The Effect of the Domestic Manufacturing Deduction on Corporate Payout Behavior

Jennifer Blouin
The Wharton School

Linda Krull
The University of Texas at Austin

Casey Schwab
Doctoral Student
The University of Texas at Austin

November 12, 2007

ABSTRACT

The American Jobs Creation Act of 2004 created a tax holiday allowing firms to repatriate foreign earnings at a discounted tax rate and a domestic manufacturing deduction (DMD) to encourage domestic investment. We investigate whether the DMD affects firms' decisions to use repatriated earnings to increase investment versus shareholder payout. We find that firms receiving an incremental benefit from the DMD decrease payout by $7.5 billion whereas firms receiving no incremental benefit from the DMD increase payout by approximately $19 billion. This suggests that, under certain conditions, firms retain repatriated funds which may lead to increased domestic investment.

Comments welcome.

We would like to thank Jennifer Brown, Margaret Christ, Lillian Mills, and Stephanie Sikes for their helpful comments.

The Effect of the Domestic Manufacturing Deduction on Corporate Payout Behavior

November 12, 2007

ABSTRACT

The American Jobs Creation Act of 2004 created a tax holiday allowing firms to repatriate foreign earnings at a discounted tax rate and a domestic manufacturing deduction (DMD) to encourage domestic investment. We investigate whether the DMD affects firms' decisions to use repatriated earnings to increase investment versus shareholder payout. We find that firms receiving an incremental benefit from the DMD decrease payout by $7.5 billion whereas firms receiving no incremental benefit from the DMD increase payout by approximately $19 billion. This suggests that, under certain conditions, firms retain repatriated funds which may lead to increased domestic investment.

The Effect of the Domestic Manufacturing Deduction on Corporate Payout Behavior

1. INTRODUCTION

The American Jobs Creation Act of 2004 (the 2004 Act) is the first broad-based corporate tax restructuring in nearly two decades. The 2004 Act includes provisions to repeal the highly controversial extraterritorial income (ETI) tax incentive, modify existing international tax statutes, and create several new U.S. tax incentives. One substantial provision is the domestic production activities deduction, commonly referred to as the domestic manufacturing deduction or the DMD. This deduction phases in from three percent of qualifying income in 2005 to nine percent of qualifying income in 2010, effectively reducing a firm's marginal tax rate by up to one percentage point in 2005 and three percentage points in 2010. The 2004 Act also creates a temporary tax holiday for U.S. multinationals which effectively reduces the maximum U.S. tax rate on qualified repatriations from foreign subsidiaries to 5.25 percent for one year only.

In conjunction with the other international provisions in the 2004 Act, the DMD is intended to increase domestic investment, improve the competitiveness of U.S. manufacturers in global markets, and offset benefits previously provided by ETI. The repatriation tax holiday provides U.S. multinationals with a means to transfer funds back to the U.S. at a low cost and the DMD provides the firms with an additional incentive to invest the repatriated funds domestically.

Research to date that evaluates the effects of the 2004 Act focuses primarily on the repatriation tax holiday. These studies find that the repatriation tax holiday induced approximately $300 to $400 billion in repatriations (Blouin and Krull 2006; Albring,

Dzuranin, and Mills 2005) but that about 11 percent of these repatriations were used for share repurchases in 2005 and that, as of the end of 2005, repatriating firms have not significantly increased U.S. investment (Blouin and Krull 2006). Although the evidence to date suggests that the repatriation tax holiday did not increase domestic investment, existing research does not consider the interaction between the repatriation tax holiday and the DMD. Because the DMD provides long-term incentives to increase domestic investment by increasing the after-tax returns of eligible firms, in this study we ask: "Conditional on repatriation, does the domestic manufacturing deduction affect firms' decisions to use repatriated earnings to increase domestic investment versus increase shareholder payout?"

The answer to this question is important for several reasons. First, existing studies investigating tax provisions created by the 2004 Act do not incorporate the DMD. Legislators need to understand the individual and interactive effects of the different tax provisions of the 2004 Act to determine whether the 2004 Act successfully increased domestic investment. Specifically, if the DMD, in conjunction with the other tax provisions, increases domestic investment, then legislators can better evaluate the relative and joint merits of temporary and long-term tax incentives, such as the repatriation tax holiday and the DMD respectively. Second, the tax provisions in the 2004 Act have already faced intense scrutiny as opponents of the 2004 Act suggest that the tax provisions primarily benefit special interests (Reich-Hale 2005; Forbes 2006; Gravelle 2005). At an estimated ten-year cost of $77 billion, the DMD is extremely costly to taxpayers if it provides little incentive to increase domestic investment.[1] Third, the DMD

[1] The estimated tax cost is from the October 7, 2004 Joint Committee on Taxation publication entitled "Estimated Budget Effects Of the Conference Agreement For H.R. 4520, The 'American Jobs Creation Act

benefits are intended to replace the benefits of ETI.[2] Evidence of firms that benefit from both the DMD and ETI investing repatriated earnings rather than increasing shareholder payout suggests that the DMD benefits provide an adequate incentive to invest in the U.S. and offset the lost ETI benefits.

To investigate the effect of the DMD on firms' payout policies following repatriation of foreign earnings under the 2004 Act, we identify firms that both discuss the DMD and state their intentions to repatriate foreign earnings under the 2004 Act in their 2004 or 2005 10-K. We partition these firms by a firm-specific measure of the DMD benefit relative to the ETI benefit. We then compare the changes in payout behavior after the 2004 Act for firms that benefit from the DMD to changes in payout behavior for firms that do not benefit from the DMD to investigate whether firms that benefit from the DMD decrease shareholder payout relative to firms that do not benefit from the DMD. We find that firms that receive an incremental benefit from the DMD relative to ETI decrease share repurchases and total shareholder payout, whereas firms that benefit more from ETI relative to the DMD increase share repurchases and shareholder payout. This result provides initial evidence suggesting that a subset of firms that repatriate under the 2004 Act retain the repatriated earnings which may lead to increased current or future domestic investment.

The remainder of the paper is organized as follows: section 2 provides background on the DMD, discusses the prior literature, and develops our hypotheses, section 3 presents our research design, section 4 describes our sample, section 5 provides

---

of 2004'". (JCX-69-04). If the projected $49.7 billion of revenue gained from the repeal of ETI is netted against the cost of the DMD, the ten year cost of the DMD is $27.3 billion.

[2] In general, ETI exempts up to 15 percent of export income from U.S. taxation resulting in a reduction in a firm's marginal tax rate on export income by up to 5.25 percent. See Figure 1for a numerical example and additional information pertaining to the ETI tax incentive.

descriptive statistics, section 6 provides empirical results and robustness tests, and section 7 concludes.

2. BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1 The Creation of the Domestic Manufacturing Deduction

For over four decades, U.S. tax policy has encouraged domestic manufacturing by offering several export tax incentives that allow U.S. exporters to exempt a portion of their export income from taxation. Since the inception of these incentives, the European Union has challenged the incentives and repeatedly requested a World Trade Organization (WTO) dispute panel to rule on their legality.[3] Each WTO panel ruled against the United States and ordered the United States to repeal the tax incentives. The United States complied with WTO rulings but replaced each repealed incentive with a slightly modified incentive that offered similar benefits. Each set of new WTO rulings, however, came more swiftly and the last ruling not only ordered the United States to repeal the most recent export tax incentive, ETI, but also allowed the European Union to impose up to a 12 percent retaliatory tariff on U.S. products until the repeal was effective. As a result, legislators decided not to create another modified version of prior export tax incentives and instead passed the 2004 Act which includes the DMD and numerous other tax provisions.

Unlike its predecessors, the DMD is not an export tax incentive and applies to domestically manufactured products regardless of whether they are sold in the United States or abroad. The DMD also extends to a broader range of firms, even those that are

[3] Under the initial export tax incentive, the Domestic International Sales Corporation, the European Community filed a complaint with the General Agreement on Tariffs and Trade (GATT). The European Community has since become the European Union and GATT has been replaced by the WTO. For simplicity, we only refer to the European Union and the WTO.

not traditionally considered manufacturers. In 2005, the DMD provides for a deduction of the lesser of three percent of a taxpayer's qualified production activities income, three percent of a taxpayer's taxable income, or 50 percent of W-2 wages paid by the taxpayer. The deduction increases to six percent of qualified income or taxable income in 2007 and nine percent in 2010.[4] Panels A and B of Figure 1 provide numerical illustrations of the DMD and ETI calculations respectively. As Figure 1 illustrates, the DMD can effectively reduce firms' marginal tax rates by approximately three percentage points by 2010 while ETI reduced firms' marginal tax rates by up to as much as 5.25 percent in recent years.[5] Despite the large effects that the DMD and ETI have on firms' marginal tax rates, existing studies investigating the 2004 Act do not incorporate the potential effects of the DMD or ETI.

2.2 Theory and Hypotheses

A growing literature investigates the effects of the 2004 Act. These studies focus almost exclusively on the repatriation tax holiday. Albring, Dzuranin, and Mills (2005) estimate that if U.S. corporations repatriate all foreign earnings eligible for the reduced repatriation tax rate under the 2004 Act, U.S. corporations will pay only $7 billion of tax rather than the $46 billion of tax that would be due absent the tax holiday. Clausing (2006) argues that the tax holiday does not change the underlying attractiveness of investing in the United States compared to investing abroad and questions whether the tax holiday can increase domestic investment. Blouin and Krull (2006) provide empirical

[4] For an in-depth technical discussion of the DMD, see Deloitte's "Producing Results II: An Analysis of the New Section 199 Production Activities Deduction." The link to the article is: http://www.deloitte.com/dtt/cda/doc/content/us_tax_producing_results_II_09022006.pdf.

