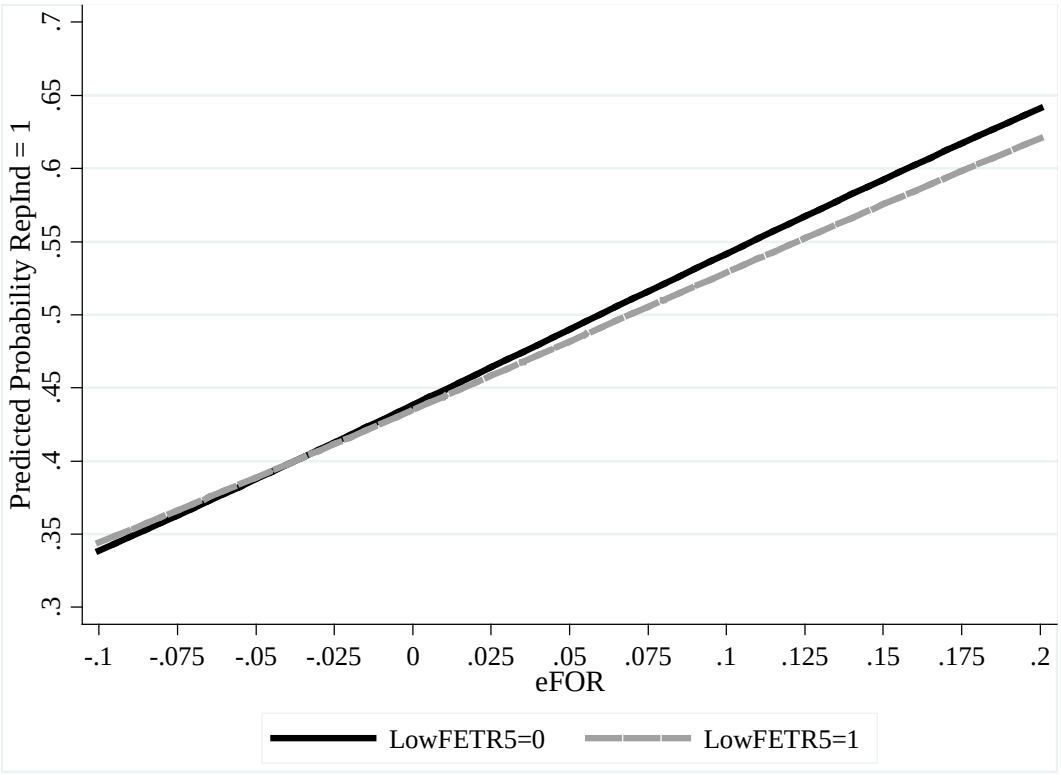
*Panel A: z-statistics for Ai and Norton (2003) eFOR*LowFETR5 Marginal Effects*



(9.92 percent of z-statistics are significant at the ten percent level)

Figure B2 Continued

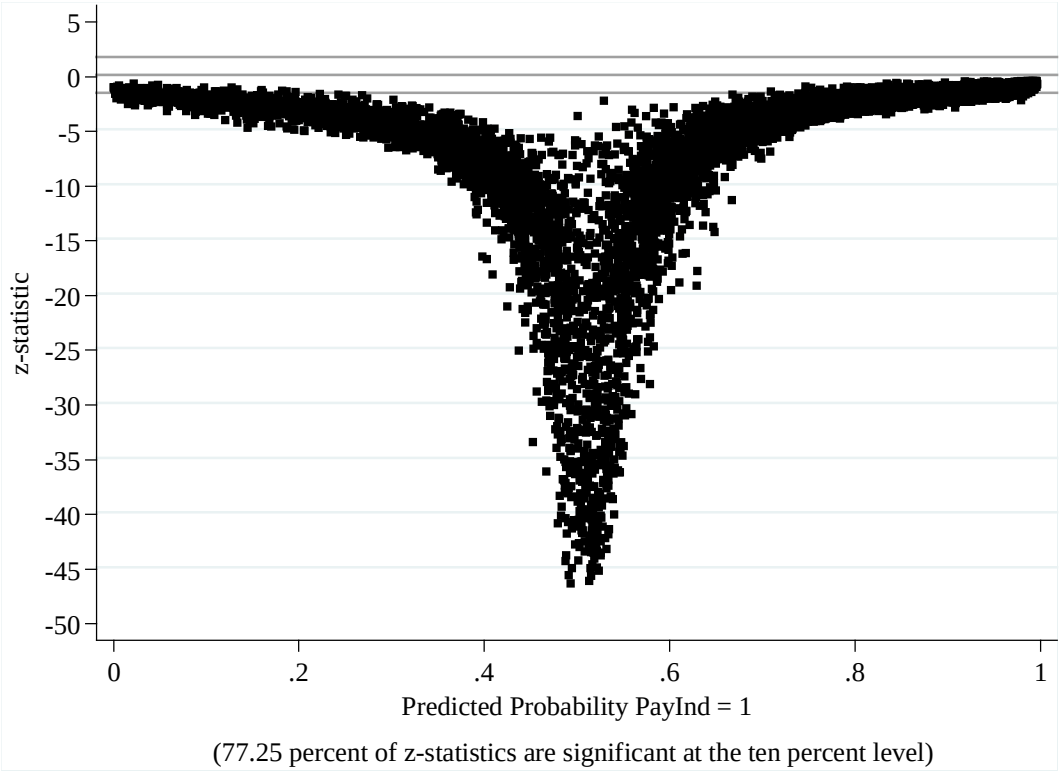
Panel B: Graphical Evidence of the Average Effect of eFOR on the Probability of a Repurchase (Greene [2010])



Note: Figure B2 is based on the regression results reported in Column (1) of Table C4, Panel B. Panel A is a scatter plot of the z-statistics of the marginal effect of *eFOR*LowFETR5* computed following Ai and Norton (2003). Panel B was constructed by computing the probability of a repurchase for each sample observation for different values of *eFOR* (ranging from -0.10 to 0.20, incrementing by 0.005) first with *LowFETR5*=0 and then with *LowFETR5* = 1, using the actual values of the remaining control variables. Panel B plots the average predicted probability *RepInd* = 1 across the values of *eFOR* with *LowFETR5*=0 and with *LowFETR5*=1 for the sample observations.

Figure B3: Additional Supporting Analyses of *eFOR*LowFETR5* Interaction Effect – Probability of Payout (Dividend or Repurchase)

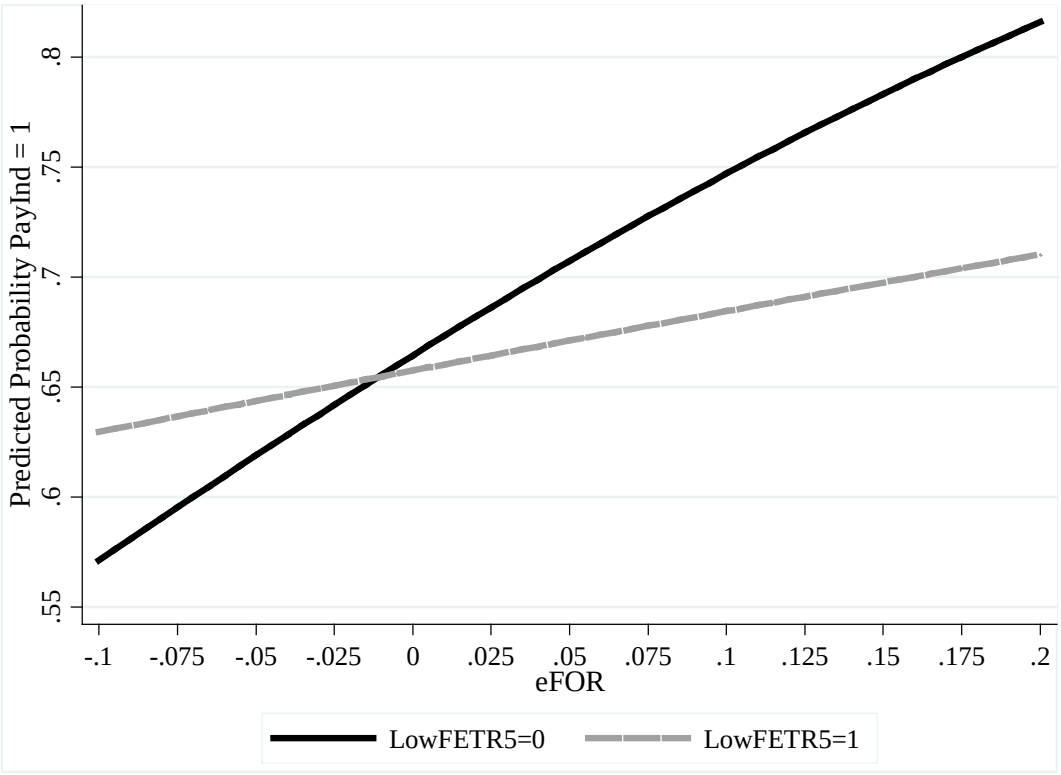
*Panel A: z-statistics for Ai and Norton (2003) eFOR*LowFETR5 Marginal Effects*



(77.25 percent of z-statistics are significant at the ten percent level)

Figure B3 Continued

Panel B: Graphical Evidence of the Average Effect of eFOR on the Probability of Payout (Greene [2010])



Note: Figure B3 is based on the regression results reported in Column (1) of Table C4, Panel C. Panel A is a scatter plot of the z-statistics of the marginal effect of *eFOR*LowFETR5* computed following Ai and Norton (2003). Panel B was constructed by computing the probability of payout for each sample observation for different values of *eFOR* (ranging from -0.10 to 0.20, incrementing by 0.005) first with *LowFETR5*=0 and then with *LowFETR5* = 1, using the actual values of the remaining control variables. Panel B plots the average predicted probability *PayInd* = 1 across the values of *eFOR* with *LowFETR5*=0 and with *LowFETR5*=1 for the sample observations.

APPENDIX C

TABLES

Table C1: Sample Selection and Composition

Panel A: Sample Selection

Compustat firm-years: 1987-2004	183,216
Less: Utilities and financial institutions	(47,219)
Less: Firms incorporated outside of the U.S.	(11,302)
Less: Firm-years with missing or zero foreign pretax income	(101,037)
Compustat U.S. multinational company (MNC) firm-years	23,658
Less: Missing values of Compustat-based regression variables	(9,707)
Less: Missing values of CRSP-based regression variables	(1,507)
U.S. MNC firm-years for tests of H1 (Full Sample)	12,444
Less: Firm-years without payout	(4,032)
U.S. MNC firm-years for tests of H2 (Payout Sample)	8,412

Table C1 Continued

Panel B: Sample Composition

Year	MNCs	Column %	Payers	Row %	Dividend Payers	Row %	Repurchasers	Row %
1987	507	4.07%	377	74.36%	323	63.71%	253	49.90%
1988	523	4.20%	387	74.00%	338	64.63%	239	45.70%
1989	541	4.35%	397	73.38%	347	64.14%	242	44.73%
1990	573	4.60%	420	73.30%	354	61.78%	261	45.55%
1991	596	4.79%	426	71.48%	365	61.24%	233	39.09%
1992	639	5.14%	447	69.95%	379	59.31%	225	35.21%
1993	664	5.34%	440	66.27%	370	55.72%	231	34.79%
1994	712	5.72%	460	64.61%	380	53.37%	260	36.52%
1995	772	6.20%	497	64.38%	396	51.30%	297	38.47%
1996	773	6.21%	515	66.62%	393	50.84%	356	46.05%
1997	784	6.30%	529	67.47%	385	49.11%	392	50.00%
1998	792	6.36%	571	72.10%	374	47.22%	478	60.35%
1999	774	6.22%	549	70.93%	342	44.19%	455	58.79%
2000	703	5.65%	491	69.84%	313	44.52%	412	58.61%
2001	709	5.70%	468	66.01%	292	41.18%	373	52.61%
2002	743	5.97%	460	61.91%	279	37.55%	351	47.24%
2003	792	6.36%	478	60.35%	306	38.64%	357	45.08%
2004	847	6.81%	500	59.03%	345	40.73%	362	42.74%
Total:	12,444		8,412		6,281		5,777	

Table C2: Descriptive Statistics

Panel A: Full Sample

Variable	N	Mean	Std Dev	10th Pctl	25th Pctl	50th Pctl	75th Pctl	90th Pctl
$PayInd_{it}$	12,444	0.6760	0.4680	0.0000	0.0000	1.0000	1.0000	1.0000
$DivInd_{it}$	12,444	0.5047	0.5000	0.0000	0.0000	1.0000	1.0000	1.0000
$RepInd_{it}$	12,444	0.4642	0.4987	0.0000	0.0000	0.0000	1.0000	1.0000
$PayLev_{it}$	12,444	0.0301	0.0471	0.0000	0.0000	0.0124	0.0377	0.0853
$DivLev_{it}$	12,444	0.0121	0.0183	0.0000	0.0000	0.0009	0.0191	0.0344
$RepLev_{it}$	12,444	0.0175	0.0386	0.0000	0.0000	0.0000	0.0163	0.0560
$RepMix_{it}$	8,412	0.0085	0.0508	-0.0303	-0.0166	-0.0035	0.0175	0.0605
$RepRatio_{it}$	8,412	0.4486	0.4176	0.0000	0.0000	0.3997	1.0000	1.0000
eUS_{it}	12,444	0.0455	0.1133	-0.0755	-0.0037	0.0470	0.1030	0.1734
$eFOR_{it}$	12,444	0.0269	0.0453	-0.0110	0.0029	0.0173	0.0445	0.0826
$LowFETR5_{it}$	12,444	0.3001	0.4583	0.0000	0.0000	0.0000	1.0000	1.0000
$LowFETR10_{it}$	12,444	0.2206	0.4147	0.0000	0.0000	0.0000	0.0000	1.0000
$Size_{it-1}$	12,444	6.2061	1.8526	3.8038	4.8611	6.1125	7.4909	8.7131
SGR_{it}	12,444	0.0951	0.2200	-0.1239	-0.0110	0.0732	0.1715	0.3255
MTB_{it-1}	12,444	2.7097	2.7890	0.7859	1.2384	1.9724	3.2259	5.4169
$CAPEX_{it-1}$	12,444	0.0591	0.0435	0.0165	0.0294	0.0484	0.0763	0.1140
AGE_{it}	12,444	2.7008	0.9456	1.3652	2.0149	2.8332	3.3816	4.0013
RE/TE_{it-1}	12,444	0.3886	1.2811	-0.3678	0.2016	0.5993	0.8801	1.1090
LEV_{it-1}	12,444	0.2200	0.1731	0.0024	0.0741	0.2046	0.3282	0.4495
$CASH_{it-1}$	12,444	0.1284	0.1531	0.0096	0.0223	0.0650	0.1762	0.3498
$\sigma(eUS)_{it}$	12,444	0.0702	0.0769	0.0139	0.0244	0.0448	0.0845	0.1538
$\sigma(eFOR)_{it}$	12,444	0.0219	0.0247	0.0033	0.0066	0.0139	0.0269	0.0499
$PastStockRet_{it}$	12,444	0.3290	0.8513	-0.4979	-0.1942	0.1677	0.6021	1.2444
$Options_{it}$	12,444	0.0428	0.1016	-0.0118	0.0007	0.0129	0.0441	0.1263
$DivHist_{it}$	12,444	1.5124	1.1873	0.0000	0.0000	1.9459	2.5649	2.9444

