

Internet Appendix for
“TAXES, CAPITAL STRUCTURE CHOICES, AND EQUITY VALUE”

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This internet appendix reports the tests and results discussed in Section VIII.F of the manuscript.

A1. Leverage and Earnings Growth in the Longer Term

In the tests reported in the manuscript we control for changes in leverage and earnings that occur in a given year, i.e., in the year of a tax reform. However, capital structure rebalancing could take longer. Also, a change in current earnings may inadequately reflect expected operating cash flow, due to changes in positive net present value opportunities following a reform.

We therefore conduct a robustness test by controlling for changes in borrowing (and changes in earnings) that occur in the year of and two years following a reform. The choice to look two years into the future is motivated by Fama and French’s (1998) argument that “two years is about as far ahead as the market can predict” (p. 823). Specifically, we include in our models (1) $dDEBT_{t+2}/A_{t-1}$, the difference between the level of interest-bearing debt at the end of year $t+2$ and the level of interest-bearing debt at the end of year $t-1$, all scaled by lagged total assets; and (2) dE_{t+2}/A_{t-1} , the change in EBIT from year $t-1$ to year $t+2$, divided by total assets as of the end of year $t-1$. Importantly, as the results in Regression (1) of Table A1 show, both the

magnitude and the statistical significance of the key regression coefficients are only marginally affected by making this change to the regression specification.¹

A2. Central Government Taxes

The corporate tax data used in the manuscript are a combination of central government tax rates and representative “sub-central” tax rates, such as local taxes. Sub-central tax rates may potentially change (in a non-random manner) as a result of weights of different regions (e.g., states) in the same country changing over time. To deal with this issue, in Regression (2) of Table A1 we consider changes in only the central government corporate tax rates. As the results show, the earlier conclusions remain unchanged.

A3. Alternative Definitions of the Dependent Variable

Another concern is that the scaling method employed may lead to some under- or overstatement of magnitudes. One possibility is that firms with higher leverage may have systematically higher book assets (relative to market value) than firms with lower leverage. This may cause changes in value for high-leverage firms to look smaller than the same changes in value for low-leverage firms. To gauge whether this issue is important, we run a specification that uses the lagged market value of assets instead of the lagged book value of assets as a scaling mechanism. Thus, in Regression (3) of Table A1 (where scaling is needed), we scale both the dependent variable and independent variables by lagged market assets (instead of lagged book assets). Our previous conclusions remain qualitatively unchanged.

Last but not least, we also verify the robustness of our results to an alternative measurement of the dependent variable, following Baker and Wurgler (2002). Specifically, in

¹ We do not include these controls in the main specification in the paper for two reasons. First, adding future realized changes in corporate choices to the control variables implicitly assumes that the market has perfect foresight. This assumption may not be warranted. Second, the inclusion of future realized capital structure changes introduces a survivorship bias.

Regression (4) of Table A1, the dependent variable is the annual change in the market value of equity (net of equity issuance), scaled by lagged book assets. Net equity issuance is defined as the change in book equity minus the change in balance sheet retained earnings. Our results are once again robust to this change.

Table A1: Other robustness tests

The dependent variable is $dVNI_t/A_{t-1}$, the annual change in the market value of equity, minus any change in the book value of equity (scaled by lagged book assets). All other variables are defined in Table 1. In Regression (1), $dDEBT_t/A_{t-1}$ is replaced by $(Debt_{t+2} - Debt_{t-1})/A_{t-1}$, the three-year change in debt scaled by lagged assets, and dE_t/A_{t-1} is replaced by $(E_{t+2} - E_{t-1})/A_{t-1}$, the three-year change in earnings scaled by lagged assets. In Regression (2), CORPORATE_TAX is the Central Government Corporate Tax Rate. In Regression (3), where scaling is needed, both the dependent and the independent variables are scaled by lagged market assets (instead of lagged book assets). In Regression (4), the dependent variable is the annual change in the market value of equity (net of equity issuance), scaled by lagged book assets. Net equity issuance is defined as the change in book equity minus the change in balance sheet retained earnings. We assume the change in balance sheet retained earnings to be zero when data are missing. All regression models include country-year fixed effects. The regression models also include the firm control variables and the interactions between each of the control variables and corporate and personal tax changes, although their coefficients are omitted for brevity. *T*-statistics are shown in the parentheses below the coefficient estimates. The *t*-statistics are based on standard errors adjusted for two-way clustering, i.e., at the country-year and at the firm level. Indicators ***, **, and * equal significance at the 1%, 5%, and 10% levels, respectively.

	Control for Future Earnings Change *Tax Changes	Central Government Corporate Tax Rate	Variables Are Scaled by Lagged <i>Market</i> Assets	Alternative Definition of Change in Value
	(1)	(2)	(3)	(4)
LEVERAGE _{t-1} *CORPORATE_TAX_CHANGE	7.739** (2.00)	8.187** (2.39)	2.423** (2.08)	6.425** (2.05)
LEVERAGE _{t-1} *INTEREST_TAX_CHANGE	-9.484** (-2.18)	-7.964* (-1.84)	-1.365** (-2.46)	-5.661** (-2.36)
LEVERAGE _{t-1} *DIVIDEND_TAX_CHANGE	3.302* (1.75)	3.496** (1.96)	2.428*** (4.01)	3.140** (2.00)
E _t /A _{t-1} *CORPORATE_TAX_CHANGE	-40.826** (-2.50)	-33.838*** (-3.08)	-12.942*** (-2.71)	-15.104 (-1.26)
Other controls (see Table 2)	Yes	Yes	Yes	Yes
Other interactions (see Table 2)	Yes	Yes	Yes	Yes
Country-Year Fixed Effects	Yes	Yes	Yes	Yes
Number of Observations	155,332	192,318	203,241	203,241
Adjusted R ²	0.084	0.079	0.146	0.144