[5] When the DMD is fully phased-in in years beginning after 2009, the DMD can reduce firms' marginal tax rates by approximately three percent. As the DMD is phased-in, the DMD can reduce firms' marginal tax rates by approximately one percent in 2005 and 2006 and two percent from 2007 to 2009.

evidence that firms may be using repatriated earnings during the tax holiday to increase share repurchases, which is specifically prohibited by the 2004 Act, rather than to increase domestic investment.

Although Blouin and Krull (2006) find evidence suggesting that firms use some repatriated foreign earnings for prohibited expenditures, it is difficult to gauge whether the 2004 Act's tax provisions are successful at increasing domestic investment if the repatriation incentive is considered alone. The repatriation tax holiday merely provides multinationals with the means to transfer funds back to the United States at a low cost. It does not alter the underlying attractiveness of investing funds in the United States *vis a vis* other locations (Clausing 2006). On the other hand, the DMD does alter the attractiveness of investing funds in the United States by initially increasing the after-tax returns firms can earn on investment in the United States.

2.3 Theoretical Model and Hypotheses Development

Hartman (1985) and Scholes, Wolfson, Erickson, Maydew, and Shevlin (2005) present a model showing that firms' investment decisions are a function of foreign and domestic tax rates and risk-adjusted after-tax returns. To identify characteristics of firms that benefit from repatriating under the tax holiday, Blouin and Krull (2006) incorporate the effect of the repatriation tax holiday into the Scholes et al. (2005) model and show that firms that benefit from the tax holiday are firms with declining investment opportunities. Because investment opportunities are relatively low, the most efficient use of the repatriated earnings is to distribute the funds to shareholders. To study the effect of the DMD on investment behavior, we summarize the Blouin and Krull (2006) model and then incorporate the effects of the phase-in of the DMD and the phase-out of ETI.

Assuming constant and exogenous domestic and foreign tax rates and risk-adjusted after-tax returns, Hartman (1985) and Scholes et al. (2005) show that in a one-period setting, a firm will repatriate foreign funds to the U.S. at the beginning of the period if the following relationship holds:

$$EP\frac{(1-td_{Full})}{(1-tf)}(1+rd) > EP(1+rf)\frac{(1-td_{Full})}{(1-tf)} \quad (1)$$

Where:
EP = the beginning balance of cumulative foreign earnings and profits invested abroad
td_{Full} = the U.S tax rate (i.e., the 2004 Act tax holiday benefit is not available)
tf = the foreign tax rate
rd = the domestic risk-adjusted after-tax rate of return
rf = the foreign risk-adjusted after-tax rate of return

The left side of equation (1) is a firm's after-tax earnings at the end of the period if *EP* is repatriated at the beginning of the period and invested in the U.S.; the right side of equation (1) is a firm's after-tax earnings if *EP* is invested abroad at the beginning of the period and repatriated at the end of the period. This relation simplifies to $rd > rf$ which implies that U.S. taxes on repatriation do not influence the repatriation decision.[6] Instead, firms repatriate foreign earnings when the domestic risk-adjusted after-tax rate of return exceeds the foreign risk-adjusted after-tax rate of return (Hartman 1985; Scholes et al. 2005).

After incorporating the 2004 Act's repatriation tax holiday into equation (1) and assuming that the tax holiday is only available if a firm repatriates *EP* at the beginning of the period, the firm will repatriate at the beginning of the period if the following relationship holds (Blouin and Krull 2006):

[6] Assuming domestic and foreign tax rates and after-tax rate of returns are constant, this result generalizes to a multi-period setting.

$$EP\frac{(1-td_{TH})}{(1-tf)}(1+rd) > EP(1+rf)\frac{(1-td_{Full})}{(1-tf)} \quad (2)$$

Where:
$td_{TH} = .85tf + .15td_{Full}$, the tax holiday effective U.S. tax rate on repatriations[7]
$td_{Full} > td_{TH}$

Considering an n-period investment horizon rather than a one-period investment horizon, equation (2) simplifies to:

$$rd > (1+rf)\left[\frac{(1-td_{Full})}{(1-td_{TH})}\right]^{\frac{1}{n}} - 1 \quad (3)$$

Notice that as the investment horizon increases (i.e., n → ∞), the benefit of the tax holiday has a smaller effect on the investment decision and investment is only dependent on *rd* and *rf*. Using the relationship between *rd* and *rf* in (3), Blouin and Krull infer that *rf* > *rd* because the firm did not repatriate prior to the Act when td_{TH} was equal to td_{Full}.

Further, assuming that the firm can borrow at an after-tax rate equal to *i*, Blouin and Krull infer that *rd* is less than *i* because the firm did not borrow funds to repatriate and invest in the United States before the tax holiday. If the firm repatriates under the tax holiday and the after-tax domestic return is less than the cost of borrowing, the most efficient use of the repatriated earnings is to distribute the funds to shareholders. Although the firm does not use the repatriated earnings to increase domestic operations, it can derive other benefits, such as reducing agency costs, by distributing the funds to shareholders.[8]

[7] See Blouin and Krull (2006) for a derivation of this formula.
[8] If the firm has EP trapped overseas due to the tax costs of repatriation, the tax holiday creates a temporary window during which the firm can repatriate the trapped funds (Foley, Hartzell, Titman, and Twite 2007). Repatriating and distributing the trapped EP to shareholders can reduce the firm's agency costs (Jensen 1986; Blouin and Krull 2006).

The preceding analysis, however, assumes that *rd* and *rf* remain constant across time. Incorporating the effects of the DMD and ETI into the model allows *rd* to change between the pre- and post-2004 Act periods. The DMD reduces the tax burden of an eligible firm and, as a result, increases the after-tax domestic rate of return. Similarly, the phase-out of ETI increases the tax burden of a firm that benefits from ETI, thereby reducing the after-tax domestic rate of return. Substituting the post-2004 Act domestic after-tax rate of return for firms that benefit from the DMD or ETI into equation (4), a firm will repatriate under the 2004 Act if the following relationship holds:

$$rd_{PA} > (1+rf)\left[\frac{(1-td_{Full})}{(1-td_{TH})}\right]-1 \qquad (3^*)$$

Where:
rd_{PA} = the post-2004 Act domestic-after tax rate of return for a DMD or ETI firm
$rd_{PA} > rd$ if the firm's DMD benefit exceeds the firm's ETI benefit, or
$rd_{PA} < rd$ if the firm's ETI benefit exceeds the firm's DMD benefit

When DMD benefits exceed ETI benefits, $rd_{PA} > rd$. A firm that benefits more from the DMD than ETI (a "DMD" firm) will repatriate over a broader range of values of *rf*, td_{Full}, and td_{TH} than a firm that benefits less from the DMD than ETI (an "ETI" firm). Further, we can no longer assume that *i* is the upper bound of the repatriation range for a DMD firm because rd_{PA} can be greater than *i*. Since the domestic after-tax rate of return increases for DMD firms, rd_{PA} can also be greater than *rf*. When $rd_{PA} > rf$ and $rd_{PA} > i$, it is optimal for firms to repatriate foreign earnings under the 2004 Act and invest in domestic operations.

When ETI benefits exceed DMD benefits, $rd_{PA} < rd$. For ETI firms, the original predictions of the Blouin and Krull (2006) model hold because $rd_{PA} < rf$ and $rd_{PA} < i$ which implies that ETI firms will distribute repatriated funds to shareholders. In

summary, DMD firms have an additional incentive to invest repatriated earnings in domestic operations relative to ETI firms, which have no incentive to invest repatriated funds.

The preceding analysis implicitly assumes that the increase (decrease) in the after-tax rate of return resulting from the phase-in of the DMD (phase-out of ETI) is not offset by a decrease (increase) in the pre-tax rate of return for DMD (ETI) firms. This assumption is likely unrepresentative because, in the equilibrium setting of a perfectly competitive and frictionless economy, all firms expect equal risk-adjusted, after-tax returns, which implies that an increase (decrease) in the after-tax rate of return will ultimately result in a decrease (increase) in the pre-tax rate of return in order to maintain the market equilibrium. Although the pre-tax rate of return for DMD (ETI) firms will likely decrease (increase) in the long-run as a result of the initial increase (decrease) in after-tax returns, the reason for the change in pre-tax returns is the more relevant issue in our setting. An increase in after-tax returns stimulates investment in tax-favored projects which decreases pre-tax returns by exerting upward pressure on factor prices (e.g., labor costs or equipment costs) or downward pressure on consumer prices (Scholes et al. 2005). The converse is true for decreases in after-tax returns.[9] Thus, regardless of whether we consider only changes in after-tax rates of return or both changes in pre-tax and after-tax rates of return for DMD and ETI firms, our analysis yields the same prediction: DMD firms have an additional incentive to invest relative to ETI firms, which have no incentive to invest repatriated funds. This implies that DMD firms are more

[9] See the Appendix for more detail on the effect of the changes in after-tax rates of return on pre-tax rates of return for DMD and ETI firms.

likely to invest repatriated funds while ETI firms are more likely to distribute repatriated funds to shareholders and leads to our first hypothesis:

> **H1: Following repatriation or a plan to repatriate foreign earnings, firms that derive a larger benefit from ETI than from the DMD will increase shareholder payout by more than firms that derive a larger benefit from the DMD than from ETI.**

This hypothesis may not be supported for at least two reasons. First, the DMD provides a limited benefit to some firms, and foreign after-tax rates of return may remain higher than domestic after-tax rates of return. If these firms choose to invest foreign earnings, they will continue to invest abroad rather than repatriate foreign earnings and invest domestically, suggesting that any repatriated funds will be distributed to shareholders despite the additional DMD benefit. Second, other tax provisions in the 2004 Act - specifically, the simplification of the Subpart F rules and the longer window to carry forward foreign tax credits - reduce the U.S. tax burden on foreign income. These provisions may encourage foreign expansion and increase foreign after-tax rates of return. If the DMD does not sufficiently increase the domestic after-tax rate of return or other international tax provisions sufficiently increase the foreign after-tax rate of return, we will not find support for hypothesis one.