Table C2 Continued

Panel B: Full Sample Split by LowFETR5

	$LowFETR5_{it} = 0$					$LowFETR5_{it} = 1$					
Variable	N	Mean	25th Pctl	50th Pctl	75th Pctl	N	Mean		25th Pctl	50th Pctl		75th Pctl
$PayInd_{it}$	8,710	0.6763	0.0000	1.0000	1.0000	3,734	0.6751		0.0000	1.0000		1.0000
$DivInd_{it}$	8,710	0.5114	0.0000	1.0000	1.0000	3,734	0.4893	**	0.0000	0.0000	##	1.0000
$RepInd_{it}$	8,710	0.4575	0.0000	0.0000	1.0000	3,734	0.4799	**	0.0000	0.0000	##	1.0000
$PayLev_{it}$	8,710	0.0291	0.0000	0.0123	0.0367	3,734	0.0326	***	0.0000	0.0126	#	0.0416
$DivLev_{it}$	8,710	0.0125	0.0000	0.0021	0.0198	3,734	0.0112	***	0.0000	0.0000	###	0.0171
$RepLev_{it}$	8,710	0.0160	0.0000	0.0000	0.0138	3,734	0.0210	***	0.0000	0.0000	###	0.0213
$RepMix_{it}$	5,891	0.0055	-0.0179	-0.0046	0.0139	2,521	0.0154	***	-0.0136	0.0000	###	0.0254
$RepRatio_{it}$	5,891	0.4326	0.0000	0.3571	0.9574	2,521	0.4858	***	0.0000	0.5024	###	1.0000
eUS_{it}	8,710	0.0448	-0.0050	0.0477	0.1042	3,734	0.0473		-0.0005	0.0447		0.0993
$eFOR_{it}$	8,710	0.0196	0.0000	0.0126	0.0365	3,734	0.0438	***	0.0111	0.0300	###	0.0631
$Size_{it-1}$	8,710	6.1183	4.8236	6.0042	7.3578	3,734	6.4109	***	4.9967	6.4161	###	7.7482
SGR_{it}	8,710	0.0861	-0.0172	0.0660	0.1638	3,734	0.1161	***	0.0055	0.0864	###	0.1908
MTB_{it-1}	8,710	2.6175	1.2088	1.9276	3.1313	3,734	2.9247	***	1.2994	2.0693	###	3.4382
$CAPEX_{it-1}$	8,710	0.0577	0.0291	0.0478	0.0748	3,734	0.0626	***	0.0300	0.0498	###	0.0802
AGE_{it}	8,710	2.7027	2.0149	2.8431	3.3872	3,734	2.6963		2.0260	2.7780		3.3645
RE/TE_{it-1}	8,710	0.3656	0.1787	0.6026	0.8837	3,734	0.4423	***	0.2473	0.5923		0.8673
LEV_{it-1}	8,710	0.2196	0.0758	0.2026	0.3255	3,734	0.2210		0.0714	0.2101		0.3333
$CASH_{it-1}$	8,710	0.1266	0.0222	0.0643	0.1718	3,734	0.1325	**	0.0226	0.0672	#	0.1882
$\sigma(eUS)_{it}$	8,710	0.0720	0.0255	0.0457	0.0859	3,734	0.0659	***	0.0222	0.0429	###	0.0808
$\sigma(eFOR)_{it}$	8,710	0.0209	0.0064	0.0134	0.0255	3,734	0.0241	***	0.0072	0.0153	###	0.0302
$PastStockRet_{it}$	8,710	0.2953	-0.2177	0.1525	0.5717	3,734	0.4075	***	-0.1423	0.2036	###	0.6830
$Options_{it}$	8,710	0.0424	0.0005	0.0119	0.0435	3,734	0.0435		0.0011	0.0154	###	0.0453
$DivHist_{it}$	8,710	1.5295	0.0000	1.9459	2.5649	3,734	1.4727	**	0.0000	1.7918	#	2.5649

Table C2 Continued

Panel C: Full Sample Split by Form of Payout

Variable	Only Dividends (Group 1)			Dividends and Repurchases (Group 2)					Only Repurchases (Group 3)						
	N	Mean	50th Pctl	N	Mean	1 vs 2	50th Pctl	1 vs 2	N	Mean	1 vs 3	2 vs 3	50th Pctl	1 vs 3	2 vs 3
RepMix $_{it}$	2,635	-0.0197	-0.0152	3,646	0.0092	***	-0.0021	###	2,131	0.0420	***	***	0.0190	###	###
RepRatio $_{it}$	2,635	0.0000	0.0000	3,646	0.4504	***	0.4678	###	2,131	1.0000	***	***	1.0000	###	###
eUS $_{it}$	2,635	0.0546	0.0479	3,646	0.0828	***	0.0724	###	2,131	0.0501		***	0.0422	###	###
eFOR $_{it}$	2,635	0.0258	0.0178	3,646	0.0385	***	0.0262	###	2,131	0.0269		***	0.0157	##	###
LowFETR5 $_{it}$	2,635	0.2767	0.0000	3,646	0.3012	**	0.0000	##	2,131	0.3257	***	*	0.0000	###	#
LowFETR10 $_{it}$	2,635	0.2023	0.0000	3,646	0.1846	*	0.0000	#	2,131	0.2595	***	***	0.0000	###	###
Size $_{it-1}$	2,635	6.6998	6.6290	3,646	7.2229	***	7.2296	###	2,131	5.7132	***	***	5.6295	###	###
SGR $_{it}$	2,635	0.0913	0.0742	3,646	0.0730	***	0.0649	###	2,131	0.0910		***	0.0767		##
MTB $_{it-1}$	2,635	2.2883	1.7682	3,646	3.2719	***	2.4301	###	2,131	2.8160	***	***	1.9438	###	###
CAPEX $_{it-1}$	2,635	0.0647	0.0530	3,646	0.0620	***	0.0543		2,131	0.0553	***	***	0.0433	###	###
AGE $_{it}$	2,635	3.0444	3.1783	3,646	3.2007	***	3.2960	###	2,131	2.2802	***	***	2.3031	###	###
RE/TE $_{it-1}$	2,635	0.6607	0.7110	3,646	0.8648	***	0.8695	###	2,131	0.3132	***	***	0.4048	###	###
LEV $_{it-1}$	2,635	0.2499	0.2480	3,646	0.2097	***	0.2071	###	2,131	0.1654	***	***	0.1083	###	###
CASH $_{it-1}$	2,635	0.0726	0.0369	3,646	0.0891	***	0.0525	###	2,131	0.2070	***	***	0.1480	###	###
σ(eUS) $_{it}$	2,635	0.0461	0.0357	3,646	0.0398	***	0.0298	###	2,131	0.0899	***	***	0.0652	###	###
σ(eFOR) $_{it}$	2,635	0.0159	0.0110	3,646	0.0146	***	0.0104	##	2,131	0.0257	***	***	0.0176	###	###
DivHist $_{it}$	2,635	2.3969	2.4849	3,646	2.5047	***	2.5649	###	2,131	0.5074	***	***	0.0000	###	###
PayLev $_{it}$	2,635	0.0206	0.0152	3,646	0.0645	***	0.0458	###	2,131	0.0431	***	***	0.0190	###	###
PayLevInd $_{it}$	2,635	0.2304	0.0000	3,646	0.7394	***	1.0000	###	2,131	0.4237	***	***	0.0000	###	###
DivLev $_{it}$	2,635	0.0200	0.0152	3,646	0.0273	***	0.0215	###	2,131	0.0000	***	***	0.0000	###	###
RepLev $_{it}$	2,635	0.0000	0.0000	3,646	0.0365	***	0.0189	###	2,131	0.0424	***	***	0.0190	###	
PastStockRet $_{it}$	2,635	0.3219	0.2197	3,646	0.3156		0.2371		2,131	0.2632	***	**	0.0667	###	###
Options $_{it}$	2,635	0.0274	0.0063	3,646	0.0219	***	0.0102	###	2,131	0.0435	***	***	0.0228	###	###

Table C2 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. In Panels B and C, ***, **, * indicates the difference in means between the groups is significant at the 0.01, 0.05, and 0.10 level, and ###, ##, # indicates the difference in medians between the groups is significant at the 0.01, 0.05, and 0.10 level.

Table C3: Correlations

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
(1)	$PayInd_{it}$		**0.699**	**0.644**	**0.824**	**0.646**	**0.605**			**0.248**	**0.171**	-0.001	**0.363**	**-0.039**	**0.138**	**0.127**	**0.338**	**0.411**	**-0.023**	**-0.120**	**-0.302**	**-0.208**	**0.081**	**-0.136**	**0.533**
(2)	$DivInd_{it}$	**0.699**		**0.235**	**0.638**	**0.924**	**0.221**	**-0.530**	**-0.772**	**0.241**	**0.178**	*-0.020*	**0.432**	**-0.035**	**0.136**	**0.166**	**0.481**	**0.497**	**0.100**	**-0.263**	**-0.409**	**-0.267**	**0.122**	**-0.178**	**0.781**
(3)	$RepInd_{it}$	**0.644**	**0.235**		**0.685**	**0.274**	**0.939**	**0.539**	**0.823**	**0.214**	**0.153**	*0.021*	**0.227**	**-0.039**	**0.186**	**0.057**	**0.157**	**0.271**	**-0.122**	**0.042**	**-0.153**	**-0.097**	**0.030**	**-0.041**	**0.206**
(4)	$PayLev_{it}$	**0.443**	**0.329**	**0.502**		**0.718**	**0.780**	**0.221**	**0.214**	**0.377**	**0.261**	0.016	**0.369**	*-0.023*	**0.305**	**0.137**	**0.343**	**0.456**	**-0.128**	-0.017	**-0.276**	**-0.180**	**0.121**	**-0.082**	**0.494**
(5)	$DivLev_{it}$	**0.458**	**0.655**	**0.251**	**0.562**		**0.274**	**-0.593**	**-0.545**	**0.316**	**0.221**	**-0.033**	**0.408**	**-0.029**	**0.222**	**0.179**	**0.495**	**0.531**	**0.025**	**-0.203**	**-0.392**	**-0.253**	**0.135**	**-0.186**	**0.737**
(6)	$RepLev_{it}$	**0.314**	**0.084**	**0.488**	**0.900**	**0.173**		**0.751**	**0.783**	**0.269**	**0.190**	**0.038**	**0.235**	**-0.029**	**0.252**	**0.059**	**0.145**	**0.273**	**-0.160**	**0.086**	**-0.132**	**-0.079**	**0.053**	0.008	**0.187**
(7)	$RepMix_{it}$		**-0.385**	**0.375**	**0.649**	**-0.365**	**0.912**		**0.790**	0.004	-0.004	**0.090**	**-0.085**	-0.010	**0.067**	**-0.097**	**-0.274**	**-0.188**	**-0.136**	**0.213**	**0.189**	**0.138**	**-0.042**	**0.239**	**-0.348**
(8)	$RepRatio_{it}$		**-0.769**	**0.725**	**0.286**	**-0.404**	**0.515**	**0.623**		*0.024*	0.004	**0.053**	**-0.163**	-0.007	**0.092**	**-0.099**	**-0.309**	**-0.190**	**-0.232**	**0.297**	**0.228**	**0.156**	**-0.077**	**0.175**	**-0.485**
(9)	eUS_{it}	**0.247**	**0.224**	**0.200**	**0.322**	**0.296**	**0.242**	**0.110**	0.008		**0.189**	-0.006	**0.063**	**0.373**	**0.392**	**0.108**	**0.077**	**0.271**	**-0.203**	**0.054**	**-0.175**	**-0.205**	**0.444**	**0.062**	**0.142**
(10)	$eFOR_{it}$	**0.143**	**0.137**	**0.145**	**0.257**	**0.241**	**0.190**	**0.079**	*0.022*	**0.201**		**0.260**	**0.200**	**0.251**	**0.277**	**0.099**	**0.098**	**0.217**	**-0.086**	**0.077**	**-0.212**	**0.217**	**0.285**	**0.049**	**0.131**
(11)	$LowFETR5_{it}$	-0.001	*-0.020*	*0.021*	**0.034**	**-0.034**	**0.060**	**0.089**	**0.058**	0.010	**0.244**		**0.073**	**0.070**	**0.051**	**0.032**	-0.010	0.007	0.009	0.017	**-0.040**	**0.062**	**0.055**	**0.029**	-0.017
(12)	$Size_{it-1}$	**0.363**	**0.432**	**0.228**	**0.222**	**0.295**	**0.134**	**-0.050**	**-0.176**	**0.085**	**0.166**	**0.072**		**-0.039**	**0.232**	**0.128**	**0.443**	**0.317**	**0.265**	**-0.255**	**-0.326**	**-0.185**	**0.083**	**-0.036**	**0.495**
(13)	SGR_{it}	**-0.072**	**-0.064**	**-0.063**	**-0.031**	**-0.034**	*-0.022*	0.002	-0.006	**0.304**	**0.228**	**0.062**	**-0.051**		**0.240**	0.013	**-0.119**	**-0.045**	**-0.094**	**0.113**	**-0.043**	*0.018*	**0.404**	**0.283**	**-0.104**
(14)	MTB_{it-1}	**0.061**	**0.051**	**0.124**	**0.297**	**0.240**	**0.243**	**0.150**	**0.097**	**0.242**	**0.235**	**0.050**	**0.159**	**0.161**		**0.129**	*0.019*	**0.034**	**-0.144**	**0.167**	-0.007	**0.063**	**0.218**	**0.117**	**0.096**
(15)	$CAPEX_{it-1}$	**0.069**	**0.094**	0.009	0.017	**0.065**	-0.007	**-0.055**	**-0.077**	**0.054**	**0.053**	**0.052**	**0.085**	**0.026**	**0.053**		**0.072**	**0.142**	0.006	**-0.120**	**-0.072**	-0.001	**-0.035**	**-0.075**	**0.091**
(16)	AGE_{it}	**0.331**	**0.463**	**0.157**	**0.191**	**0.380**	**0.052**	**-0.194**	**-0.317**	**0.091**	**0.071**	-0.003	**0.425**	**-0.131**	-0.001	0.011		**0.433**	**0.151**	**-0.206**	**-0.329**	**-0.209**	**0.091**	**-0.153**	**0.622**
(17)	RE/TE_{it-1}	**0.288**	**0.307**	**0.182**	**0.192**	**0.256**	**0.112**	**-0.067**	**-0.168**	**0.218**	**0.152**	**0.027**	**0.239**	-0.004	**-0.174**	**0.069**	**0.232**		**0.030**	**-0.147**	**-0.335**	**-0.209**	**0.104**	**-0.248**	**0.495**
(18)	LEV_{it-1}	**-0.069**	**0.040**	**-0.139**	**-0.180**	**-0.097**	**-0.164**	**-0.144**	**-0.195**	**-0.172**	**-0.113**	0.004	**0.217**	**-0.071**	**-0.083**	0.010	**0.090**	-0.010		**-0.573**	**-0.195**	**-0.149**	**-0.068**	**-0.030**	**0.189**
(19)	$CASH_{it-1}$	**-0.135**	**-0.304**	**0.028**	**0.089**	**-0.120**	**0.150**	**0.277**	**0.348**	0.009	**0.047**	*0.018*	**-0.252**	**0.126**	**0.176**	**-0.137**	**-0.260**	**-0.168**	**-0.465**		**0.306**	**0.263**	**0.049**	**0.114**	**-0.313**
(20)	$\sigma(eUS)_{it}$	**-0.279**	**-0.361**	**-0.131**	**-0.101**	**-0.234**	-0.016	**0.180**	**0.269**	**-0.231**	**-0.147**	**-0.037**	**-0.279**	**0.035**	**0.103**	**-0.043**	**-0.334**	**-0.277**	**-0.157**	**0.390**		**0.281**	**-0.166**	**0.107**	**-0.388**
(21)	$\sigma(eFOR)_{it}$	**-0.223**	**-0.271**	**-0.107**	**-0.084**	**-0.173**	*-0.020*	**0.119**	**0.184**	**-0.209**	**0.125**	**0.059**	**-0.206**	**0.031**	**0.085**	0.011	**-0.236**	**-0.193**	**-0.094**	**0.266**	**0.324**		**-0.044**	**0.096**	**-0.264**
(22)	$PastStockRet_{it}$	**-0.030**	-0.008	**-0.027**	**0.049**	0.009	**0.051**	**0.074**	-0.003	**0.370**	**0.252**	**0.060**	*-0.021*	**0.363**	**0.158**	**-0.054**	0.004	-0.002	**-0.079**	**0.076**	*-0.018*	0.012		**0.243**	**0.088**
(23)	$Options_{it}$	**-0.173**	**-0.173**	**-0.106**	**-0.033**	**-0.128**	*0.019*	**0.151**	**0.102**	**-0.058**	0.000	0.005	**-0.066**	**0.302**	**0.026**	**-0.051**	**-0.162**	**-0.160**	**0.068**	**0.076**	**0.147**	**0.126**	**0.150**		**-0.170**
(24)	$DivHist_{it}$	**0.551**	**0.805**	**0.200**	**0.252**	**0.542**	**0.050**	**-0.338**	**-0.614**	**0.158**	**0.092**	*-0.022*	**0.482**	**-0.116**	0.018	**0.045**	**0.576**	**0.304**	**0.140**	**-0.382**	**-0.374**	**-0.284**	**-0.030**	**-0.163**	