While the first hypothesis predicts relative differences in the payout behavior of DMD and ETI firms following repatriation under the 2004 Act in general terms of total shareholder payout, the firms can modify their payout via both dividends and/or share repurchases. Like Blouin and Krull (2006), we expect firms to increase share repurchases rather than shareholder dividends for at least two reasons. First, unlike dividends, open market repurchases do not typically require commitment. Thus, once a firm repurchases, it is not expected to continue to repurchase on a regular basis (Guay

and Harford 2000). Second, repurchases are tax-preferred. Though dividends and repurchases are both taxed at a 15 percent reduced rate, repurchases are taxed as capital gains, which dominate dividends from a tax perspective.[10] This leads us to our second hypothesis:

> **H2: Following repatriation or a plan to repatriate foreign earnings, firms that derive a greater benefit from ETI than from the DMD will increase share repurchases by more than firms that derive a larger benefit from the DMD than from ETI.**

3. RESEARCH DESIGN

To provide a benchmark for our primary tests, we estimate the following simplified version of equation (10) from Blouin and Krull (2006) with firm-quarter observations from 1989 through 2005 for firms that repatriate under the 2004 Act and discuss the DMD in their 2004 or 2005 10-Ks[11]:

$$\Delta Payout_{i,t} = \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 Size_{i,t} + \beta_3 \Delta CapEx_{i,t-1} + \beta_4 ROE_{i,t-1} + \beta_5 Debt_{i,t-1} + \beta_6 DivYield_{i,t-1} + \beta_7 \Delta Cash_{i,t-1} + \beta_8 \Delta Payout_{i,t-4} + \beta_9 IndustryDum_{i,k} + \theta_q Qtr_{i,q} + \varepsilon_{i,t}, \quad (4)$$

where *ΔPayout* equals the change in total dividends plus total share repurchases divided by total assets from quarter t-4 to quarter t; *PostAct* is a dummy variable equal to one for all quarters beginning after the 2004 Act (i.e., quarters beginning after October 2004),

[10] Capital gains dominate dividends from a tax perspective for at least four reasons. One, dividends accelerate the tax payment that could be deferred until the stock is sold (or fully avoided if held until the shareholder dies). Two, unlike dividends, shareholders can time the sale of an investment and thus pay the resulting capital gain tax when the shareholder's marginal tax rate is lowest. Three, with capital gains a portion of the proceeds is treated as a return of basis and thus goes untaxed. Conversely, basis cannot be used to avoid dividend income. Four, since only $3,000 of capital losses (net of capital gains) can be deducted each year, capital gains, unlike dividends, enable individuals to accelerate utilization of their pool of capital losses, an important consideration for many individuals following the downturn in the equity markets from 2000 to 2002.

[11] The original Blouin and Krull (2006) equation (10) is estimated using a sample comprised of repatriating and non-repatriating firms whereas the equation listed above has been modified in order to estimate the equation with only repatriating firms. We estimate the complete Blouin and Krull (2006) equation (10) as a robustness check later in the paper and our inferences are unchanged.

and zero otherwise; *Size* equals the log of market value of equity at the beginning of the quarter; *ΔCapEx* equals the change in the ratio of capital expenditures to total assets from the beginning of quarter t-4 to the beginning of quarter t; *ROE* equals the ratio of earnings to market value of equity in quarter t-1; *Debt* equals the ratio of current plus long term debt to total assets at the beginning of the quarter; *DivYield* equals dividends per share divided by stock price at the beginning of the quarter; *ΔCash* equals the change in the ratio of cash and cash equivalents to total assets from the beginning of quarter t-4 to the beginning of quarter t; *IndustryDum* is dummy variable equal to one if the firm's industry corresponds to a specific Fama and French (1997) industry classification and zero otherwise; and *Qtr* is a fixed effect.

Equation (4) contains control variables that prior literature finds to be significant predictors of share repurchases and dividends. Vermaelen (1981; 1984) find evidence that managers repurchase shares to convey insider information to the market to reduce information asymmetry and signal that the firm's shares are undervalued. Since Vermaelen (1981) suggests that information asymmetry may be more prominent in small firms due to smaller analyst followings and less popular press, Dittmar (2000) predicts that repurchases are decreasing in firm size. Dittmar (2000) and Core et al. (2005) find a positive relation between repurchases and size while Barclay et al. (1995) find a positive relation between dividends and size. Based on these prior empirical findings, we expect the coefficient on Size to be positive. Consistent with Blouin et al. (2004), we include *ROE* to control for the variability in the source of dividends. We also control for *Debt* and *ΔCapEx* and, consistent with Dittmar (2000) and Core et al. (2005), expect the coefficient of these variables to be negative. Consistent with Blouin and Krull (2006), we

expect shareholder payouts to be increasing in cash available for repurchases and dividends and, thus, expect payouts to be positively related to *ΔCash*. We include *DivYield* to control for a firm's ability to increase dividends (Blouin and Krull 2006) and the substitutability of dividends and repurchases (Grullon and Michaely 2002). Since prior literature is unclear on whether dividends act as a complement or substitute for repurchases, we make no prediction for the coefficient on *DivYield* when *ΔPayout* or *ΔShrRep* is the dependent variable. We do expect *DivYield* to be negatively related to *ΔDiv* because a high *DivYield* indicates that it may be more difficult for a firm to increase its dividends. Consistent with Blouin and Krull (2006), we also include the lagged value of changes in the payout measures to control for changes in payout levels before the 2004 Act and expect negative coefficients on these variables.

To test the hypotheses, we modify equation (4) to incorporate the phase-out of ETI and phase-in of DMD, creating the following empirical model:

$$\begin{aligned}\Delta Payout_{i,t} &= \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 DMDvsETI_{i,t} + \beta_3 PostAct*DMDvsETI_{i,t} \\ &+ \beta_4 Size_{i,t} + \beta_5 \Delta CapEx_{i,t-1} + \beta_6 ROE_{i,t-1} + \beta_7 Debt_{i,t-1} + \beta_8 DivYield_{i,t-1} \\ &+ \beta_9 \Delta Cash_{i,t-1} + \beta_{10} \Delta Payout_{i,t-4} + \beta_{11} IndustryDum_{i,k} + \theta_q Qtr_{i,q} + \varepsilon_{i,t},\end{aligned} \quad (5)$$

where *DMDvsETI*, which will be discussed in more detail later, is the difference between a firm's estimated DMD and ETI benefits scaled by annual sales. All other variables are the same as previously defined.

The coefficient on *DMDvsETI* measures whether abnormal payout varies with the benefit firms receive from the DMD relative to ETI. *PostAct*DMDvsETI* measures whether the change in abnormal payouts after the 2004 Act varies with the benefit firms receive from the DMD relative to ETI. Consistent with hypothesis one, we predict a

negative coefficient on *PostAct*DMDvsETI* which suggests that DMD firms decrease abnormal payout following repatriation under the 2004 Act relative to ETI firms. We include *PostAct* and *DMDvsETI* as control variables but make no predictions for these variables.

4. SAMPLE

To investigate the effect of the DMD on firms' payout policies following repatriation of foreign earnings under the 2004 Act, we construct a sample of firms that discuss the DMD in their 2004 or 2005 10-Ks and repatriated or intend to repatriate earnings under the 2004 Act. On December 21, 2004, the FASB issued FSP 109-1 and 109-2. FSP 109-1 requires firms to account for the DMD as a special deduction in accordance with FASB Statement No. 109, *Accounting for Income Taxes*. FSP 109-2 requires firms considering repatriating a range of amounts under the 2004 Act to recognize the income tax effects from remitting the lowest amount within the considered range. We use these disclosures as the basis for constructing our sample of firms. Specifically, we construct our sample by using 10kwizard.com to search for firms that mention the DMD in their original or amended 10-Ks from June 30, 2004 to July 16, 2006.[12] This search yields 1,319 filings. We then eliminate firms that are not listed on Compustat, firms incorporated outside of the U.S., firms without any reported foreign activity over the past three years, all insurance and financial services firms, and firms that do not discuss their repatriation decision under the 2004 Act, resulting in a sample of 453 firms that mention the DMD. For each of these firms, we review the last two fiscal year 10-Ks and record the firm's plans for repatriation, the range of possible repatriation

[12] The exact search term we used is "Domestic prod* or manufacturing deduct* or production deduct* or qualified product* or qualified activi* or activities deduct* or section 199."

amounts reported, and the firm's DMD and ETI eligibility, including the specific dollar benefit or effective tax rate reduction provided by each tax incentive. For our primary tests, we eliminate 352 firms that do not repatriate or intend to repatriate under the 2004 Act resulting in a sample of 101 repatriating firms. We use these 101 repatriating firms to estimate equation (4). Of the 101 firms, 41 firms report their specific DMD or ETI tax benefit in the text of the 10-K or in the income tax footnote necessary to compute the measure comparing the relative benefit of the DMD to ETI. We use these 41 firms (hereafter the "DMDvsETI sample") to investigate the effect of the phase-out of ETI and the phase-in of the DMD on firms' decisions to use repatriated foreign earnings to increase shareholder payout or increase domestic investment. Using these samples of firms, we estimate equations (4) and (5) for all firm-quarters from 1989 through 2005 with the required data available in Compustat.