Note: Pearson (Spearman) correlations are below (above) the diagonal. Complete variable definitions are provided in the List of Abbreviations. Correlation coefficients in bold (italics) are significantly different from zero at the 0.01 (0.05) level.

Table C4: Logit Regression Results for the Probability of a Distribution to Shareholders (H1)

Panel A: Results of Estimating Equation (1) for the Probability of a Dividend Payment

Dependent Variable:		Prob($DivInd_{it}$ = 1)							
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$				$LowFETR10_{it}$			
		(1)		(2)		(3)		(4)	
Constant	?	-3.1965 ***		-5.7154 ***		-3.2004 ***		-5.6831 ***	
		(-9.60)		(-13.69)		(-9.56)		(-13.59)	
eUS_{it}	+	4.3799 ***	***0.5906***	5.3820 ***	***0.1590***	4.4670 ***	***0.6012***	5.4045 ***	***0.1596***
		(6.41)		(6.93)		(6.72)		(7.08)	
$eFOR_{it}$	+	9.1684 ***	***1.2363***	8.7072 ***	***0.2573***	8.6133 ***	***1.1593***	8.2024 ***	***0.2422***
		(5.29)		(4.85)		(5.19)		(4.83)	
$LowFETR_{it}$	?	0.0613	0.0083	0.2443	0.0072	-0.0138	-0.0019	0.2836 *	*0.0083*
		(0.50)		(1.59)		(-0.10)		(1.68)	
$eFOR_{it}$ *$LowFETR_{it}$	-	-8.9108 ***	***-1.1988***	-7.4661 ***	**-0.2291**	-9.0540 ***	***-1.2240***	-7.7594 ***	**-0.2356**
		(-3.73)		(-2.80)		(-3.49)		(-2.65)	
eUS_{it} *$LowFETR_{it}$	?	-0.0572	-0.0089	-1.0029	-0.0331	-0.4116	-0.0529	-1.3637	-0.0442
		(-0.06)		(-0.86)		(-0.36)		(-1.05)	
$Size_{it-1}$	+	0.4691 ***	***0.0633***	0.3341 ***	***0.0099***	0.4691 ***	***0.0631***	0.3318 ***	***0.0098***
		(10.34)		(8.77)		(10.29)		(8.65)	
SGR_{it}	-	-0.7513 ***	***-0.1013***	-0.2317	-0.0068	-0.7495 ***	***-0.1009***	-0.2337	-0.0069
		(-4.17)		(-0.70)		(-4.16)		(-0.71)	
MTB_{it-1}	-	0.0651 **	**0.0088**	-0.0165	-0.0005	0.0622 **	**0.0084**	-0.0184	-0.0005
		(2.50)		(-0.72)		(2.41)		(-0.80)	
$CAPEX_{it-1}$	-	0.2848	0.0384	0.2974	0.0088	0.3434	0.0462	0.2792	0.0082
		(0.23)		(0.26)		(0.28)		(0.24)	
AGE_{it}	+	0.7368 ***	***0.0994***	0.2141 ***	***0.0063***	0.7381 ***	***0.0993***	0.2115 ***	***0.0062***
		(10.45)		(3.11)		(10.47)		(3.07)	
RE/TE_{it-1}	+	0.5218 ***	***0.0704***	0.2498 ***	***0.0074***	0.5162 ***	***0.0695***	0.2488 ***	***0.0073***
		(7.18)		(3.87)		(7.12)		(3.87)	
LEV_{it-1}	-	-1.8928 ***	***-0.2552***	-2.5157 ***	***-0.0743***	-1.8784 ***	***-0.2528***	-2.5140 ***	***-0.0742***
		(-5.02)		(-6.60)		(-4.98)		(-6.57)	
$CASH_{it-1}$	+	-4.0210 ***	***-0.5422***	-1.4954 ***	***-0.0442***	-3.9922 ***	***-0.5373***	-1.5323 ***	***-0.0453***
		(-8.28)		(-3.19)		(-8.09)		(-3.22)	
$\sigma(eUS)_{it}$	-	-6.5509 ***	***-0.8834***	-4.0810 ***	***-0.1206***	-6.4742 ***	***-0.8714***	-4.0654 ***	***-0.1201***
		(-4.69)		(-4.14)		(-4.66)		(-4.15)	
$\sigma(eFOR)_{it}$	-	-10.8880 ***	***-1.4682***	-4.7921 *	*-0.1416*	-10.7469 ***	***-1.4464***	-4.8314 *	*-0.1427*
		(-3.44)		(-1.88)		(-3.41)		(-1.88)	
$DivInd_{it-1}$	+			6.5810 ***	***0.8311***			6.5808 ***	***0.8312***
				(41.07)				(40.98)	
$PastStockRet_{it}$	?	-0.1659 ***	***-0.0224***	0.2359 ***	***0.0070***	-0.1659 ***	***-0.0223***	0.2396 ***	***0.0071***
		(-3.85)		(3.66)		(-3.87)		(3.71)	
$Options_{it}$	?	-1.8589 ***	***-0.2507***	-1.0561	-0.0312	-1.8453 ***	***-0.2484***	-1.0465	-0.0309
		(-5.24)		(-1.59)		(-5.19)		(-1.58)	
Year Controls		Yes		Yes		Yes		Yes	
Observations		12,444		12,444		12,444		12,444	
Log Likelihood		-5,168.0		-1,522.5		-5,159.7		-1,522.1	
Pseudo R-squared		0.4008		0.8235		0.4018		0.8235	

Table C4 Continued

Panel B: Results of Estimating Equation (1) for the Probability of a Share Repurchase

Dependent Variable:		Prob($RepInd_{it}$ = 1)			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$		$LowFETR10_{it}$	
		(1)	(2)	(3)	(4)
Constant	?	-1.2352 ***	-1.7738 ***	-1.2303 ***	-1.7626 ***
		(-6.02)	(-10.07)	(-6.01)	(-10.01)
eUS_{it}	+	3.3945 *** ***0.6955***	3.1271 *** ***0.4763***	3.3578 *** ***0.6876***	3.0753 *** ***0.4684***
		(8.88)	(9.56)	(8.94)	(9.66)
$eFOR_{it}$	+	4.9689 *** ***1.0181***	4.7970 *** ***0.7307***	5.2395 *** ***1.0729***	4.9729 *** ***0.7574***
		(5.45)	(6.41)	(6.01)	(6.96)
$LowFETR_{it}$	?	-0.0386 -0.0079	0.0150 0.0023	-0.1150 -0.0235	-0.0645 -0.0098
		(-0.46)	(0.20)	(-1.26)	(-0.77)
$eFOR_{it}$ *$LowFETR_{it}$	-	-0.4243 -0.0871	-0.5893 -0.0887	-1.0057 *-0.2086*	-0.7896 -0.1215
		(-0.29)	(-0.45)	(-0.65)	(-0.56)
eUS_{it} *$LowFETR_{it}$	?	0.4150 0.0800	0.2695 0.0403	0.6192 0.1168	0.5388 0.0783
		(0.72)	(0.51)	(1.02)	(0.94)
$Size_{it-1}$	+	0.2135 *** ***0.0437***	0.1637 *** ***0.0249***	0.2133 *** ***0.0437***	0.1636 *** ***0.0249***
		(8.51)	(8.79)	(8.52)	(8.79)
SGR_{it}	-	-1.2801 *** ***-0.2623***	-1.2381 *** ***-0.1886***	-1.2715 *** ***-0.2604***	-1.2317 *** ***-0.1876***
		(-9.64)	(-8.94)	(-9.56)	(-8.88)
MTB_{it-1}	-	0.0508 *** ***0.0104***	0.0350 *** ***0.0053***	0.0503 *** ***0.0103***	0.0345 *** ***0.0053***
		(3.67)	(3.31)	(3.64)	(3.27)
$CAPEX_{it-1}$	-	-1.5512 * *-0.3178*	-1.1357 * *-0.1730*	-1.4862 * *-0.3043*	-1.0854 * *-0.1653*
		(-1.90)	(-1.75)	(-1.82)	(-1.67)
AGE_{it}	+	0.0886 ** **0.0182**	0.0268 0.0041	0.0880 ** **0.0180**	0.0268 0.0041
		(2.07)	(0.83)	(2.06)	(0.82)
RE/TE_{it-1}	+	0.2162 *** ***0.0443***	0.1207 *** ***0.0184***	0.2150 *** ***0.0440***	0.1202 *** ***0.0183***
		(5.98)	(4.77)	(5.97)	(4.75)
LEV_{it-1}	-	-1.9547 *** ***-0.4005***	-1.5852 *** ***-0.2415***	-1.9465 *** ***-0.3986***	-1.5775 *** ***-0.2403***
		(-8.53)	(-8.73)	(-8.50)	(-8.70)
$CASH_{it-1}$	+	0.9391 *** ***0.1924***	0.8934 *** ***0.1361***	0.9544 *** ***0.1954***	0.9025 *** ***0.1374***
		(3.68)	(4.30)	(3.75)	(4.35)
$\sigma(eUS)_{it}$	-	-1.6270 *** ***-0.3334***	-1.1074 *** ***-0.1687***	-1.6313 *** ***-0.3340***	-1.1158 *** ***-0.1699***
		(-3.22)	(-2.84)	(-3.22)	(-2.85)
$\sigma(eFOR)_{it}$	-	-5.0566 *** ***-1.0360***	-3.5970 *** ***-0.5479***	-4.8985 *** ***-1.0031***	-3.5343 *** ***-0.5383***
		(-3.45)	(-3.10)	(-3.36)	(-3.06)
$RepInd_{it-1}$	+		2.4129 *** ***0.4858***		2.4113 *** ***0.4854***
			(41.64)		(41.58)
$PastStockRet_{it}$	?	-0.2269 *** ***-0.0465***	-0.2012 *** ***-0.0306***	-0.2261 *** ***-0.0463***	-0.2013 *** ***-0.0307***
		(-6.77)	(-5.74)	(-6.74)	(-5.75)
$Options_{it}$	?	-0.2700 -0.0553	1.0224 *** ***0.1557***	-0.2697 -0.0552	1.0196 *** ***0.1553***
		(-1.12)	(4.15)	(-1.11)	(4.12)
Year Controls		Yes	Yes	Yes	Yes
Observations		12,444	12,444	12,444	12,444
Log Likelihood		-7,394.2	-5,892.2	-7,390.7	-5,891.1
Pseudo R-squared		0.1396	0.3144	0.1400	0.3145