5. DESCRIPTIVE STATISTICS

5.1 Univariate Analysis of the DMDvsETI Sample Firms Partitioned by DMD vs. ETI Classification

Table 1 provides the 2005 descriptive statistics for the DMDvsETI sample partitioned by DMD vs. ETI classification. We partition the sample by assigning all 41 firms that disclose a monetary or rate reduction benefit of the DMD or ETI in their 2005 10-Ks to one of two DMD vs. ETI classifications: firms that benefit more from the DMD than ETI (DMD firms) or firms that benefit more from ETI than the DMD (ETI firms). Using the disclosed benefits, we estimate the long-term annual benefit that firms will receive under the DMD and compare the estimated DMD benefit to the hypothetical long-term benefit a firm would receive under ETI if ETI were not being phased out.

Since the 2005 DMD deduction is limited to three percent of the lesser of qualified production activities income or taxable income whereas the long-term DMD deduction will be nine percent, we multiply the 2005 DMD benefit by three to estimate the long-term annual DMD benefit. Since firms are only allowed to take eighty percent of their calculated ETI benefit in 2005, we divide the disclosed ETI benefit by 0.8 to estimate the hypothetical long-term annual benefit. We then subtract the estimated ETI benefit from the estimated DMD benefit to determine whether a firm benefits more from the DMD or ETI. A positive difference indicates that the firm benefits more from DMD and a negative value indicates that a firm benefits more from ETI. Next, we scale the calculated difference by annual sales to control for size and allow the firms to be ranked in a meaningful way. The scaled difference between a firm's estimated DMD and ETI benefits is the *DMDvsETI* variable used in equation (5).

After ranking the firms, the DMDvsETI sample includes 15 DMD firms and 26 ETI firms. Table 1 shows that DMD firms are similar in size, as measured by *Assets* and *Size*, inventory, as measured by *TotInv*, and productive assets, as measured by *NPPE*, relative to ETI firms. DMD firms are also more profitable, as measured by *ROE*, invest more in capital expenditures, as measured by *CapEx*, are more levered, as measured by *Debt*, and have a higher dividend yield, as measured by *DivYield* than ETI firms, whereas ETI firms hold more cash. DMD firms likely have higher gross profit and pretax income ratios because these ratios are rough proxies for the two key determinants of a firm's DMD benefit, qualified production activities income and taxable income. Consistent with expectations, the DMD firms have higher gross profit and pretax income ratios, as measured by *PI* and *GP*, than ETI firms. DMD firms also have higher effective tax rates,

U.S. tax rates, and foreign tax rates, as measured by *ETR*, *USTR*, and *FTR* respectively, than ETI firms. Although higher tax rates are not necessarily indicators of DMD firms, the high tax rates do imply that the DMD firms have an incentive to respond quickly to the new tax incentive to lower their effective tax rate. The differences between DMD and ETI firms highlighted in the univariate statistics in Table 1 suggest the need to control for many of the firm characteristics discussed in section 3.

5.2 Univariate Analysis of Changes in the DMDvsETI Sample Firms' Payout Behavior Partitioned by DMD vs. ETI Classification

Table 2 presents quarterly scaled share repurchases, shareholder dividends, and total payout from 2003 to 2005 for firms partitioned on the DMD vs. ETI classification. Table 2 shows that ETI firms increase total shareholder payout by over 70 percent from 2004 to 2005 whereas DMD firms only increase total payout by 26.84 percent. The large increase in payout for ETI firms is driven by the change in share repurchases which increase by almost 95 percent from 2004 to 2005. In contrast, DMD firms only increase share repurchases by approximately 34 percent. DMD firms do increase dividends by a larger percentage from 2004 to 2005. The difference, a 9.4 percent increase for DMD firms relative to a 4.7 percent increase for ETI firms, is marginal in comparison to the difference in repurchases. These univariate results are consistent with hypothesis one and suggest that firms that benefit more from the DMD than ETI increase shareholder payout. Overall, these descriptive statistics suggest that ETI firms increase payout, primarily via share repurchases, substantially more in 2005 than DMD firms. The multivariate tests that follow will control for other determinants of shareholder payout and test whether the DMD affects firms' payout behavior.

6. *MULTIVARIATE TESTS OF THE EFFECT OF A FIRM'S DMD VS. ETI CLASSIFICATION ON CHANGES IN PAYOUT BEHAVIOR*

6.1 Main tests

Panels A and B of Table 3 present the results from estimating equations (4) and (5) respectively. All t-statistics are calculated using the Newey-West procedure to control for heteroskedasticity and serial correlation. Panel A replicates the results from Blouin and Krull (2006) using a sample of firms that both repatriate under the 2004 Act and mention the DMD in their 2004 or 2005 10-K. The results are consistent with Blouin and Krull (2006) and suggest that firms that repatriate under the 2004 Act increase shareholder payout. Specifically, the positive and significant coefficients on *PostAct* in Columns (1) and (2) indicate that, in general, firms increase shareholder payout, primarily via share repurchases, following repatriation under the 2004 Act.

Panel B of Table 3 presents the results from estimating equation (5) for the DMDvsETI sample. As outlined earlier, the *DMDvsETI* variable captures the benefit of the DMD relative to ETI and is equal to the firm-specific scaled difference between the estimated DMD and ETI benefits. Positive (negative) values of *DMDvsETI* indicate that the firm derives a larger benefit from the DMD (ETI) than ETI (the DMD). The coefficient on the variable of interest, *PostAct*DMDvsETI*, is negative and significant in Columns (1) and (2) and negative and insignificant in Column (3) suggesting that ETI firms increase payout, primarily via share repurchases, while DMD firms decrease payout following repatriation under the 2004 Act. These results provide support for hypothesis one.

We also find that changes in total payout and share repurchases increase with firm size and decrease with dividend yield and the four-quarter lag of changes in payout and

share repurchases respectively. On the other hand, we find that changes in dividends increase in general after the 2004 Act and decrease in firm size, debt, and dividend yield.

Overall, the results in Panel A indicate that firms that both repatriate under the 2004 Act and mention the DMD in their 2004 or 2005 10-K increase shareholder payout while the results in Panel B indicate that, for a subset of repatriating firms that we can determine the benefit of the DMD relative to ETI, repatriating ETI firms increase abnormal shareholder payout while repatriating DMD firms decrease abnormal shareholder payout. These results provide evidence that, in conjunction with the dividend tax holiday, the DMD helps increase domestic investment for some firms.

To determine the economic significance of the effect of the DMD on total firm payout, we multiply the coefficient on *PostAct*DMDvsETI* in the Column (1) of Table 3, Panel B (-3.9716) by the firm-specific *DMDvsETI* measure and the average quarterly 2005 total assets. This calculation yields an estimate of the change in quarterly payout for each firm in the sample. We sum these firm-specific totals separately for firms with positive values of *DMDvsETI* (DMD firms) and firms with negative values of *DMDvsETI* (ETI firms). Aggregating the firm-specific estimates separately for DMD and ETI firms suggests that ETI firms increase shareholder payout by $18.988 billion in 2005 whereas DMD firms decrease shareholder payout by $7.464 billion. In sum, the difference between DMD and ETI firms' changes in shareholder payout in 2005 is approximately $25 billion.

6.2 Robustness Checks

We conduct a series of robustness checks to ensure that the results are consistent with prior studies and to examine alternative hypotheses. In our primary tests, we consider only firms that repatriated under the 2004 Act because repatriating firms have an

abnormal cash inflow (i.e., the repatriated foreign earnings) that firms must choose whether to invest or distribute to shareholders. Thus, these firms are more likely than non-repatriating firms to have abnormal changes in shareholder payout following the 2004 Act. To investigate whether non-repatriating DMD and ETI firms exhibit similar patterns in changes in shareholder payout following the 2004 Act, we estimate the following two equations with all firm-quarters for the sample firms from 1989 through 2005:

$$\begin{aligned}\Delta Payout_{i,t} &= \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 Repat_{i,t} + \beta_3 PostAct*Repat_{i,t} + \beta_4 Size_{i,t} \\ &+ \beta_5 \Delta CapEx_{i,t-1} + \beta_6 ROE_{i,t-1} + \beta_7 Debt_{i,t-1} + \beta_8 DivYield_{i,t-1} + \beta_9 \Delta Cash_{i,t-1} \\ &+ \beta_{10} \Delta Payout_{i,t-4} + \beta_{11} IndustryDum_{i,k} + \theta_q Qtr_{i,q} + \varepsilon_{i,t},\end{aligned} \tag{6}$$

where *Repat* equals one if the firm repatriated under the 2004 Act and zero otherwise. All other variables are the same as previously defined.

$$\begin{aligned}\Delta Payout_{i,t} &= \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 DMDvsETI_{i,t} + \beta_3 Repat_{i,t} + \\ &\beta_4 PostAct*DMDvsETI_{i,t} + \beta_5 PostAct*Repat_{i,t} + \beta_6 DMDvsETI*Repat_{i,t} + \\ &\beta_7 PostAct*DMDvsETI*Repat_{i,t} + \beta_8 Size_{i,t} + \beta_9 \Delta CapEx_{i,t-1} + \beta_{10} ROE_{i,t-1} + \\ &\beta_{11} Debt_{i,t-1} + \beta_{12} DivYield_{i,t-1} + \beta_{13} \Delta Cash_{i,t-1} + \beta_{14} \Delta Payout_{i,t-4} + \beta_{15} IndustryDum_{i,k} \\ &+ \theta_q Qtr_{i,q} + \varepsilon_{i,t},\end{aligned} \tag{7}$$

where all variables are the same as previously defined.