Table C4 Continued

Panel C: Results of Estimating Equation (1) for the Probability of Payout (Dividend or Repurchase)

Dependent Variable:		Prob($PayInd_{it}$ = 1)							
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$				$LowFETR10_{it}$			
		(1)		(2)		(3)		(4)	
Constant	?	-1.8553 ***		-2.7561 ***		-1.8606 ***		-2.7531 ***	
		(-7.29)		(-11.78)		(-7.32)		(-11.73)	
eUS_{it}	+	3.6680 ***	***0.5578***	3.3689 ***	***0.3212***	3.7044 ***	***0.5629***	3.3019 ***	***0.3147***
		(8.66)		(8.34)		(8.95)		(8.46)	
$eFOR_{it}$	+	5.6321 ***	***0.8565***	5.6294 ***	***0.5368***	5.5814 ***	***0.8482***	5.6005 ***	***0.5339***
		(5.01)		(5.77)		(5.10)		(5.91)	
$LowFETR_{it}$	?	-0.0731	-0.0112	0.0374	0.0036	-0.1151	-0.0176	0.0106	0.0010
		(-0.78)		(0.39)		(-1.14)		(0.10)	
$eFOR_{it}$ *$LowFETR_{it}$	-	-3.8831 **	***-0.5665***	-3.8614 **	***-0.3647***	-4.2366 **	***-0.6215***	-4.2677 **	***-0.4035***
		(-2.21)		(-2.28)		(-2.33)		(-2.44)	
eUS_{it} *$LowFETR_{it}$	?	0.7296	0.1099	0.5850	0.0511	0.6939	0.1110	1.0265	0.0920
		(1.06)		(0.83)		(0.97)		(1.40)	
$Size_{it-1}$	+	0.4221 ***	***0.0642***	0.2944 ***	***0.0281***	0.4213 ***	***0.0640***	0.2942 ***	***0.0280***
		(12.85)		(12.13)		(12.85)		(12.12)	
SGR_{it}	-	-0.9985 ***	***-0.1518***	-0.9585 ***	***-0.0914***	-0.9925 ***	***-0.1508***	-0.9544 ***	***-0.0910***
		(-6.80)		(-5.84)		(-6.74)		(-5.81)	
MTB_{it-1}	-	0.0551 ***	***0.0084***	0.0439 ***	***0.0042***	0.0541 ***	***0.0082***	0.0430 ***	***0.0041***
		(2.99)		(3.05)		(2.94)		(3.00)	
$CAPEX_{it-1}$	-	0.2346	0.0357	0.2496	0.0238	0.2788	0.0424	0.2649	0.0253
		(0.24)		(0.32)		(0.29)		(0.34)	
AGE_{it}	+	0.4396 ***	***0.0668***	0.2223 ***	***0.0212***	0.4396 ***	***0.0668***	0.2228 ***	***0.0212***
		(8.10)		(5.19)		(8.10)		(5.19)	
RE/TE_{it-1}	+	0.2847 ***	***0.0433***	0.1623 ***	***0.0155***	0.2830 ***	***0.0430***	0.1612 ***	***0.0154***
		(6.89)		(5.33)		(6.86)		(5.31)	
LEV_{it-1}	-	-2.1518 ***	***-0.3272***	-1.7802 ***	***-0.1697***	-2.1429 ***	***-0.3257***	-1.7766 ***	***-0.1694***
		(-7.92)		(-8.16)		(-7.89)		(-8.14)	
$CASH_{it-1}$	+	-0.2064	-0.0314	0.2924	0.0279	-0.1903	-0.0289	0.3007	0.0287
		(-0.69)		(1.15)		(-0.63)		(1.18)	
$\sigma(eUS)_{it}$	-	-2.3569 ***	***-0.3584***	-1.2434 ***	***-0.1186***	-2.3422 ***	***-0.3559***	-1.2390 ***	***-0.1181***
		(-3.88)		(-2.68)		(-3.84)		(-2.67)	
$\sigma(eFOR)_{it}$	-	-6.6020 ***	***-1.0040***	-4.0175 ***	***-0.3831***	-6.4869 ***	***-0.9858***	-3.9937 ***	***-0.3807***
		(-4.12)		(-2.94)		(-4.03)		(-2.91)	
$PayInd_{it-1}$	+			3.2296 ***	***0.5486***			3.2288 ***	***0.5481***
				(39.88)				(39.92)	
$PastStockRet_{it}$	?	-0.2342 ***	***-0.0356***	-0.1710 ***	***-0.0163***	-0.2334 ***	***-0.0355***	-0.1702 ***	***-0.0162***
		(-6.54)	(-6.48)	(-4.07)		(-6.51)		(-4.04)	
$Options_{it}$	?	-1.1793 ***	***-0.1793***	0.2237	0.0213	-1.1714 ***	***-0.1780***	0.2281	0.0217
		(-4.30)	(-4.31)	(0.75)		(-4.27)		(0.77)	
Year Controls		Yes		Yes		Yes		Yes	
Observations		12,444		12,444		12,444		12,444	
Log Likelihood		-5,784.9		-4,011.7		-5,780.9		-4,010.2	
Pseudo R-squared		0.2619		0.4882		0.2624		0.4884	

Table C4 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. z-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed). Average marginal effects are presented to the right of the regression coefficients. Average marginal effects of the *eFOR*LowFETR* and *eUS*LowFETR* interaction terms were computed following the procedure in Ai and Norton (2003). Marginal effects in bold and italics, bold, and italics are significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C5: Tobit Regression Results for the Level of Distributions to Shareholders (H1)

Panel A: Results of Estimating Equation (2) for the Level of Dividends Paid

Dependent Variable:		$DivLev_{it}$							
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$				$LowFETR10_{it}$			
		(1)		(2)		(3)		(4)	
Constant	?	-0.0262 ***		-0.0134 ***		-0.0262 ***		-0.0133 ***	
		(-8.01)		(-11.02)		(-7.98)		(-10.99)	
eUS_{it}	+	0.0790 ***	***0.0389***	0.0189 ***	***0.0097***	0.0801 ***	***0.0394***	0.0188 ***	***0.0097***
		(9.26)		(6.74)		(9.74)		(6.95)	
$eFOR_{it}$	+	0.1561 ***	***0.0769***	0.0341 ***	***0.0175***	0.1468 ***	***0.0723***	0.0321 ***	***0.0165***
		(6.24)		(5.32)		(6.27)		(5.23)	
$LowFETR_{it}$	?	0.0006	0.0003	0.0005	0.0003	0.0001	0.0001	0.0003	0.0002
		(0.53)		(1.28)		(0.10)		(0.69)	
$eFOR_{it}$ *$LowFETR_{it}$	-	-0.0991 ***	***-0.0488***	-0.0289 ***	***-0.0149***	-0.0971 ***	***-0.0478***	-0.0303 ***	***-0.0156***
		(-3.29)		(-3.55)		(-3.03)		(-3.19)	
eUS_{it} *$LowFETR_{it}$	?	-0.0050	-0.0024	0.0010	0.0005	-0.0097	-0.0048	0.0021	0.0011
		(-0.44)		(0.25)		(-0.74)		(0.45)	
$Size_{it-1}$	+	0.0028 ***	***0.0014***	0.0011 ***	***0.0006***	0.0028 ***	***0.0014***	0.0011 ***	***0.0006***
		(6.99)		(8.26)		(6.95)		(8.24)	
SGR_{it}	-	-0.0140 ***	***-0.0069***	-0.0030 ***	***-0.0015***	-0.0140 ***	***-0.0069***	-0.0030 ***	***-0.0015***
		(-6.87)		(-3.27)		(-6.83)		(-3.25)	
MTB_{it-1}	-	0.0017 ***	***0.0008***	0.0001	0.0000	0.0016 ***	***0.0008***	0.0001	0.0000
		(7.81)		(0.93)		(7.67)		(0.73)	
$CAPEX_{it-1}$	-	-0.0121	-0.0059	-0.0008	-0.0004	-0.0113	-0.0056	-0.0006	-0.0003
		(-1.09)		(-0.22)		(-1.03)		(-0.17)	
AGE_{it}	+	0.0079 ***	***0.0039***	0.0018 ***	***0.0009***	0.0079 ***	***0.0039***	0.0018 ***	***0.0009***
		(10.57)		(6.47)		(10.55)		(6.48)	
RE/TE_{it-1}	+	0.0059 ***	***0.0029***	0.0016 ***	***0.0008***	0.0058 ***	***0.0029***	0.0016 ***	***0.0008***
		(7.30)		(5.44)		(7.22)		(5.40)	
LEV_{it-1}	-	-0.0279 ***	***-0.0137***	-0.0101 ***	***-0.0052***	-0.0276 ***	***-0.0136***	-0.0101 ***	***-0.0052***
		(-7.83)		(-6.56)		(-7.76)		(-6.55)	
$CASH_{it-1}$	+	-0.0345 ***	***-0.0170***	-0.0114 ***	***-0.0059***	-0.0341 ***	***-0.0168***	-0.0113 ***	***-0.0058***
		(-6.27)		(-5.91)		(-6.14)		(-5.87)	
$\sigma(eUS)_{it}$	-	-0.0558 ***	***-0.0275***	-0.0258 ***	***-0.0133***	-0.0546 ***	***-0.0269***	-0.0255 ***	***-0.0131***
		(-3.51)		(-5.10)		(-3.43)		(-5.03)	
$\sigma(eFOR)_{it}$	-	-0.1216 ***	***-0.0599***	-0.0343 ***	***-0.0176***	-0.1211 ***	***-0.0596***	-0.0344 ***	***-0.0177***
		(-3.43)		(-2.99)		(-3.43)		(-3.01)	
$DivLev_{it-1}$	+			0.9492 ***	***0.4884***			0.9493 ***	***0.4884***
				(63.76)				(63.66)	
$PastStockRet_{it}$	?	-0.0042 ***	***-0.0020***	0.0002	0.0001	-0.0042 ***	***-0.0020***	0.0002	0.0001
		(-7.56)		(0.81)		(-7.52)		(0.81)	
$Options_{it}$	?	-0.0081 **	**-0.0040**	0.0003	0.0002	-0.0078 *	*-0.0038*	0.0004	0.0002
		(-2.00)		(0.17)		(-1.94)		(0.21)	
Year Controls		Yes		Yes		Yes		Yes	
Observations		12,444		12,444		12,444		12,444	
Log Likelihood		12,526.6		17,462.7		12,527.1		17,463.2	

Table C5 Continued

Panel B: Results of Estimating Equation (2) for the Level of Share Repurchases

Dependent Variable:		$RepLev_{it}$							
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$				$LowFETR10_{it}$			
		(1)		(2)		(3)		(4)	
Constant	?	-0.0490 ***		-0.0414 ***		-0.0484 ***		-0.0409 ***	
		(-8.20)		(-8.82)		(-8.14)		(-8.73)	
eUS_{it}	+	0.1513 ***	***0.0631***	0.1118 ***	***0.0462***	0.1508 ***	***0.0629***	0.1108 ***	***0.0458***
		(10.55)		(11.43)		(10.72)		(11.75)	
$eFOR_{it}$	+	0.1941 ***	***0.0810***	0.1451 ***	***0.0599***	0.1945 ***	***0.0811***	0.1438 ***	***0.0594***
		(6.62)		(6.76)		(7.01)		(7.24)	
$LowFETR_{it}$	?	-0.0002	-0.0001	0.0002	0.0001	-0.0030	-0.0012	-0.0026	-0.0011
		(-0.08)		(0.10)		(-1.12)		(-1.18)	
$eFOR_{it}$ *$LowFETR_{it}$	-	0.0235	0.0098	0.0140	0.0058	0.0448	0.0187	0.0373	0.0154
		(0.51)		(0.40)		(0.89)		(0.98)	
eUS_{it} *$LowFETR_{it}$	?	0.0247	0.0103	0.0123	0.0051	0.0336	0.0140	0.0209	0.0086
		(1.19)		(0.81)		(1.44)		(1.21)	
$Size_{it-1}$	+	0.0059 ***	***0.0024***	0.0050 ***	***0.0021***	0.0059 ***	***0.0025***	0.0050 ***	***0.0021***
		(8.97)		(9.86)		(8.98)		(9.88)	
SGR_{it}	-	-0.0636 ***	***-0.0265***	-0.0527 ***	***-0.0218***	-0.0636 ***	***-0.0265***	-0.0527 ***	***-0.0218***
		(-13.93)		(-13.16)		(-13.92)		(-13.15)	
MTB_{it-1}	-	0.0026 ***	***0.0011***	0.0013 ***	***0.0005***	0.0026 ***	***0.0011***	0.0013 ***	***0.0005***
		(5.97)		(4.10)		(5.99)		(4.10)	
$CAPEX_{it-1}$	-	-0.0437 **	**-0.0182**	-0.0376 **	**-0.0155**	-0.0428 *	*-0.0178*	-0.0367 **	**-0.0152**
		(-1.98)		(-2.15)		(-1.94)		(-2.10)	
AGE_{it}	+	0.0008	0.0003	0.0001	0.0001	0.0008	0.0003	0.0002	0.0001
		(0.63)		(0.16)		(0.63)		(0.16)	
RE/TE_{it-1}	+	0.0069 ***	***0.0029***	0.0043 ***	***0.0018***	0.0069 ***	***0.0029***	0.0043 ***	***0.0018***
		(7.20)		(5.81)		(7.18)		(5.80)	
LEV_{it-1}	-	-0.0610 ***	***-0.0254***	-0.0575 ***	***-0.0238***	-0.0608 ***	***-0.0254***	-0.0573 ***	***-0.0237***
		(-8.02)		(-10.06)		(-8.00)		(-10.04)	
$CASH_{it-1}$	+	0.0526 ***	***0.0219***	0.0371 ***	***0.0153***	0.0524 ***	***0.0219***	0.0369 ***	***0.0153***
		(6.61)		(6.17)		(6.60)		(6.15)	
$\sigma(eUS)_{it}$	-	-0.0207	-0.0086	***-0.0329*** ***	***-0.0136***	-0.0214	-0.0089	***-0.0334*** ***	***-0.0138***
		(-1.18)		(-2.64)		(-1.22)		(-2.67)	
$\sigma(eFOR)_{it}$	-	-0.1551 ***	***-0.0647***	-0.1423 ***	***-0.0588***	-0.1569 ***	***-0.0655***	-0.1444 ***	***-0.0596***
		(-3.49)		(-4.08)		(-3.52)		(-4.12)	
$RepLev_{it-1}$	+			0.5485 ***	***0.2266***			0.5485 ***	***0.2266***
				(22.40)				(22.42)	
$PastStockRet_{it}$	?	-0.0061 ***	***-0.0025***	-0.0048 ***	***-0.0020***	-0.0062 ***	***-0.0026***	-0.0048 ***	***-0.0020***
		(-5.31)		(-4.86)		(-5.34)		(-4.90)	
$Options_{it}$	?	0.0555 ***	***0.0232***	0.0817 ***	***0.0337***	0.0554 ***	***0.0231***	0.0816 ***	***0.0337***
		(5.88)		(9.06)		(5.87)		(9.05)	
Year Controls		Yes		Yes		Yes		Yes	
Observations		12,444		12,444		12,444		12,444	
Log Likelihood		5,016.9		5,712.0		5,017.6		5,713.0	