Estimating equation (6) provides evidence that our overall sample is not distinctly different from the sample used in Blouin and Krull (2006) and provides a benchmark for equation (7). We estimate equation (6) using 101 repatriating firms and 352 non-repatriating firms that mention the DMD in their 2004 or 2005 10-Ks. While equation (6) only examines the effect of repatriation under the 2004 Act on changes in shareholder payout, equation (7) investigates the effect of repatriation under the 2004 Act *and* the

phase-out of ETI and phase-in of the DMD on changes in shareholder payout. We estimate equation (7) using 41 repatriating firms and 115 non-repatriating firms that disclose their 2005 DMD and/or ETI benefit in their 2005 10-K.

Panels A and B of Table 4 present the results from estimating equations (6) and (7), respectively. In Panel A, the variable of interest is the *PostAct*Repat* interaction which measures whether there is a difference in changes in payout in the post-2004 Act period between repatriating and non-repatriating firms. Consistent with Blouin and Krull (2006), *PostAct*Repat* is positive and significant for changes in payout and changes in share repurchases, indicating that repatriating firms increase shareholder payout, primarily via share repurchases, more than non-repatriating firms following the 2004 Act.

In Panel B of Table 4, the variable of interest is the *PostAct*DMDvsETI*Repat* interaction which measures whether there is a difference in changes in payout in the post-2004 Act period between repatriating DMD and ETI firms relative to non-repatriating DMD and ETI firms. Consistent with expectations, *PostAct*DMDvsETI*Repat* is significantly negative suggesting that repatriating ETI (DMD) firms increase (decrease) shareholder payout and share repurchases following the 2004 Act. We also find that shareholder payout and share repurchases increase for all firms after the 2004 Act which may be indicative of a general increase in shareholder payout over time.

Finally, in additional tests, we include a 2003 and/or 2004 dummy variable to control for an abnormal increase in shareholder payout following the Jobs Growth and Tax Relief Reconciliation Act and the results are unchanged.

7. CONCLUSION

In this paper, we investigate whether firms that benefit from the DMD use foreign earnings repatriated under the 2004 Act to increase domestic investment or increase shareholder payout. We find that firms that derive an incremental benefit from the DMD relative to prior tax incentives decrease share repurchases following the 2004 Act. In contrast, firms that benefit less from the DMD relative to prior export tax incentives significantly increase shareholder payout.

Our primary contribution to the literature is two-fold. First, we incorporate the DMD into the research investigating the effects of the 2004 Act and find that, under certain conditions, the 2004 Act encourages some firms to retain repatriated foreign earnings which may lead to increased current or future domestic investment. Second, we provide preliminary evidence on the effects of the phase-in of the DMD and the phase-out of ETI. Because we find that the DMD encourages some U.S. multinationals to retain repatriated foreign earnings, we provide preliminary evidence suggesting that the DMD may be an adequate replacement for prior export tax incentives for some firms. Future research can investigate the net effect of the DMD and ETI on production location decisions and U.S. manufacturers' ability to compete in international markets.

One limitation of this study is that we cannot definitively determine whether repatriated foreign earnings that are retained by DMD firms will be used to increase domestic investment. Future studies can address the actual use of repatriated funds by these firms as firms make investment decisions.

Appendix

The primary model developed in the paper implicitly assumes that a change in the after-tax rate return is not offset by a change in the pre-tax rate of return. The model presented below (adapted from Wilkie 1992) outlines the effect of the phase-in of the DMD and the phase-out of ETI on two firms' pre-tax and after-tax rates of return.

For simplicity, we assume (1) a perfectly competitive and frictionless economy and (2) only two sets of firms exist, one set that benefits only from the DMD (DMD firms) and one set that benefits only from ETI (ETI firms). Furthermore, all income for DMD (ETI) firms qualifies for preferential tax treatment under the DMD (ETI) in the post-2004 Act (pre-2004 Act) period. In the pre-2004 Act period, the after-tax equilibrium return on equity for DMD firms, which does not benefit from ETI, is:

$$r^{AT*} = r_{DMD}^{PT} * (1-t) = \frac{TI_{DMD} * (1-t)}{SE} \qquad (1)$$

Where:
r^{AT*} = the equilibrium after-tax return on equity,
r_{DMD}^{PT} = the pre-tax return on equity for the DMD firm,
t = the statutory tax rate,
TI_{DMD} = the taxable income for the DMD firm, and
SE = shareholders' equity.

Similarly, the after-tax equilibrium return on equity for ETI firms, which receives preferential treatment in the pre-2004 Act period, is:

$$r^{AT*} = r_{ETI}^{PT} * (1-t_{ETI}) = \frac{TI_{ETI} * (1-t_{ETI})}{SE} = \frac{TI_{ETI} * (1-.85t)}{SE} \qquad (2)$$

Where:
r_{ETI}^{PT} = the pre-tax return on equity for the ETI firm,
t_{ETI} = the preferential tax rate for the ETI firm in the pre-2004 Act period[13],

[13] ETI allows a company to exclude 15 percent of qualified foreign trade income from taxable income. If all firm income is qualified foreign trade income and ETI is the only tax benefit the company receives, the firm's tax rate will equal 85 percent of the statutory rate.

$t_{ETI} < t$, *and*
TI_{ETI} = the taxable income for the ETI firm.

Given that $t > t_{ETI}$, it follows that for the after-tax return of DMD and ETI firms to equal one another in equilibrium that r_{DMD}^{PT} must be greater than r_{ETI}^{PT} which implies that DMD firms have higher pre-tax returns relative to ETI firms in the pre-2004 Act periods. With the passage of the 2004 Act, however, the after-tax equilibrium return on equity for the DMD firm, which now benefits from the DMD, changes to:

$$r^{AT*} = r_{DMD}^{PT} * (1 - t_{DMD}) = \frac{TI_{DMD} * (1 - t_{DMD})}{SE} = \frac{TI_{DMD} * (1 - .91t)}{SE} \qquad (3)$$

Where:
t_{DMD}= the preferential tax rate for the DMD firm in the post-2004 Act period[14] and
$t_{DMD} < t$.

Similarly, the post-2004 Act after-tax equilibrium return on equity for the ETI firm, which does not benefit from the DMD, changes to:

$$r^{AT*} = r_{ETI}^{PT} * (1 - t) = \frac{TI_{ETI} * (1 - t)}{SE} \qquad (4)$$

Comparing equations (3) and (4), it is apparent that in the post-2004 Act period ETI firms must now have higher pre-tax returns than DMD firms since $t > t_{DMD}$. As discussed briefly in Section 2.3, the pre-tax returns decrease (increase) for DMD (ETI) firms due to increased (decreased) investment in DMD (ETI) projects in the post-2004 Act period as a result of the phase-in of the DMD (phase-out of ETI). The increased investment in DMD projects decreases pre-tax returns by exerting upward pressure on factor prices (e.g., labor costs or equipment costs) or downward pressure on consumer

[14] The DMD allows a company to deduct nine percent of qualified production activities income from taxable income. If all firm income is qualified production activities income and the DMD is the only tax benefit the company receives, the firm's tax rate will equal 91 percent of the statutory rate.

prices (Scholes et al. 2005). The converse is true for decreased investment in ETI projects in the post-2004 Act period.

In the equations presented above, note that the equilibrium after-tax returns do not change between the pre- and post-2004 Act periods. This only holds given the assumption of a competitive and frictionless market which allows investment to instantaneously and costlessly shift from ETI to DMD firms in the post-2004 Act period. If we do not make this assumption, the after-tax returns will likely shift initially in the post-2004 Act period yielding higher after-tax returns for the DMD firm and lower after-tax returns for the ETI firm. As firms adjust investment levels (i.e., DMD firms invest more and ETI firms invest less), however, the after-tax returns for DMD and ETI firms will converge.

In sum, accounting for changes in both the tax incentives and pre-tax returns between DMD and ETI firms in the pre- and post-2004 Act periods yields the same predictions as presented in Section 2.3: DMD firms have additional incentives to invest domestically in the post-2004 Act period while ETI firms have no additional incentive to invest domestically in the post-2004 Act period. This implies that DMD firms are more likely to invest repatriated funds while ETI firms are more likely to distribute repatriated funds to shareholders.

References

Albring S., Ann Dzranin, and Lillian F. Mills. August 8, 2005. Tax savings on repatriations of foreign earnings under the American Jobs Creation Act of 2004. *Tax Notes*, 665-669.

Barclay, M., C. Smith, and R. Watts. 1995. The determinants of corporate leverage and dividend policies. *Journal of Applied Corporate Finance* 7:4, 4-19.

Bhattacharya, S. 1979. Imperfect information, dividend policy, and "the bird in the hand" fallacy. *Bell Journal of Economics* 10, 259-270.

Blouin, J. and L. Krull. 2006. Bringing it home: A study of the incentives surrounding the repatriation of foreign earnings under the American Jobs Creation Act of 2004. Working paper.

Blouin, J., Raedy, J., and D. Shackelford. 2004. The initial impact of the 2003 reduction in the dividend tax rate. University of Pennsylvania working paper.

Clausing, Kimberly A. 2005. Tax holidays (and other escapes) in the American Jobs Creation Act. *National Tax Journal* 58:3, 331-346.