Table C5 Continued

Panel C: Results of Estimating Equation (2) for the Level of Total Payout (Dividends plus Share Repurchases)

Dependent Variable:		$PayLev_{it}$							
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$				$LowFETR10_{it}$			
		(1)		(2)		(3)		(4)	
Constant	?	-0.0394 ***		-0.0316 ***		-0.0391 ***		-0.0313 ***	
		(-7.75)		(-8.65)		(-7.71)		(-8.57)	
eUS_{it}	+	0.1638 ***	***0.0972***	0.1087 ***	***0.0642***	0.1656 ***	***0.0983***	0.1090 ***	***0.0644***
		(12.01)		(12.54)		(12.39)		(13.11)	
$eFOR_{it}$	+	0.2601 ***	***0.1543***	0.1669 ***	***0.0986***	0.2520 ***	***0.1495***	0.1605 ***	***0.0948***
		(8.24)		(8.10)		(8.37)		(8.27)	
$LowFETR_{it}$	?	-0.0013	-0.0008	-0.0004	-0.0002	-0.0029	-0.0017	-0.0021	-0.0012
		(-0.64)		(-0.26)		(-1.35)		(-1.26)	
$eFOR_{it}$ *$LowFETR_{it}$	-	-0.0552	-0.0327	-0.0324	-0.0192	-0.0352	-0.0209	-0.0112	-0.0066
		(-1.23)		(-1.03)		(-0.73)		(-0.33)	
eUS_{it} *$LowFETR_{it}$	?	0.0295	0.0175	0.0180	0.0106	0.0307	0.0182	0.0231	0.0137
		(1.50)		(1.31)		(1.40)		(1.49)	
$Size_{it-1}$	+	0.0063 ***	***0.0038***	0.0051 ***	***0.0030***	0.0063 ***	***0.0038***	0.0051 ***	***0.0030***
		(10.87)		(12.53)		(10.85)		(12.53)	
SGR_{it}	-	-0.0586 ***	***-0.0348***	-0.0442 ***	***-0.0261***	-0.0586 ***	***-0.0347***	-0.0443 ***	***-0.0261***
		(-14.86)		(-13.35)		(-14.85)		(-13.32)	
MTB_{it-1}	-	0.0037 ***	***0.0022***	0.0017 ***	***0.0010***	0.0037 ***	***0.0022***	0.0017 ***	***0.0010***
		(8.68)		(5.93)		(8.60)		(5.86)	
$CAPEX_{it-1}$	-	-0.0343 **	**-0.0204**	-0.0231 *	*-0.0136*	-0.0335 *	*-0.0199*	-0.0225 *	*-0.0133*
		(-1.99)		(-1.83)		(-1.94)		(-1.79)	
AGE_{it}	+	0.0074 ***	***0.0044***	0.0043 ***	***0.0026***	0.0074 ***	***0.0044***	0.0043 ***	***0.0026***
		(7.25)		(6.09)		(7.25)		(6.10)	
RE/TE_{it-1}	+	0.0088 ***	***0.0052***	0.0051 ***	***0.0030***	0.0087 ***	***0.0052***	0.0051 ***	***0.0030***
		(9.11)		(7.75)		(9.04)		(7.70)	
LEV_{it-1}	-	-0.0599 ***	***-0.0356***	-0.0518 ***	***-0.0306***	-0.0598 ***	***-0.0355***	-0.0517 ***	***-0.0306***
		(-9.30)		(-11.14)		(-9.27)		(-11.13)	
$CASH_{it-1}$	+	0.0314 ***	***0.0187***	0.0212 ***	***0.0125***	0.0315 ***	***0.0187***	0.0211 ***	***0.0125***
		(4.13)		(3.88)		(4.13)		(3.86)	
$\sigma(eUS)_{it}$	-	-0.0311 *	*-0.0184*	-0.0386 ***	***-0.0228***	-0.0310 *	*-0.0184*	-0.0387 ***	***-0.0229***
		(-1.87)		(-3.44)		(-1.87)		(-3.44)	
$\sigma(eFOR)_{it}$	-	-0.1883 ***	***-0.1117***	-0.1519 ***	***-0.0897***	-0.1897 ***	***-0.1125***	-0.1540 ***	***-0.0910***
		(-4.47)		(-4.93)		(-4.50)		(-4.98)	
$PayLev_{it-1}$	+			0.5093 ***	***0.3009***			0.5095 ***	***0.3010***
				(26.62)				(26.66)	
$PastStockRet_{it}$	?	-0.0075 ***	***-0.0044***	-0.0045 ***	***-0.0027***	-0.0075 ***	***-0.0044***	-0.0045 ***	***-0.0027***
		(-7.44)		(-5.48)		(-7.47)		(-5.52)	
$Options_{it}$	?	0.0442 ***	***0.0262***	0.0691 ***	***0.0408***	0.0443 ***	***0.0263***	0.0692 ***	***0.0409***
		(5.26)		(8.79)		(5.27)		(8.79)	
Year Controls		Yes		Yes		Yes		Yes	
Observations		12,444		12,444		12,444		12,444	
Log Likelihood		10,880.7		11,990.5		10,880.2		11,991.0	

Table C5 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. z-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed). Average marginal effects are reported to the right of the regression coefficients. The reported average marginal effect represents $\partial E(y \mid x)/ \partial x_i$. Average marginal effects in bold and italics, bold, and italics are significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C6: Results for the Relative Level of Repurchases versus Dividends (H2)

Dependent Variable:		$RepMix_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$		$LowFETR10_{it}$	
		(1)	(2)	(3)	(4)
Constant	?	0.0022	-0.0015	0.0027	-0.0011
		(0.43)	(-0.29)	(0.52)	(-0.21)
eUS_{it}	?	0.0735 ***	0.0393 ***	0.0732 ***	0.0389 ***
		(5.07)	(2.84)	(5.04)	(2.81)
$eFOR_{it}$	?	0.0503	0.0117	0.0540 *	0.0147
		(1.57)	(0.37)	(1.70)	(0.46)
$LowFETR_{it}$	+	0.0057 ***	0.0059 ***	0.0056 ***	0.0063 ***
		(3.49)	(3.61)	(3.01)	(3.37)
$Size_{it-1}$	?	0.0019 ***	0.0012 **	0.0020 ***	0.0012 **
		(3.41)	(2.00)	(3.44)	(2.02)
SGR_{it}	?	-0.0443 ***	-0.0341 ***	-0.0444 ***	-0.0342 ***
		(-10.75)	(-8.67)	(-10.76)	(-8.68)
MTB_{it-1}	?	0.0008 *	0.0001	0.0008 *	0.0001
		(1.65)	(0.24)	(1.67)	(0.26)
$CAPEX_{it-1}$	?	-0.0159	-0.0109	-0.0161	-0.0113
		(-1.05)	(-0.70)	(-1.07)	(-0.74)
AGE_{it}	?	-0.0007	-0.0014	-0.0008	-0.0015
		(-0.63)	(-1.25)	(-0.67)	(-1.29)
RE/TE_{it-1}	?	0.0060 ***	0.0039 ***	0.0061 ***	0.0040 ***
		(4.05)	(2.60)	(4.12)	(2.68)
LEV_{it-1}	?	-0.0067	0.0080	-0.0067	0.0080
		(-1.07)	(1.29)	(-1.07)	(1.27)
$CASH_{it-1}$	?	0.0368 ***	0.0313 ***	0.0366 ***	0.0311 ***
		(3.98)	(3.42)	(3.96)	(3.40)
$\sigma(eUS)_{it}$	+	0.0250	0.0230	0.0239	0.0219
		(1.11)	(1.03)	(1.06)	(0.98)
$\sigma(eFOR)_{it}$	+	-0.0411	-0.0150	-0.0443	-0.0186
		(-0.88)	(-0.33)	(-0.95)	(-0.41)
$DivHist_{it}$	-	-0.0159 ***	-0.0161 ***	-0.0159 ***	-0.0160 ***
		(-12.08)	(-12.40)	(-12.05)	(-12.35)
$PayLevInd_{it}$	+		0.0245 ***		0.0246 ***
			(16.27)		(16.31)
$PastStockRet_{it}$	?	0.0018	0.0031 ***	0.0018	0.0031 ***
		(1.49)	(2.62)	(1.47)	(2.60)
$Options_{it}$	?	0.1237 ***	0.1074 ***	0.1233 ***	0.1069 ***
		(9.50)	(8.57)	(9.46)	(8.53)
Year Controls		Yes	Yes	Yes	Yes
Observations		8,412	8,412	8,412	8,412
Adjusted R-squared		0.2400	0.2837	0.2395	0.2835

Table C6 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. t-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C7: Average Marginal Effects from Regressions using Ratio of Repurchases to Total Payout

Dependent Variable:		*RepRatio* $_{it}$					
	Predicted Sign	(1) Tobit	(2) Fractional logit	(3) Zero-One Inflated Beta	(4) Tobit	(5) Fractional logit	(6) Zero-One Inflated Beta
eUS $_{it}$	?	-0.2794 ***	-0.2457 ***	-0.2365 ***	-0.1128 *	-0.1087	-0.1326 **
		(-3.20)	(-2.82)	(-4.00)	(-1.66)	(-1.51)	(-2.45)
eFOR $_{it}$	?	-0.3377 *	-0.3583 *	-0.4888 ***	-0.1467	-0.1862	-0.3486 ***
		(-1.88)	(-1.86)	(-4.10)	(-1.08)	(-1.23)	(-3.42)
LowFETR5 $_{it}$	+	0.0245 *	0.0310 **	0.0364 ***	0.0065	0.0114	0.0189 **
		(1.76)	(2.15)	(4.20)	(0.66)	(1.06)	(2.56)
Size $_{it-1}$	?	-0.0148 **	-0.0169 ***	-0.0283 ***	0.0001	0.0004	-0.0032
		(-2.55)	(-2.81)	(-9.97)	(0.01)	(0.09)	(-1.37)
SGR $_{it}$	?	-0.0678 **	-0.1042 ***	-0.0277	-0.1165 ***	-0.1572 ***	-0.1230 ***
		(-2.18)	(-3.36)	(-0.97)	(-4.58)	(-5.79)	(-5.03)
MTB $_{it-1}$	?	0.0030	0.0025	0.0019	-0.0002	-0.0010	-0.0001
		(1.10)	(0.92)	(0.84)	(-0.11)	(-0.47)	(-0.05)
CAPEX $_{it-1}$	?	-0.1249	-0.0797	0.1065	-0.1295	-0.0733	-0.0446
		(-0.65)	(-0.43)	(1.03)	(-0.93)	(-0.50)	(-0.52)
AGE $_{it}$	?	-0.0795 ***	-0.0850 ***	-0.1043 ***	0.0448 ***	0.0360 ***	0.0080
		(-7.55)	(-8.37)	(-20.42)	(5.00)	(3.82)	(1.39)
RE/TE $_{it-1}$	?	-0.0578 ***	-0.0540 ***	-0.0693 ***	0.0262 **	0.0202 *	0.0194 **
		(-3.98)	(-3.76)	(-7.75)	(2.32)	(1.70)	(2.35)
LEV $_{it-1}$	?	-0.0157	0.0162	0.0740 **	-0.0284	0.0100	0.0683 **
		(-0.25)	(0.27)	(2.11)	(-0.62)	(0.21)	(2.28)
CASH $_{it-1}$	?	0.6276 ***	0.6025 ***	0.5439 ***	0.0819	0.1255 **	0.1507 ***
		(8.48)	(8.25)	(12.91)	(1.45)	(1.97)	(3.90)
σ(eUS) $_{it}$	+	0.6476 ***	0.6212 ***	0.7685 ***	0.0868	0.1241	0.2652 **
		(3.15)	(2.87)	(6.08)	(0.62)	(0.80)	(2.46)
σ(eFOR) $_{it}$	+	0.8183	0.8070	0.8425 ***	-0.2274	-0.2155	-0.0304
		(1.60)	(1.56)	(3.04)	(-0.68)	(-0.59)	(-0.14)
DivHist $_{it}$	-				-0.3003 ***	-0.2843 ***	-0.1808 ***
					(-42.62)	(-35.79)	(-23.90)
PastStockRet $_{it}$	?	0.0002	0.0062	0.0159 **	-0.0063	0.0011	0.0174 ***
		(0.02)	(0.75)	(2.31)	(-0.89)	(0.14)	(2.86)
Options $_{it}$	?	0.2235 ***	0.3287 ***	0.4538 ***	0.1994 ***	0.3175 ***	0.4041 ***
		(3.11)	(4.55)	(5.95)	(3.45)	(5.17)	(6.23)
PayLevInd $_{it}$	+	0.2023 ***	0.2140 ***	0.0722 ***	0.2082 ***	0.2275 ***	0.1475 ***
		(14.25)	(14.83)	(7.55)	(19.96)	(20.61)	(18.59)
Observations		8,412	8,412	8,412	8,412	8,412	8,412

Table C7 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. z-statistics are presented in parentheses below the average marginal effects. In Columns (1), (2), (4), and (5), robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the average marginal effect is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C8: Results for the Post American Jobs Creation Act of 2004 Period (2009-2012)

Panel A: Results of Estimating Equation (1) for the Probability of a Dividend Payment