Core, John E., Wayne R. Guay, Scott A. Richardson and Rodrigo S. Verdi. 2006. Stock Market Anomalies: What Can We Learn from Repurchases and Insider Trading? *Review of Accounting Studies* 11:1, 49-70 **.**

Deloitte. April 6, 2006. "Producing Results II: An Analysis of the New Section 199 Production Activities Deduction."

Desai, Mihir A., C. Fritz Foley and James R. Hines. 2001. Repatriation taxes and dividend distortions. *National Tax Journal* 54:4, 829-851.

Desai, Mihir A., and James R. Hines. 2001. The Uneasy Marriage of Export Incentives and the Income Tax. *Tax Policy & the Economy* 15:1, 41-94.

Dittmar, Amy K. 2000. Why do firms repurchase stock? *Journal of Business* 73:3, 331-355.

Forbes, Steve. January 18, 2006. "Nightmare on Main Street." *The Daily Reckoning*.

Gravelle, Jane G. 2005. The 2004 Corporate Tax Revisions as a Spaghetti Western: Good, Bad, and Ugly. *National Tax Journal* 58:3, 347-365.

Grubert, H. and J. Mutti. 2000. Do Taxes Influence Where U.S. Corporations Invest? *National Tax Journal* 53:4, 825-839.

Grullon, G. and R. Michaely. 2002. Dividends, Share Repurchases and the Substitution Hypothesis. *Journal of Finance* 57, 1649-1684.

Grullon, G. and R. Michaely. 2004. The information content of share repurchase programs. *Journal of Finance* 59, 1649-1684.

Guay, Wayne and J. Harford. 2000. The cash-flow permanence and information content of dividend increases versus repurchases. *Journal of Financial Economics* 57:3. 385-415.

Hartman, David. 1985. Tax policy and foreign direct investment. *Journal of Public Economics* 26, 107-121.

Foley, Hartzell, Jay C., Sheridan Titman, and Garry Twite. 2007. Why do firms hold so much cash? A tax-based explanation. *Journal of Financial Economics*, forthcoming.

Jensen, Michael C. 1986. Agency costs of free cash flow, corporate finance and takeovers. *The American Economic Review* 76, 323-329.

Kemsley, Deen. 1998. The Effects of Taxes on Production Location. *Journal of Accounting Research* 36:2, 321-341.

Reich-Hale, David. January 7, 2005. "Commentary: American Jobs Creation Act: a 650-page boondoggle." *Long Island Business News*.

Scholes, Myron S., Mark A. Wolfson, Merle Erickson, Edward L. Maydew and Terry Shevlin. 2005. *Taxes and Business Strategy: A Planning Approach*. 3rd edition. Prentice Hall, Upper Saddle River, NJ 07458.

Vermaelen, T. 1984. Repurchase tender offers signaling and manager incentives. *Journal of Financial and Quantitative Analysis* 19, 163-181.

Wilkie, P. J. 1992. Empirical Evidence of Implicit Taxes in the Corporate Sector. *Journal of the American Taxation Association* 14:1, 97-116.

Figure 1
Examples of DMD and ETI Calculations

Panel A: Numerical Examples of the DMD Calculation and Related Terminology

DMD Eligibility	**Without DMD Benefit**	**With DMD Benefit**	
Taxable Income Not Eligible for the DMD	1675		1000
Domestic Production Gross Receipts (DPGR)			2,200
Less: Cost of Goods Sold Allocable to DPGR			(1,150)
Less: Other Deductions and Expenses Directly Allocable to DPGR			(300)
Less: Share of Other Deductions, Expenses, and Losses Not Directly Applicable to DPGR or Another Class of Income			(75)
Qualified Production Activities Income (QPAI)			675
QPAI		675	
50% of W-2 Wages		700	
Taxable Income		1,675	
Lesser of QPAI, Taxable Income, or 50% of W-2 Wages			675
Applicable Percentage After 2009: 9%			9%
Domestic Manufacturing Deduction	**n/a**		**60.75**
Pre-DMD Taxable Income	1675		1675
Taxable Income Less DMD			1,614
Tax Liability	586		565
Effective Tax Rate	**35.00%**		**33.73%**
Effect of DMD on Effective Tax Rate [(-DMD Deduction/Pre-DMD TI)*35%]	**n/a**		**-1.27%**
MTR Calculation			
Additional Dollar of Income Eligible for the DMD	1		1
Taxes Due on Additional Dollar of Income Eligible for the DMD	0.35		0.32
Marginal Tax Rate	**35.00%**		**31.85%**
Effect of DMD on Marginal Tax Rate	**n/a**		**-3.15%**

DPGR: Gross receipts derived from (1) any sale, exchange or other disposition, or any lease, rental or license, of qualifying production property that was manufactured, produced, grown or extracted by the taxpayer *in whole or in significant part in the U.S.*; (2) any sale, exchange or other disposition, or any lease, rental or license, of qualified film produced by the taxpayer; (3) any sale, exchange or other disposition of electricity, natural gas, or possible water produced by the taxpayer in the U.S.; (4) construction activities performed in the U.S.; or (5) engineering or architectural services performed in the U.S. for construction projects located in the U.S.

IWSP: In Whole or Significant Part. For property to be treated as MPGE in whole or significant part within the United States, the taxpayer must satisfy either the subjective, facts-and-circumstances, "subtantial in nature" test or an objective safe-harbor test.

MPGE: Manufactured, Produced, Grown, or Extracted

Figure 1 (continued)
Examples of DMD and ETI Calculations

Panel B: Numerical Examples of the ETI Calculation and Related Terminology				
ETI Eligibility	**Without ETI Benefit**		**With ETI Benefit**	
Taxable Income Not Eligible for ETI	1675			1000
Foreign Trading Gross Receipts (FTGR)				2,200
Less: Cost of Goods Sold				(1,150)
Less: Other Deductions				(375)
Taxable Income Eligible for the ETI Benefit				675
Qualifying Foreign Trade Income (QFTI)				675
Exclusion				
1.2% FTGR			26	
15% QFTI			101	
Greater of amounts 1.2% FTGR and 15% QFTI			101	
FTI Limit (2 * 15% QFTI)			203	
Lesser of Exclusion Amount or FTI Limit				101
Percentage of ETI benefits allowed				100%
Extraterritorial Income Exclusion	**n/a**			**101**
Pre-ETI Taxable Income	1,675			1,675
Taxable Income less ETI Exclusion				1,574
Tax Liability	586			551
Effective Tax Rate	**35.00%**			**32.88%**
Effect of ETI on Effective Tax Rate [(-ETI Exclusion/Pre-ETI TI)*35%]	**n/a**			**-2.12%**
MTR Calculation				
Additional Dollar of Income Eligible for ETI	1			1
Taxes Due on Additional Dollar of Income Eligible for ETI	0.35			0.30
Marginal Tax Rate	**35.00%**			**29.75%**
Effect of ETI on Marginal Tax Rate	**n/a**			**-5.25%**

FTI: Foreign Trade Income. Gross income of a taxpayer attributable to foreign trading gross receipts (FTGR)

FTGR: Qualified receipts include income from the sale, lease, rental or servicing of qualifying trade property. Qualified receipts can also include fees from architectural, engineering and certain managerial services. 100% of the gross receipts from sales and services involving military property also qualify as FTGR. A firm must satisfy two requirements for the qualified receipts to be included in FTGR: the receipts must arise from transaction involving qualified foreign trading property and each transaction must satisfy the foreign economic processes (FEP) test.

QFTP: Qualifying Foreign Trade Property. Property that (1) is manufactured or produced *within* or *outside* the United States, (2) is held primarily for sale for use or disposition outside of the United States, and (3) has no more than 50% of its value attributable to foreign content or *other value added outside the United States*

FEP: To satisfy the foreign economic processes test, the taxpayer must participate outside of the United States in one of three sales activities, the solicitation, negotiation, or making of the contract that generates FTGR. Also, either 50% of the direct participation costs must occur outside the United States or 85% of the the total costs in two of the following five direct cost categories must occur outside of the United States: advertising or sales promotion, processing of customer orders and arranging for delivery, transportation, determination and transmittal of a final invoice and receipt of payment, and assumption of credit risk.

Table 1

Descriptive Statistics for Firms Partitioned by DMD vs. ETI Classifications

This table reports 2005 annual descriptive statistics for firms that discuss the DMD in their 2004 or 2005 10-Ks and report that they have repatriated or plan to repatriate under the 2004 Act. The sample excludes firms not listed on Compustat, firms incorporated outside the U.S., insurance companies, financial services firms, and firms with no foreign activity in the last three years. *Assets* is the log of total assets (data 6). *Debt* is the ratio of long-term debt (data9) plus debt included in current liabilities (data34) to total assets (data6). *Cash* is the ratio of cash and cash equivalents (data1) to total assets. *CapEx* is the ratio of capital expenditures (data128) to total assets (data6). *DivYield* is dividends per share (data201) scaled by price (data199). *ROE* is net income (data172) scaled by equity (data60). *Size* is price per share (data199) times common shares outstanding in millions (data25). *TotInv* is total inventory (data3) scaled by total assets (data6). *NPPE* is net property, plant, and equipment (data8) scaled by total assets (data6). *GP* is gross profit (data12 minus data41) scaled by sales (data12). *ETR* is the total effective tax rate measured as total tax expense (data16) over pre-tax income (data170). *USTR*, the U.S. effective tax rate, is domestic tax expense (data63) over domestic pre-tax income (data272). *FTR*, the foreign effective tax rate, is foreign tax expense (data64) over foreign pre-tax income (data273).

	DMD vs. ETI Classifications					
	ETI>DMD			DMD>ETI		
Variable	N	Mean	Median	N	Mean	Median
Assets	26	8.4200	8.1041	15	8.2251	8.0876
Debt	26	0.2091	0.2376	15	0.2844	0.2340
Cash	26	0.1510	0.0700	15	0.0762	0.0580
CapEx	26	0.0361	0.0338	15	0.0525	0.0387
DivYield	26	0.0131	0.0131	15	0.0198	0.0151
ROE	26	0.1186	0.1319	15	0.4817	0.1457
Size	26	15032.90	3851.08	15	16075.73	4138.82
TotInv	26	0.1367	0.1081	15	0.1173	0.1025
NPPE	26	0.2489	0.2393	15	0.2676	0.2197
PI	26	0.1032	0.0889	15	0.1651	0.1059
GP	26	0.3899	0.3429	15	0.4513	0.3710
ETR	26	0.1928	0.2927	15	0.3207	0.3473
USTR	23	-0.0619	0.1647	10	0.4004	0.3013
FTR	24	0.3127	0.3008	10	0.4152	0.2782
DMDvsETI	26	-0.0030	-0.0025	15	0.0035	0.0024

Table 2

Scaled Total Payout, Share Repurchases, and Dividends Partitioned by DMD vs. ETI Classifications

This table reports scaled mean total payout, share repurchases, and dividends from 2003 to 2005 for firms that disclose their specific 2005 DMD and/or ETI benefit in their 10-Ks from July 31, 2004 to July 17, 2006 and report that they have repatriated or plan to repatriate under the 2004 Act. The sample excludes firms not listed on Compustat, firms incorporated outside the U.S., insurance companies, financial services firms, and firms with no foreign activity in the last three years. *Share Repurchases/Total Assets* is the repurchase amount from the statement of cash flows (data 93) less decreases in preferred stock (change in data55 and data71) scaled by total assets (data44). *Dividends/Total Assets* equals quarterly dividends per share times total shares outstanding as reported by Compustat (data16*data61), divided by total assets (data44). *Total Payout/Total Assets* equals the sum of share repurchases and dividends scaled by total assets (data44).

	Total Payout/Total Assets				Share Repurchases/Total Assets				Dividends/Total Assets			
	ETI>DMD		DMD>ETI		ETI>DMD		DMD>ETI		ETI>DMD		DMD>ETI	
	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean	N	Mean
2003: Q1	25	0.0050	15	0.0375	25	0.0015	15	0.0278	26	0.0033	15	0.0097
2003: Q2	26	0.0122	15	0.0569	26	0.0083	15	0.0475	26	0.0039	15	0.0094
2003: Q3	26	0.0087	15	0.0774	26	0.0051	15	0.0679	26	0.0036	15	0.0096
2003: Q4	26	0.0156	15	0.0877	26	0.0119	15	0.0786	26	0.0038	15	0.0091
2003 Total		0.0415		0.2596		0.0267		0.2218		0.0147		0.0378
2004: Q1	26	0.0077	14	0.0193	26	0.0035	14	0.0091	26	0.0042	15	0.0096
2004: Q2	26	0.0099	14	0.0261	26	0.0059	14	0.0176	26	0.0039	15	0.0081
2004: Q3	26	0.0168	14	0.0317	26	0.0130	14	0.0233	26	0.0038	15	0.0079
2004: Q4	26	0.0237	15	0.0366	26	0.0198	15	0.0286	26	0.0039	15	0.0080
2004 Total		0.0582		0.1138		0.0423		0.0787		0.0159		0.0335
2005: Q1	26	0.0115	14	0.0186	26	0.0073	14	0.0089	26	0.0042	15	0.0091
2005: Q2	26	0.0213	14	0.0305	26	0.0172	14	0.0208	26	0.0041	15	0.0092
2005: Q3	26	0.0284	14	0.0428	26	0.0243	14	0.0333	26	0.0041	15	0.0089
2005: Q4	26	0.0378	14	0.0524	26	0.0336	14	0.0423	26	0.0043	15	0.0095
2005 Total		0.0990		0.1443		0.0824		0.1054		0.0166		0.0367
% Δ: 2003 - 2004		40.19%		-56.18%		58.53%		-64.51%		8.12%		-11.42%
% Δ: 2004 - 2005		**70.26%**		**26.84%**		**94.86%**		**33.91%**		**4.70%**		**9.40%**
% Δ: 2003 – 2005		138.68%		-44.42%		208.92%		-52.48%		13.20%		-3.10%

Table 3

Multivariate Tests of the Effect of Repatriation and DMD vs. ETI Classification on Payout Behavior

The sample includes firm-quarters from 1989 to 2005 with data available to calculate all regression variables, excluding firms incorporated outside the U.S., financial services firms, insurance companies, and firms with no foreign activity in the previous three years. ΔPayout is the sum of ΔShrRep and ΔDividends. ΔShrRep is the change from quarter t-4 to quarter t in the repurchase amount from the statement of cash flows (data 93) less decreases in preferred stock (change in data55 and data71) scaled by total assets (data44), and ΔDividends is the change from quarter t-4 to quarter t in dividends per share times total shares outstanding as reported by Compustat (data16 * data61)) scaled by total assets (data44). PostAct equals 1 if the year equals 2005, and 0 otherwise. DMDvsETI equals the firm-specific difference between estimated 2005 DMD and ETI benefits scaled by annual sales. Size is the log of the market value of equity (price (data14) times common shares outstanding (data61)). ΔCapEx is the change in the ratio of capital expenditures (data90) to average total assets (data44) from the beginning of quarter t-4 to the beginning of quarter t. ROE is net income (data69*4) scaled by equity (data59). Debt is the ratio of long-term debt (data51) plus the debt included in current liabilities (data45) to total assets (data44). Dividend yield is dividends per share (data16) scaled by price (data14). ΔCash is the change in the ratio of cash and cash equivalents (data36) to total assets (data44) from the beginning of quarter t-4 to the beginning of quarter t. Qtr1, Qtr2, and Qtr3 are quarterly dummy variables that equal 1 if the observation is in the first, second, or third quarters respectively. T-statistics are calculated using the Newey-West procedure to correct for heteroskedasticity and serial correlation. All reported *p*-values for variables with directional predictions are based on one-tailed t-statistics.

$$\Delta Payout_{i,t} = \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 Size_{i,t} + \beta_3 \Delta CapEx_{i,t-1} + \beta_4 ROE_{i,t-1} + \beta_5 Debt_{i,t-1} + \beta_6 DivYield_{i,t-1} + \beta_7 \Delta Cash_{i,t-1} + \beta_8 \Delta Payout_{i,t-4} + \beta_9 IndustryDum_{i,k} + \theta_q Qtr_{i,q} + \varepsilon_{i,t}$$

Panel A: Effect of Repatriation on Change in Payout with Repatriating Firms Only

Variable		(1) Δ Payout		(2) Δ Share Repurchases		(3) Δ Dividends	
	Pred.	Coeff.	*p*-value	Coeff.	*p*-value	Coeff.	*p*-value
Intercept	?	0.0096	(0.1510)	0.0105	(0.4420)	0.0035	(0.0090)
$PostAct_t$	+	**0.0086**	**(0.0115)**	**0.0085**	**(0.0130)**	**0.0000**	**(0.4545)**
$Size_{t-1}$	+	0.0011	(0.0555)	0.0009	(0.1095)	0.0003	(0.0080)
$\Delta CapEx_{t-1}$	-	-0.0346	(0.0835)	-0.0348	(0.0780)	0.0000	(0.4915)
ROE_{t-1}	?	0.0000	(0.8630)	0.0000	(0.6520)	0.0000	(0.3460)
$Debt_{t-1}$	-	-0.0435	(0.0265)	-0.0325	(0.0670)	-0.0109	(0.0435)
$DivYield_{t-1}$	?/-	-0.2819	(0.1710)	-0.2363	(0.2340)	-0.0501	(0.3690)
$\Delta Cash_{t-1}$	+	-0.0010	(0.4795)	-0.0002	(0.4960)	0.0006	(0.3595)
$\Delta Payout_{t-4}$	-	-0.4470	(0.0000)				
$\Delta ShrRep_{t-4}$	-			-0.4448	(0.0000)		
$\Delta TotDiv_{t-4}$	-					-0.4750	(0.1185)
Quarter Dummies		Yes		Yes		Yes	
Industry Dummies		Yes		Yes		Yes	
N		5517		5546		5821	
Adj. R Square		.2146		.2048		.3578	

Table 3 (continued)

Multivariate Tests of the Effect of Repatriation and DMD vs. ETI Classification on Payout Behavior

$$\Delta Payout_{i,t} = \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 DMDvsETI_{i,t} + \beta_3 PostAct*DMDvsETI_{i,t} + \beta_4 Size_{i,t} + \beta_5 \Delta CapEx_{i,t-1} + \beta_6 ROE_{i,t-1} + \beta_7 Debt_{i,t-1} + \beta_8 DivYield_{i,t-1} + \beta_9 \Delta Cash_{i,t-1} + \beta_{10} \Delta Payout_{i,t-4} + \beta_{11} IndustryDum_{i,k} + \theta_q Qtr_{i,q} + \varepsilon_{i,t}$$