Dependent Variable:		$DivInd_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
		(1)	(2)	(3)	(4)
eUS_{it}	+	7.5643 ***	7.2227 ***	6.8973 ***	6.5293 ***
		(6.74)	(6.84)	(6.82)	(6.81)
$eFOR_{it}$	+	8.8228 ***	9.4863 ***	8.7793 ***	7.1106 ***
		(4.04)	(4.78)	(4.67)	(4.01)
$LowFETR_{it}$	?	0.2496	0.3166	0.2624	0.0853
		(1.31)	(1.56)	(1.16)	(0.34)
$eFOR_{it}$ *$LowFETR_{it}$	-	-5.7435 **	-8.6501 ***	-8.9961 ***	-5.6518 **
		(-2.12)	(-3.34)	(-3.32)	(-1.98)
eUS_{it} *$LowFETR_{it}$	?	-1.6272	-0.9285	0.0747	0.9875
		(-0.97)	(-0.54)	(0.04)	(0.50)
Control Variables		Yes	Yes	Yes	Yes
Observations		4,410	4,410	4,410	4,410
Log Likelihood		-733.5	-731.0	-730.8	-733.9
Pseudo R-squared		0.7549	0.7557	0.7557	0.7547

Table C8 Continued

Panel B: Results of Estimating Equation (1) for the Probability of a Share Repurchase

Dependent Variable:		$RepInd_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
		(1)	(2)	(3)	(4)
eUS_{it}	+	3.4848 ***	3.4457 ***	3.3861 ***	3.3450 ***
		(5.77)	(6.02)	(6.10)	(6.14)
$eFOR_{it}$	+	2.6243 **	2.8259 **	2.7802 ***	3.0935 ***
		(2.12)	(2.41)	(2.67)	(3.10)
$LowFETR_{it}$	?	0.1359	0.1872 *	0.3441 ***	0.2287
		(1.34)	(1.71)	(2.76)	(1.61)
$eFOR_{it}$ *$LowFETR_{it}$	-	-0.8273	-1.5823	-2.4793	-3.2719
		(-0.49)	(-0.88)	(-1.26)	(-1.57)
eUS_{it} *$LowFETR_{it}$	?	-0.5954	-0.6166	-0.4490	-0.4590
		(-0.68)	(-0.68)	(-0.46)	(-0.44)
Control Variables		Yes	Yes	Yes	Yes
Observations		4,410	4,410	4,410	4,410
Log Likelihood		-1,998.2	-1,997.7	-1,995.3	-1,997.3
Pseudo R-squared		0.3375	0.3377	0.3385	0.3379

Table C8 Continued

Panel C: Results of Estimating Equation (1) for the Probability of Payout (Dividend or Share Repurchase)

Dependent Variable:		$PayInd_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
		(1)	(2)	(3)	(4)
eUS_{it}	+	4.8209 ***	4.8589 ***	5.0851 ***	4.9002 ***
		(6.99)	(7.30)	(7.64)	(7.53)
$eFOR_{it}$	+	4.3779 ***	4.6019 ***	4.9850 ***	4.7231 ***
		(3.27)	(3.60)	(4.17)	(4.15)
$LowFETR_{it}$	?	0.1019	0.0850	0.1935	0.1384
		(0.88)	(0.67)	(1.39)	(0.85)
$eFOR_{it}$ *$LowFETR_{it}$	-	-2.1751	-2.8776	-5.1691 **	-5.3294 **
		(-1.07)	(-1.33)	(-2.36)	(-2.36)
eUS_{it} *$LowFETR_{it}$	?	-0.3340	-0.5418	-1.4657	-1.0526
		(-0.33)	(-0.51)	(-1.35)	(-0.92)
Control Variables		Yes	Yes	Yes	Yes
Observations		4,410	4,410	4,410	4,410
Log Likelihood		-1,479.4	-1,478.9	-1,475.6	-1,476.2
Pseudo R-squared		0.4507	0.4509	0.4521	0.4518

Table C8 Continued

Panel D: Results of Estimating Equation (2) for the Level of Dividends Paid

Dependent Variable:		$DivLev_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
		(1)	(2)	(3)	(4)
eUS_{it}	+	0.0653 ***	0.0590 ***	0.0562 ***	0.0553 ***
		(5.89)	(5.63)	(5.76)	(5.74)
$eFOR_{it}$	+	0.0703 ***	0.0690 ***	0.0733 ***	0.0586 ***
		(3.79)	(4.27)	(4.76)	(4.05)
$LowFETR_{it}$	?	0.0011	-0.0005	0.0013	0.0004
		(0.77)	(-0.33)	(0.78)	(0.19)
$eFOR_{it}$ *$LowFETR_{it}$	-	-0.0354	-0.0368	-0.0861 ***	-0.0477 **
		(-1.53)	(-1.55)	(-3.49)	(-1.97)
eUS_{it} *$LowFETR_{it}$	?	-0.0168	-0.0039	0.0064	0.0127
		(-1.33)	(-0.27)	(0.39)	(0.67)
Control Variables		Yes	Yes	Yes	Yes
Observations		4,410	4,410	4,410	4,410
Log Likelihood		3,403.7	3,405.0	3,412.5	3,402.4

Table C8 Continued

Panel E: Results of Estimating Equation (2) for the Level of Share Repurchases

Dependent Variable:		$RepLev_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
		(1)	(2)	(3)	(4)
eUS_{it}	+	0.1559 ***	0.1570 ***	0.1578 ***	0.1576 ***
		(8.73)	(9.42)	(9.44)	(9.61)
$eFOR_{it}$	+	0.0964 ***	0.1221 ***	0.1209 ***	0.1263 ***
		(3.46)	(4.47)	(4.84)	(5.25)
$LowFETR_{it}$	?	0.0013	0.0027	0.0060 **	0.0047
		(0.52)	(1.03)	(2.05)	(1.38)
$eFOR_{it}$ *$LowFETR_{it}$	-	0.0376	-0.0100	-0.0214	-0.0303
		(0.98)	(-0.25)	(-0.49)	(-0.63)
eUS_{it} *$LowFETR_{it}$	?	-0.0155	-0.0227	-0.0294	-0.0364
		(-0.62)	(-0.89)	(-1.15)	(-1.35)
Control Variables		Yes	Yes	Yes	Yes
Observations		4,410	4,410	4,410	4,410
Log Likelihood		2,939.6	2,939.1	2,941.3	2,940.3

Table C8 Continued

Panel F: Results of Estimating Equation (2) for the Level of Total Payout (Dividends plus Share Repurchases)

Dependent Variable:		$PayLev_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
		(1)	(2)	(3)	(4)
eUS_{it}	+	0.2004 ***	0.2024 ***	0.2070 ***	0.2071 ***
		(10.36)	(11.13)	(11.46)	(11.58)
$eFOR_{it}$	+	0.1577 ***	0.1794 ***	0.1840 ***	0.1772 ***
		(4.65)	(6.03)	(6.97)	(7.06)
$LowFETR_{it}$	?	-0.0001	-0.0006	0.0040	0.0026
		(-0.06)	(-0.22)	(1.42)	(0.81)
$eFOR_{it}$ *$LowFETR_{it}$	-	0.0137	-0.0227	-0.0686	-0.0533
		(0.30)	(-0.51)	(-1.50)	(-1.09)
eUS_{it} *$LowFETR_{it}$	?	-0.0087	-0.0176	-0.0381	-0.0475
		(-0.34)	(-0.65)	(-1.38)	(-1.64)
Control Variables		Yes	Yes	Yes	Yes
Observations		4,410	4,410	4,410	4,410
Log Likelihood		4,049.9	4,051.2	4,053.8	4,053.7

Table C8 Continued

Panel G: Results of Estimating Equation (3) for the Relative Use of Repurchases versus Dividends

Dependent Variable:		$RepMix_{it}$			
$LowFETR_{it}$:	Predicted Sign	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
		(1)	(2)	(3)	(4)
eUS_{it}	?	0.1429 ***	0.1428 ***	0.1429 ***	0.1425 ***
		(5.57)	(5.57)	(5.58)	(5.56)
$eFOR_{it}$	?	0.0851 **	0.0844 **	0.0783 **	0.0828 **
		(2.39)	(2.39)	(2.28)	(2.39)
$LowFETR_{it}$	+	0.0013	0.0018	0.0061 *	0.0058
		(0.53)	(0.71)	(1.96)	(1.56)
Control Variables		Yes	Yes	Yes	Yes
Control for Payout Level		No	No	No	No
Observations		3,088	3,088	3,088	3,088
Adjusted R-squared		0.2325	0.2326	0.2342	0.2337

Note: Complete variable definitions are provided in the List of Abbreviations. In Panels A through F, the control variables include the lagged value of the dependent variable. z-statistics/t-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C9: Results for Cash Holdings

Panel A: Results for the Level of Cash Holdings

Dependent Variable:	$CASH_{it}$			
$LowFETR_{it}$:	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
	(1)	(2)	(3)	(4)
Constant	0.1255 ***	0.1258 ***	0.1253 ***	0.1249 ***
	(4.45)	(4.38)	(4.30)	(4.30)
eUS_{it}	0.1642 ***	0.1641 ***	0.1627 ***	0.1590 ***
	(7.59)	(7.78)	(7.94)	(8.00)
$eFOR_{it}$	0.0882 *	0.0901 *	0.0915 *	0.1047 **
	(1.73)	(1.84)	(1.94)	(2.27)
$LowFETR_{it}$	-0.0056	-0.0028	0.0004	-0.0003
	(-1.28)	(-0.57)	(0.06)	(-0.04)
$eFOR_{it}$ *$LowFETR_{it}$	0.2617 ***	0.2897 ***	0.3371 ***	0.4117 ***
	(3.09)	(3.20)	(3.30)	(3.46)
eUS_{it} *$LowFETR_{it}$	0.0137	0.0154	0.0231	0.0605
	(0.30)	(0.29)	(0.37)	(0.77)
$Size_{it}$	-0.0062 ***	-0.0062 ***	-0.0061 ***	-0.0060 ***
	(-4.75)	(-4.73)	(-4.68)	(-4.60)
MTB_{it}	0.0017 **	0.0018 ***	0.0018 ***	0.0019 ***
	(2.56)	(2.68)	(2.73)	(2.77)
$\sigma(eUS)_{it}$	0.3269 ***	0.3253 ***	0.3241 ***	0.3231 ***
	(9.10)	(9.03)	(9.00)	(8.97)
$\sigma(eFOR)_{it}$	0.4575 ***	0.4531 ***	0.4451 ***	0.4425 ***
	(4.35)	(4.32)	(4.25)	(4.23)
$R\&D_{it}$	0.5680 ***	0.5694 ***	0.5713 ***	0.5720 ***
	(10.35)	(10.38)	(10.45)	(10.50)
LEV_{it}	-0.2322 ***	-0.2326 ***	-0.2326 ***	-0.2329 ***
	(-16.34)	(-16.34)	(-16.33)	(-16.35)
$CAPEX_{it}$	-0.5521 ***	-0.5540 ***	-0.5557 ***	-0.5550 ***
	(-12.28)	(-12.30)	(-12.34)	(-12.40)
$ACQUIS_{it}$	-0.3257 ***	-0.3255 ***	-0.3236 ***	-0.3224 ***
	(-12.98)	(-12.96)	(-12.91)	(-12.87)
$DebtIss_{it}$	0.2122 ***	0.2107 ***	0.2104 ***	0.2113 ***
	(11.23)	(11.19)	(11.22)	(11.25)
$EquityIss_{it}$	0.1825 ***	0.1821 ***	0.1814 ***	0.1811 ***
	(6.10)	(6.10)	(6.10)	(6.08)
$PayInd_{it}$	0.0028	0.0031	0.0034	0.0032
	(0.68)	(0.75)	(0.83)	(0.77)
Year Controls	Yes	Yes	Yes	Yes
Industry Controls	Yes	Yes	Yes	Yes
Observations	12,380	12,380	12,380	12,380
Adjusted R-squared	0.4834	0.4839	0.4848	0.4855

Table C9 Continued

Panel B: Results for Changes in Cash Holdings

Dependent Variable:	$\Delta CASH_{it}$			
$LowFETR_{it}$:	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
	(1)	(2)	(3)	(4)
Constant	0.0356 ***	0.0360 ***	0.0355 ***	0.0355 ***
	(3.87)	(3.88)	(3.78)	(3.81)
eUS_{it}	0.0944 ***	0.0916 ***	0.0935 ***	0.0908 ***
	(10.77)	(10.63)	(11.12)	(11.01)
$eFOR_{it}$	0.0903 ***	0.0947 ***	0.0967 ***	0.1063 ***
	(5.14)	(5.66)	(6.00)	(6.77)
$LowFETR_{it}$	-0.0036 **	-0.0037 **	-0.0026	-0.0033
	(-2.17)	(-1.98)	(-1.24)	(-1.36)
$eFOR_{it}$ *$LowFETR_{it}$	0.1085 ***	0.1142 ***	0.1244 ***	0.1219 ***
	(3.68)	(3.52)	(3.36)	(2.96)
eUS_{it} *$LowFETR_{it}$	0.0038	0.0172	0.0089	0.0325
	(0.25)	(1.02)	(0.49)	(1.58)
$\Delta Size_{it}$	-0.0000	-0.0000	-0.0000	-0.0000
	(-0.09)	(-0.10)	(-0.07)	(-0.05)
ΔMTB_{it}	0.0001	0.0001	0.0001	0.0001
	(0.32)	(0.40)	(0.48)	(0.51)
$\sigma(eUS)_{it}$	0.0624 ***	0.0617 ***	0.0617 ***	0.0613 ***
	(4.93)	(4.87)	(4.87)	(4.85)
$\sigma(eFOR)_{it}$	0.0489	0.0492	0.0483	0.0517
	(1.42)	(1.43)	(1.39)	(1.49)
$\Delta R\&D_{it}$	0.0793 ***	0.0797 ***	0.0809 ***	0.0811 ***
	(4.87)	(4.91)	(4.97)	(4.99)
ΔLEV_{it}	-0.0321 ***	-0.0323 ***	-0.0323 ***	-0.0325 ***
	(-7.01)	(-7.05)	(-7.06)	(-7.09)
$CASH_{it-1}$	-0.1857 ***	-0.1858 ***	-0.1861 ***	-0.1863 ***
	(-23.15)	(-23.25)	(-23.31)	(-23.48)
$CAPEX_{it}$	-0.3744 ***	-0.3749 ***	-0.3751 ***	-0.3750 ***
	(-19.32)	(-19.32)	(-19.36)	(-19.40)
$ACQUIS_{it}$	-0.4207 ***	-0.4207 ***	-0.4200 ***	-0.4198 ***
	(-26.21)	(-26.23)	(-26.22)	(-26.16)
$DebtIss_{it}$	0.1455 ***	0.1451 ***	0.1450 ***	0.1455 ***
	(13.03)	(13.01)	(13.01)	(13.03)
$EquityIss_{it}$	0.2800 ***	0.2800 ***	0.2797 ***	0.2797 ***
	(17.74)	(17.76)	(17.74)	(17.71)
$PayInd_{it}$	0.0031 **	0.0032 **	0.0033 **	0.0031 **
	(2.11)	(2.14)	(2.20)	(2.11)
Year Controls	Yes	Yes	Yes	Yes
Industry Controls	Yes	Yes	Yes	Yes
Observations	12,380	12,380	12,380	12,380
Adjusted R-squared	0.2748	0.2750	0.2750	0.2751

Table C9 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. t-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C10: Results for Sensitivity of Investment to Investment Opportunities and Cash Flows

Panel A: Descriptive Statistics

	$LowFETR5_{it} = 0$						$LowFETR5_{it} = 1$						
Variable	N	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl	N	Mean		Std Dev	25th Pctl	50th Pctl		75th Pctl
$FCAPX_{it+1}$	624	0.0240	0.0404	0.0053	0.0123	0.0287	303	0.0416	***	0.0601	0.0082	0.0196	###	0.0416
$DCAPX_{it+1}$	624	0.0496	0.0779	0.0149	0.0298	0.0567	303	0.0625	*	0.1070	0.0162	0.0282		0.0587
$FSGR_{it}$	624	0.1364	0.5043	-0.0435	0.0750	0.2109	303	0.1727		0.5011	-0.0175	0.0947	##	0.2598
DSR_{it}	624	0.0658	0.2735	-0.0454	0.0507	0.1511	303	0.1252	**	0.4012	-0.0223	0.0597	#	0.1909
$FCFO_{it}$	624	0.0273	0.0495	0.0066	0.0239	0.0474	303	0.0631	***	0.0484	0.0268	0.0494	###	0.0883
$DCFO_{it}$	624	0.0607	0.0919	0.0204	0.0648	0.1106	303	0.0593		0.0817	0.0150	0.0588		0.0937

Table C10 Continued

Panel B: Regression Results for Domestic Investment Levels

Dependent Variable:		$DCAPX_{it+1}$			
		(1)	(2)	(3)	(4)
Constant	?	0.0285 *	0.0342 *	0.0329 *	0.0326 *
		(1.68)	(1.96)	(1.95)	(1.66)
$DSGR_{it}$	+	0.0249 **	0.0238 **	0.0255 **	0.0229 **
		(2.51)	(2.33)	(2.49)	(2.19)
$DCFO_{it}$	+	0.2710 ***	0.1980 ***	0.2739 ***	0.1968 ***
		(3.00)	(2.73)	(3.03)	(2.86)
$LowFETR5_{it}$	?		-0.0058		0.0118
			(-0.69)		(0.73)
$DSGR_{it}$ *$LowFETR5_{it}$	-		-0.0070		-0.0060
			(-0.41)		(-0.36)
$DCFO_{it}$ *$LowFETR5_{it}$	+		0.2667 **		0.2670 **
			(2.07)		(2.17)
$FCFO_{it}$	?			-0.0634	0.0081
				(-0.83)	(0.09)
$FCFO_{it}$ *$LowFETR5_{it}$	-				-0.3032
					(-1.29)
Year Controls		Yes	Yes	Yes	Yes
Industry Controls		Yes	Yes	Yes	Yes
Observations		927	927	927	927
Adjusted R-squared		0.1995	0.2120	0.1997	0.2175

Table C10 Continued

Panel C: Regression Results for Foreign Investment Levels

Dependent Variable:		$FCAPX_{it+1}$			
		(1)	(2)	(3)	(4)
Constant	?	-0.0033	-0.0016	-0.0045	-0.0027
		(-0.59)	(-0.26)	(-0.71)	(-0.40)
$FSGR_{it}$	+	0.0100 *	0.0070	0.0098 *	0.0067
		(1.88)	(1.06)	(1.80)	(0.98)
$FCFO_{it}$	+	0.2392 ***	0.2008 ***	0.2359 ***	0.1949 ***
		(5.04)	(3.84)	(4.96)	(3.98)
$LowFETR5_{it}$	?		-0.0008		-0.0012
			(-0.10)		(-0.17)
$FSGR_{it}$ *$LowFETR5_{it}$	?		0.0083		0.0084
			(0.78)		(0.78)
$FCFO_{it}$ *$LowFETR5_{it}$	?		0.0781		0.0847
			(0.65)		(0.73)
$DCFO_{it}$	?			0.0209	0.0229
				(0.61)	(0.74)
$DCFO_{it}$ *$LowFETR5_{it}$	?				0.0033
					(0.09)
Year Controls		Yes	Yes	Yes	Yes
Industry Controls		Yes	Yes	Yes	Yes
Observations		927	927	927	927
Adjusted R-squared		0.2745	0.2766	0.2749	0.2766

Note: Complete variable definitions are provided in the List of Abbreviations. In Panel A, ***, **, * indicates the difference in means between the groups is significant at the 0.01, 0.05, and 0.10 level, and ###, ##, # indicates the difference in medians between the groups is significant at the 0.01, 0.05, and 0.10 level. In Panels B and C, t-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C11: Results for Investment Efficiency

Panel A: Descriptive Statistics for Sample without Requiring Worldwide Control Variables

	$LowFETR5_{it} = 0$						$LowFETR5_{it} = 1$						
Variable	N	Mean	Std Dev	25th Pctl	50th Pctl	75th Pctl	N	Mean		Std Dev	25th Pctl	50th Pctl		75th Pctl
$DUnderInd_{it+1}$	850	0.2529	0.4350	0.0000	0.0000	1.0000	392	0.2602		0.4393	0.0000	0.0000		1.0000
$FOverInd_{it+1}$	850	0.2282	0.4199	0.0000	0.0000	0.0000	392	0.3138	***	0.4646	0.0000	0.0000	###	1.0000
$DOverInd_{it+1}$	850	0.2624	0.4402	0.0000	0.0000	1.0000	392	0.2398		0.4275	0.0000	0.0000		0.0000
$FUnderInd_{it+1}$	850	0.2741	0.4463	0.0000	0.0000	1.0000	392	0.2143	**	0.4109	0.0000	0.0000	##	0.0000
$DUnder_{it+1}$	517	0.0306	0.0342	0.0094	0.0181	0.0333	248	0.0286		0.0316	0.0080	0.0188		0.0340
$FOver_{it+1}$	289	0.0244	0.0537	0.0033	0.0087	0.0187	173	0.0344	*	0.0631	0.0045	0.0120	##	0.0270
$DOver_{it+1}$	332	0.0426	0.1052	0.0067	0.0147	0.0339	144	0.0605		0.1211	0.0062	0.0200		0.0516
$FUnder_{it+1}$	561	0.0184	0.0196	0.0050	0.0111	0.0252	219	0.0171		0.0183	0.0051	0.0107		0.0236

Table C11 Continued

Panel B: Descriptive Statistics for Sample Requiring Worldwide Control Variables

	$LowFETR5_{it} = 0$						$LowFETR5_{it} = 1$							
Variable	N	Mean		Std Dev	25th Pctl	50th Pctl	75th Pctl	N	Mean		Std Dev	25th Pctl	50th Pctl		75th Pctl
$DUnderInd_{it+1}$	570	0.2526		0.4349	0.0000	0.0000	1.0000	298	0.2651		0.4421	0.0000	0.0000		1.0000
$FOverInd_{it+1}$	570	0.2246		0.4177	0.0000	0.0000	0.0000	298	0.3188	***	0.4668	0.0000	0.0000	###	1.0000
$DOverInd_{it+1}$	570	0.2684		0.4435	0.0000	0.0000	1.0000	298	0.2349		0.4246	0.0000	0.0000		0.0000
$FUnderInd_{it+1}$	570	0.2632		0.4407	0.0000	0.0000	1.0000	298	0.2450		0.4308	0.0000	0.0000		0.0000
$DUnder_{it+1}$	330	0.0233		0.0250	0.0079	0.0156	0.0269	189	0.0246		0.0293	0.0067	0.0160		0.0283
$FOver_{it+1}$	205	0.0178		0.0337	0.0027	0.0070	0.0176	141	0.0266	*	0.0502	0.0036	0.0102	#	0.0233
$DOver_{it+1}$	240	0.0295		0.0549	0.0057	0.0152	0.0336	109	0.0435	*	0.0780	0.0048	0.0165		0.0427
$FUnder_{it+1}$	365	0.0158		0.0198	0.0041	0.0087	0.0183	157	0.0184		0.0211	0.0047	0.0110	#	0.0233
$Size_{it}$	570	6.3580		1.9325	4.9147	6.3325	7.7174	298	6.6387	**	1.9206	5.2113	6.5737	##	7.9356
MTB_{it}	570	2.7814		4.2633	1.2268	1.9113	3.2283	298	2.3964		3.2341	1.2021	1.9892		3.0042
CFO_{it}	570	0.1028		0.0990	0.0501	0.1034	0.1551	298	0.1168	**	0.0906	0.0624	0.1132	#	0.1600
$Sale_{it}$	570	1.3830		0.7514	0.9015	1.2784	1.6744	298	1.3506		0.8461	0.7857	1.1543	#	1.6603
$ZScore_{it}$	570	4.1601		3.4746	2.2858	3.3404	4.8828	298	4.1054		3.0690	2.2723	3.2227		4.5201
$TANG_{it}$	570	0.3326		0.2426	0.1465	0.2750	0.4535	298	0.4625	***	0.3208	0.2156	0.3382	###	0.7123
$MktLev_{it}$	570	0.1776		0.1931	0.0170	0.1235	0.2611	298	0.2169	***	0.2104	0.0419	0.1666	###	0.3139
$SLACK_{it}$	570	0.8043		1.6827	0.0649	0.1852	0.6680	298	0.6639		1.4347	0.0458	0.1551	##	0.5711
$LOSS_{it}$	570	0.2281		0.4200	0.0000	0.0000	0.0000	298	0.1510	***	0.3587	0.0000	0.0000	###	0.0000
AGE_{it}	570	2.7402		0.9442	2.1001	2.8764	3.4342	298	2.7209		0.8641	2.1505	2.8258		3.3352
$\sigma(CFO)_{it}$	570	0.0579		0.0509	0.0260	0.0420	0.0722	298	0.0579		0.0392	0.0280	0.0474		0.0779
$\sigma(Sales)_{it}$	570	0.2379		0.2201	0.0964	0.1686	0.2964	298	0.2396		0.2426	0.0938	0.1540		0.2903
$\sigma(Invest)_{it}$	570	0.0759		0.0958	0.0211	0.0410	0.0877	298	0.0985	***	0.1232	0.0273	0.0511	###	0.1089

Table C11 Continued

Panel C: Results for Domestic Under-Investment

Dependent Variable:		*DUnderInd* $_{it+1}$		*DUnder* $_{it+1}$		*DUnderRank* $_{it+1}$	
	Predicted Sign	(1)	(2)	(3)	(4)	(5)	(6)
Constant	?	-1.0322 ***	-0.8224	0.0406 ***	0.0371 ***	0.4795 ***	0.6677 ***
		(-3.13)	(-0.92)	(4.63)	(2.92)	(4.57)	(4.81)
LowFETR5 $_{it}$	+	0.0414	-0.0817	0.0023	-0.0007	0.0454 **	0.0024
		(0.21)	(-0.36)	(1.12)	(-0.35)	(2.10)	(0.08)
Size $_{it}$			0.0082		0.0000		0.0018
			(0.11)		(0.07)		(0.20)
MTB $_{it}$			0.0256		-0.0002		0.0044
			(1.07)		(-0.52)		(1.37)
CFO $_{it}$			-1.2544		-0.0012		0.1308
			(-0.96)		(-0.09)		(0.71)
Sale $_{it}$			-0.1592		0.0004		0.0199
			(-0.91)		(0.24)		(0.96)
ZScore $_{it}$			-0.1259 ***		0.0001		-0.0012
			(-2.70)		(0.33)		(-0.20)
TANG $_{it}$			1.0977 **		0.0084		-0.0667
			(2.15)		(0.81)		(-0.57)
MktLev $_{it}$			-0.3185		0.0050		0.0692
			(-0.43)		(0.89)		(0.79)
SLACK $_{it}$			0.1951 ***		0.0007		0.0097
			(2.60)		(1.34)		(0.92)
LOSS $_{it}$			-0.3652		-0.0037		-0.0454
			(-1.37)		(-1.21)		(-1.25)
AGE $_{it}$			0.0249		-0.0029 **		-0.0518 ***
			(0.18)		(-2.29)		(-3.34)
σ(CFO) $_{it}$			-2.3407		0.0070		-0.2155
			(-0.85)		(0.30)		(-0.67)
σ(Sales) $_{it}$			0.3615		0.0026		-0.0333
			(0.58)		(0.54)		(-0.40)
σ(Invest) $_{it}$			1.2952		0.0158		0.1062
			(1.13)		(1.48)		(0.74)
Year Controls		Yes	Yes	Yes	Yes	Yes	Yes
Industry Controls		No	No	Yes	Yes	Yes	Yes
Observations		1242	868	765	519	765	519
Psuedo/Adj R^2		0.0001	0.0509	0.3637	0.3041	0.3259	0.2738