Panel B: Effect of DMDvsETI on Change in Payout with Repatriating Firms Only

		(1)		(2)		(3)	
Variable		Δ Payout		Δ Share Repurchases		Δ Dividends	
	Pred.	Coefficient	*p*-value	Coefficient	*p*-value	Coefficient	*p*-value
Intercept	?	0.0109	(0.2380)	0.0015	(0.8850)	0.0017	(0.0000)
$PostAct_t$	?	0.0011	(0.8030)	0.0010	(0.8350)	0.0002	(0.2330)
$DMDvsETI_t$	?	0.4581	(0.1990)	0.3519	(0.3280)	0.0804	(0.0000)
$PostAct*DMDvsETI_t$	**-**	**-3.9716**	**(0.0035)**	**-3.8993**	**(0.0035)**	**-0.0518**	**(0.0980)**
$Size_{t-1}$	+	0.0011	(0.0410)	0.0011	(0.0290)	-0.0001	(0.0025)
$\Delta CapEx_{t-1}$	-	-0.0831	(0.0765)	-0.0850	(0.0685)	0.0015	(0.1855)
ROE_{t-1}	?	0.0003	(0.4620)	0.0003	(0.4620)	0.0000	(0.7200)
$Debt_{t-1}$	-	-0.0302	(0.0730)	-0.0252	(0.1155)	-0.0041	(0.0000)
$DivYield_{t-1}$	?/-	-0.6689	(0.0450)	-0.5853	(0.0740)	-0.0751	(0.0160)
$\Delta Cash_{t-1}$	+	0.0119	(0.3000)	0.0105	(0.3215)	0.0011	(0.0670)
$\Delta Payout_{t-4}$	-	-0.4832	(0.0000)				
$\Delta ShrRep_{t-4}$	-			-0.4815	(0.0000)		
$\Delta TotDiv_{t-4}$	-					-0.2471	(0.1410)
Quarter Dummies		Yes		Yes		Yes	
Industry Dummies		Yes		Yes		Yes	
N		2342		2359		2473	
Adj. R Square		.2448		.2412		.1586	

Table 4
Multivariate Tests of the Effect of the DMD vs. ETI Classification on Payout Behavior

The sample includes firm-quarters from 1989 to 2005 with data available to calculate all regression variables, excluding firms incorporated outside the U.S., financial services firms, insurance companies, and firms with no foreign activity in the previous three years. ΔPayout is the sum of ΔShrRep and ΔDividends. ΔShrRep is the change from quarter t-4 to quarter t in the repurchase amount from the statement of cash flows (data 93) less decreases in preferred stock (change in data55 and data71) scaled by total assets (data44), and ΔDividends is the change from quarter t-4 to quarter t in dividends per share times total shares outstanding as reported by Compustat (data16 * data61)) scaled by total assets (data44). PostAct equals 1 if year equals 2005, and 0 otherwise. DMDvsETI equals the scaled difference between the firm's DMD and ETI benefits. Repat equals 1 if the firm repatriates under the 2004 Act, and 0 otherwise. Size is the log of the market value of equity (price (data14) times common shares outstanding (data61)). ΔCapEx is the change in the ratio of capital expenditures (data90) to average total assets (data44) from the beginning of quarter t-4 to the beginning of quarter t. ROE is net income (data69*4) scaled by equity (data59). Debt is the ratio of long-term debt (data51) plus the debt included in current liabilities (data45) to total assets (data44). Dividend yield is dividends per share (data16) scaled by price (data14). ΔCash is the change in the ratio of cash and cash equivalents (data36) to total assets (data44) from the beginning of quarter t-4 to the beginning of quarter t. Qtr1, Qtr2, and Qtr3 are quarterly dummy variables that equal 1 if the observation is in the first, second, or third quarters respectively. T-statistics are calculated using the Newey-West procedure to correct for heteroskedasticity and serial correlation. All reported *p*-values for variables with directional predictions are based on one-tailed t-statistics.

$$\Delta Payout_{i,t} = \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 Repat_{i,t} + \beta_3 PostAct*Repat_{i,t} + \beta_4 Size_{i,t} + \beta_5 \Delta CapEx_{i,t-1} + \beta_6 ROE_{i,t-1} + \beta_7 Debt_{i,t-1} + \beta_8 DivYield_{i,t-1} + \beta_9 \Delta Cash_{i,t-1} + \beta_{10} \Delta Payout_{i,t-4} + \beta_{11} IndustryDum_{i,k} + \theta_q Qtr_{i,q} + \varepsilon_{i,t}$$

Panel A: Effect of Repatriation on Change in Payout with Repatriating and Nonrepatriating Firms

Variable		(1) Δ Payout		(2) Δ Share Repurchases		(3) Δ Dividends	
	Pred.	Coeffic.	*p*-value	Coeffic.	*p*-value	Coeffic.	*p*-value
Intercept	?	0.0052	(0.0510)	0.0034	(0.1090)	0.0021	(0.1900)
$PostAct_t$	?	0.0010	(0.6410)	0.0011	(0.6220)	-0.0003	(0.5900)
$Repat_t$	?	-0.0002	(0.8960)	-0.0001	(0.9510)	-0.0001	(0.9230)
$PostAct*Repat_t$	+	**0.0081**	**(0.0315)**	**0.0078**	**(0.0355)**	**0.0005**	**(0.2550)**
$Size_{t-1}$	+	0.0010	(0.0000)	0.0009	(0.0000)	0.0001	(0.0180)
$\Delta CapEx_{t-1}$	-	0.0028	(0.3650)	0.0011	(0.4365)	0.0036	(0.1505)
ROE_{t-1}	?	0.0000	(0.6830)	0.0000	(0.3930)	0.0000	(0.2110)
$Debt_{t-1}$	-	-0.0239	(0.0005)	-0.0134	(0.0115)	-0.0107	(0.0020)
$DivYield_{t-1}$	?/-	-0.0118	(0.1400)	-0.0142	(0.1040)	0.0011	(0.6510)
$\Delta Cash_{t-1}$	+	0.0215	(0.0030)	0.0106	(0.0440)	0.0071	(0.0160)
$\Delta Payout_{t-4}$	-	-0.3528	(0.0000)				
$\Delta ShrRep_{t-4}$	-			-0.2501	(0.0005)		
$\Delta TotDiv_{t-4}$	-					-0.4449	(0.0035)
Quarter Dummies		Yes		Yes		Yes	
Industry Dummies		Yes		Yes		Yes	
N		20684		20854		22012	
Adj. R Square		.1720		.1195		.2256	

Table 4 (continued)
Multivariate Tests of the Effect of the DMD vs. ETI Classification on Payout Behavior

$$\Delta Payout_{i,t} = \beta_0 + \beta_1 PostAct_{i,t} + \beta_2 DMDvsETI_{i,t} + \beta_3 Repat_{i,t} + \beta_4 PostAct*DMDvsETI_{i,t} + \beta_5 PostAct*Repat_{i,t} + \beta_6 DMDvsETI*Repat_{i,t} + \beta_7 PostAct*DMDvsETI*Repat_{i,t} + \beta_8 Size_{i,t} + \beta_9 \Delta CapEx_{i,t-1} + \beta_{10} ROE_{i,t-1} + \beta_{11} Debt_{i,t-1} + \beta_{12} DivYield_{i,t-1} + \beta_{13} \Delta Cash_{i,t-1} + \beta_{14} \Delta Payout_{i,t-4} + \beta_{15} IndustryDum_{i,k} + \theta_q Qtr_{i,q} + \varepsilon_{i,t}$$

Panel B: Effect of DMDvsETI on Change in Payout with Repatriating and Nonrepatriating Firms

Variable		(1) Δ Payout		(2) Δ Share Repurchases		(3) Δ Dividends	
	Pred.	Coeff.	*p*-value	Coeff.	*p*-value	Coeff.	*p*-value
Intercept	?	-0.0037	(0.4210)	-0.0029	(0.5040)	-0.0004	(0.7920)
$PostAct_t$	?	0.0114	(0.0000)	0.0102	(0.0000)	0.0011	(0.3330)
$Repat_t$	?	-0.0011	(0.5030)	-0.0011	(0.4920)	-0.0001	(0.6780)
$DMDvsETI_t$	?	0.2330	(0.4940)	0.1770	(0.5950)	0.0468	(0.5670)
$PostAct*Repat_t$	?	-0.0095	(0.0570)	-0.0085	(0.0870)	-0.0011	(0.3980)
$PA*DMDvsETI_t$	?	-0.2001	(0.7490)	-0.1603	(0.7840)	0.0255	(0.8810)
$DMDvsETI*Repat_t$	?	0.0553	(0.8820)	0.0369	(0.9200)	0.0349	(0.5980)
$PA*DMDvsETI*Repat_t$	-	**-3.5774**	**(0.0110)**	**-3.5763**	**(0.0100)**	**-0.1233**	**(0.2615)**
$Size_{t-1}$	+	0.0008	(0.0070)	0.0008	(0.0055)	0.0000	(0.4210)
$\Delta CapEx_{t-1}$	-	-0.0333	(0.0060)	-0.0297	(0.0085)	-0.0028	(0.3000)
ROE_{t-1}	?	-0.0003	(0.6430)	-0.0003	(0.6810)	0.0000	(0.4730)
$Debt_{t-1}$	-	-0.0107	(0.0055)	-0.0102	(0.0060)	-0.0017	(0.0960)
$DivYield_{t-1}$	?/-	-0.0069	(0.3550)	-0.0092	(0.3670)	0.0025	(0.6430)
$\Delta Cash_{t-1}$	+	0.0203	(0.0175)	0.0146	(0.0465)	0.0041	(0.1790)
$\Delta Payout_{t-4}$	-	-0.3490	(0.0000)				
$\Delta ShrRep_{t-4}$	-			-0.3801	(0.0000)		
$\Delta TotDiv_{t-4}$	-					-0.4874	(0.0180)
Quarter Dummies		Yes		Yes		Yes	
Industry Dummies		Yes		Yes		Yes	
N		7819		7879		8197	
Adj. R Square		.1625		.1760		.2353	