Table C11 Continued

Panel D: Results for Foreign Over-Investment

Dependent Variable:		*FOverInd* $_{it+1}$		*FOver* $_{it+1}$		*FOverRank* $_{it+1}$	
	Predicted Sign	(1)	(2)	(3)	(4)	(5)	(6)
Constant	?	-1.1764 ***	-1.9587 **	-0.0018	0.0094	0.5268 ***	0.4026 **
		(-3.49)	(-2.26)	(-0.16)	(0.51)	(4.53)	(2.02)
LowFETR5 $_{it}$	+	0.4518 **	0.3285	0.0111 **	0.0072	0.0935 ***	0.0752 *
		(2.26)	(1.33)	(1.98)	(1.40)	(2.77)	(1.83)
Size $_{it}$			0.0005		-0.0020		-0.0024
			(0.01)		(-1.29)		(-0.16)
MTB $_{it}$			0.0596 **		0.0004		0.0130 **
			(1.99)		(1.23)		(2.42)
CFO $_{it}$			0.3325		-0.0094		0.0931
			(0.25)		(-0.27)		(0.40)
Sale $_{it}$			0.0703		0.0028		0.0084
			(0.48)		(0.87)		(0.28)
ZScore $_{it}$			0.0112		0.0000		0.0024
			(0.18)		(0.02)		(0.27)
TANG $_{it}$			1.2905 **		0.0370 **		0.2892 **
			(2.49)		(2.38)		(2.53)
MktLev $_{it}$			0.0113		-0.0274		0.0375
			(0.01)		(-1.65)		(0.31)
SLACK $_{it}$			-0.2222 **		0.0013		-0.0175
			(-2.11)		(0.59)		(-0.89)
LOSS $_{it}$			-0.9157 ***		-0.0069		-0.0804
			(-3.10)		(-1.09)		(-1.39)
AGE $_{it}$			0.0146		-0.0019		-0.0048
			(0.09)		(-0.57)		(-0.21)
σ(CFO) $_{it}$			-2.4041		-0.0871		-0.1580
			(-0.81)		(-1.55)		(-0.29)
σ(Sales) $_{it}$			1.4591 ***		0.0043		-0.0079
			(2.63)		(0.35)		(-0.07)
σ(Invest) $_{it}$			-1.0169		0.0255		-0.0433
			(-0.85)		(0.53)		(-0.17)
Year Controls		Yes	Yes	Yes	Yes	Yes	Yes
Industry Controls		No	No	Yes	Yes	Yes	Yes
Observations		1242	868	462	346	462	346
Psuedo/Adj R^2		0.0075	0.0734	0.3455	0.3282	0.2759	0.2683

Table C11 Continued

Panel E: Results for Domestic Over-Investment

Dependent Variable:		*DOverInd* $_{it+1}$		*DOver* $_{it+1}$		*DOverRank* $_{it+1}$	
	Predicted Sign	(1)	(2)	(3)	(4)	(5)	(6)
Constant	?	-0.9797 ***	0.6730	0.0507	0.0415	0.5047 ***	0.6553 ***
		(-2.97)	(0.75)	(1.16)	(0.71)	(4.01)	(3.25)
LowFETR5 $_{it}$	?	-0.1214	-0.4251 *	0.0144	-0.0019	0.0029	-0.0417
		(-0.73)	(-1.81)	(1.43)	(-0.27)	(0.09)	(-1.02)
Size $_{it}$			-0.2640 ***		-0.0010		-0.0233
			(-3.41)		(-0.37)		(-1.63)
MTB $_{it}$			0.0125		0.0016		0.0093
			(0.48)		(0.88)		(1.49)
CFO $_{it}$			5.3680 ***		0.0826		0.5922 **
			(4.27)		(1.42)		(2.48)
Sale $_{it}$			0.1870		0.0122 **		0.0722 **
			(1.25)		(2.49)		(2.05)
ZScore $_{it}$			0.0975 **		-0.0024		-0.0070
			(2.53)		(-1.24)		(-0.89)
TANG $_{it}$			1.3793 **		0.0617 **		0.3265 ***
			(2.39)		(2.19)		(3.13)
MktLev $_{it}$			0.4026		-0.0254		-0.0683
			(0.54)		(-1.37)		(-0.53)
SLACK $_{it}$			-0.1322		0.0039 **		0.0311 **
			(-1.45)		(2.02)		(2.17)
LOSS $_{it}$			0.2250		0.0009		-0.0257
			(0.85)		(0.06)		(-0.43)
AGE $_{it}$			-0.3314 **		-0.0100 ***		-0.0644 ***
			(-2.51)		(-2.66)		(-2.85)
σ(CFO) $_{it}$			4.2132		0.0704		0.5625
			(1.63)		(0.63)		(1.06)
σ(Sales) $_{it}$			-2.3220 ***		-0.0256		-0.2676 ***
			(-3.38)		(-1.20)		(-2.72)
σ(Invest) $_{it}$			-1.3379		-0.0099		-0.1734
			(-1.03)		(-0.22)		(-0.89)
Year Controls		Yes	Yes	Yes	Yes	Yes	Yes
Industry Controls		No	No	Yes	Yes	Yes	Yes
Observations		1242	868	476	349	476	349
Psuedo/Adj R^2		0.0006	0.1320	0.2584	0.1676	0.1107	0.2150

Table C11 Continued

Panel F: Results for Foreign Under-Investment

Dependent Variable:		*FUnderInd* $_{it+1}$		*FUnder* $_{it+1}$		*FUnderRank* $_{it+1}$	
	Predicted Sign	(1)	(2)	(3)	(4)	(5)	(6)
Constant	?	-0.9157 ***	-1.3014	0.0134 ***	0.0176 **	0.4683 ***	0.4727 ***
		(-2.75)	(-1.34)	(4.17)	(2.30)	(5.99)	(3.00)
LowFETR5 $_{it}$	?	-0.3328	-0.3988	-0.0031 **	-0.0033 **	-0.0448 **	-0.0364
		(-1.64)	(-1.52)	(-2.58)	(-2.22)	(-2.44)	(-1.41)
Size $_{it}$			-0.1266		-0.0008		-0.0094
			(-1.45)		(-1.41)		(-1.11)
MTB $_{it}$			0.0089		0.0001		0.0058
			(0.31)		(0.41)		(1.45)
CFO $_{it}$			2.2851 *		0.0042		0.1546
			(1.82)		(0.57)		(0.92)
Sale $_{it}$			-0.2487		-0.0017 *		-0.0117
			(-1.32)		(-1.70)		(-0.48)
ZScore $_{it}$			-0.0359		0.0001		-0.0016
			(-0.87)		(0.30)		(-0.27)
TANG $_{it}$			2.4384 ***		0.0021		-0.0484
			(4.83)		(0.42)		(-0.58)
MktLev $_{it}$			-0.5610		-0.0002		0.1202
			(-0.85)		(-0.05)		(1.45)
SLACK $_{it}$			0.1977 ***		-0.0001		0.0061
			(3.20)		(-0.19)		(0.90)
LOSS $_{it}$			0.2777		-0.0006		0.0026
			(1.00)		(-0.30)		(0.08)
AGE $_{it}$			0.1329		0.0005		0.0148
			(0.86)		(0.56)		(0.78)
σ(CFO) $_{it}$			-1.1620		-0.0154		0.2968
			(-0.40)		(-1.02)		(0.86)
σ(Sales) $_{it}$			0.8884		0.0022		0.0308
			(1.36)		(0.74)		(0.37)
σ(Invest) $_{it}$			-0.5737		0.0014		-0.0062
			(-0.45)		(0.23)		(-0.05)
Year Controls		Yes	Yes	Yes	Yes	Yes	Yes
Industry Controls		No	No	Yes	Yes	Yes	Yes
Observations		1242	868	780	522	780	522
Psuedo/Adj R^2		0.0038	0.0832	0.5440	0.6018	0.5701	0.4400

Table C11 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. In Panels A and B, ***, **, * indicates the difference in means between the groups is significant at the 0.01, 0.05, and 0.10 level, and ###, ##, # indicates the difference in medians between the groups is significant at the 0.01, 0.05, and 0.10 level. In Panels C through F, z/t-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

Table C12: Results for Overall Profitability

Panel A: Results for Pre-Tax Return on Assets

Dependent Variable:	$PROA_{it}$							
$LowFETR_{it}$:	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.1126 ***	0.1126 ***	0.1130 ***	0.1129 ***	0.0533 ***	0.0529 ***	0.0529 ***	0.0528 ***
	(4.51)	(4.52)	(4.54)	(4.51)	(3.24)	(3.21)	(3.20)	(3.18)
$LowFETR_{it}$	-0.0039	-0.0063 **	-0.0082 **	-0.0098 **	-0.0041 **	-0.0049 **	-0.0048 **	-0.0056 *
	(-1.44)	(-2.10)	(-2.25)	(-2.13)	(-2.44)	(-2.50)	(-2.04)	(-1.89)
$Size_{it-1}$	0.0044 ***	0.0043 ***	0.0042 ***	0.0042 ***	0.0020 ***	0.0020 ***	0.0020 ***	0.0019 ***
	(4.12)	(4.05)	(3.94)	(3.86)	(3.41)	(3.33)	(3.26)	(3.20)
MTB_{it-1}	0.0116 ***	0.0116 ***	0.0116 ***	0.0116 ***	0.0051 ***	0.0051 ***	0.0051 ***	0.0051 ***
	(14.61)	(14.64)	(14.65)	(14.62)	(9.27)	(9.29)	(9.28)	(9.26)
LEV_{it-1}	-0.1442 ***	-0.1438 ***	-0.1437 ***	-0.1439 ***	-0.0387 ***	-0.0386 ***	-0.0388 ***	-0.0389 ***
	(-12.60)	(-12.56)	(-12.53)	(-12.50)	(-5.15)	(-5.13)	(-5.15)	(-5.15)
SGR_{it}	0.1414 ***	0.1417 ***	0.1418 ***	0.1416 ***	0.1227 ***	0.1228 ***	0.1228 ***	0.1227 ***
	(19.72)	(19.79)	(19.77)	(19.76)	(18.65)	(18.69)	(18.65)	(18.64)
$PROA_{it-1}$					0.5200 ***	0.5196 ***	0.5193 ***	0.5193 ***
					(30.23)	(30.22)	(30.17)	(30.12)
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10,200	10,200	10,200	10,200	10,200	10,200	10,200	10,200
Adjusted R-squared	0.3054	0.3058	0.3060	0.3061	0.4998	0.4999	0.4998	0.4998

Table C12 Continued

Panel B: Results for After-Tax Return on Assets

Dependent Variable:	ROA_{it}							
$LowFETR_{it}$:	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.0590 ***	0.0596 ***	0.0598 ***	0.0600 ***	0.0305 ***	0.0305 ***	0.0304 ***	0.0305 ***
	(3.85)	(3.89)	(3.90)	(3.91)	(2.78)	(2.78)	(2.78)	(2.78)
$LowFETR_{it}$	0.0019	0.0009	-0.0002	-0.0011	-0.0007	-0.0008	-0.0008	-0.0014
	(0.96)	(0.41)	(-0.06)	(-0.33)	(-0.50)	(-0.53)	(-0.40)	(-0.58)
$Size_{it-1}$	0.0040 ***	0.0040 ***	0.0040 ***	0.0040 ***	0.0020 ***	0.0020 ***	0.0020 ***	0.0020 ***
	(5.18)	(5.19)	(5.15)	(5.09)	(4.27)	(4.25)	(4.22)	(4.18)
MTB_{it-1}	0.0080 ***	0.0080 ***	0.0080 ***	0.0080 ***	0.0041 ***	0.0041 ***	0.0041 ***	0.0041 ***
	(13.79)	(13.79)	(13.79)	(13.80)	(9.24)	(9.24)	(9.24)	(9.24)
LEV_{it-1}	-0.0981 ***	-0.0980 ***	-0.0978 ***	-0.0977 ***	-0.0303 ***	-0.0303 ***	-0.0303 ***	-0.0303 ***
	(-11.76)	(-11.75)	(-11.72)	(-11.70)	(-5.05)	(-5.04)	(-5.05)	(-5.04)
SGR_{it}	0.1034 ***	0.1034 ***	0.1036 ***	0.1036 ***	0.0905 ***	0.0906 ***	0.0906 ***	0.0906 ***
	(18.29)	(18.29)	(18.28)	(18.32)	(17.22)	(17.22)	(17.19)	(17.20)
ROA_{it-1}					0.4725 ***	0.4724 ***	0.4723 ***	0.4723 ***
					(24.70)	(24.70)	(24.71)	(24.71)
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10,200	10,200	10,200	10,200	10,200	10,200	10,200	10,200
Adjusted R-squared	0.2677	0.2676	0.2676	0.2676	0.4298	0.4298	0.4298	0.4298

Table C12 Continued

Panel C: Results for Cash Flows from Operations

Dependent Variable:	CFO_{it}							
$LowFETR_{it}$:	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$	$LowFETR5_{it}$	$LowFETR10_{it}$	$LowFETR15_{it}$	$LowFETR20_{it}$
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.0792 ***	0.0788 ***	0.0787 ***	0.0787 ***	0.0389 **	0.0384 **	0.0382 **	0.0382 **
	(3.43)	(3.44)	(3.45)	(3.45)	(2.22)	(2.21)	(2.20)	(2.20)
$LowFETR_{it}$	-0.0034	-0.0040	-0.0039	-0.0047	-0.0032 **	-0.0033 *	-0.0027	-0.0032
	(-1.46)	(-1.48)	(-1.21)	(-1.22)	(-2.12)	(-1.93)	(-1.29)	(-1.28)
$Size_{it-1}$	0.0052 ***	0.0052 ***	0.0052 ***	0.0051 ***	0.0023 ***	0.0023 ***	0.0023 ***	0.0023 ***
	(5.85)	(5.79)	(5.72)	(5.68)	(4.30)	(4.23)	(4.18)	(4.15)
MTB_{it-1}	0.0077 ***	0.0077 ***	0.0077 ***	0.0077 ***	0.0037 ***	0.0037 ***	0.0037 ***	0.0037 ***
	(13.18)	(13.19)	(13.19)	(13.18)	(9.81)	(9.82)	(9.81)	(9.81)
LEV_{it-1}	-0.0776 ***	-0.0775 ***	-0.0776 ***	-0.0776 ***	-0.0156 ***	-0.0156 ***	-0.0157 ***	-0.0158 ***
	(-8.63)	(-8.60)	(-8.60)	(-8.59)	(-2.62)	(-2.60)	(-2.63)	(-2.64)
SGR_{it}	0.0384 ***	0.0385 ***	0.0385 ***	0.0384 ***	0.0432 ***	0.0433 ***	0.0432 ***	0.0431 ***
	(6.35)	(6.38)	(6.36)	(6.33)	(8.45)	(8.47)	(8.44)	(8.42)
CFO_{it-1}					0.4637 ***	0.4636 ***	0.4635 ***	0.4635 ***
					(30.35)	(30.33)	(30.33)	(30.31)
Year Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	10,200	10,200	10,200	10,200	10,200	10,200	10,200	10,200
Adjusted R-squared	0.1662	0.1663	0.1662	0.1662	0.3444	0.3444	0.3442	0.3442

Table C12 Continued

Note: Complete variable definitions are provided in the List of Abbreviations. t-statistics are presented in parentheses below the regression coefficients. Robust standard errors were computed using Huber-White corrections with clustering by firm. ***, **, * indicates the regression coefficient is significantly different from zero at the 0.01, 0.05, and 0.10 level (two-tailed).

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