INTERNET APPENDIX

FOR

FINANCING PAYOUTS

(NOT INTENDED FOR PUBLICATION)

Internet Appendix A. Variable Definitions.

Measuring financed payouts and payout gaps (all tables and figures)

Repurchases & special dividends (abbreviated as repurchases, or REP) is the sum of share repurchases (Compustat data item *prstkc*) and special dividends. We identify special dividends using CRSP, as those with distribution codes (CRSP data item *distcd*) equal to 1202, 1214, 1215, 1218, 1219, 1262, 1263, 1264, 1268, 1272, 1273, 1274, 1278, 1279, 1280, 1282, 1292, 1294, 1312, 1314, 1362, 1368, 1372, 1392, 1705, 1712, 1713, 1772, 1812, 1813, 1814, or 1872; in those rare instances where the sum of CRSP-reported special dividends is larger than cash dividends reported in Compustat (Compustat data item *dv*), we set special dividends equal to *dv*.

Regular dividends (abbreviated as dividends, or DIV) is cash dividends (Compustat data item dv) minus special dividends (defined above).

Total payout (abbreviated as TP) is the sum of repurchases & special dividends (defined above) and regular dividends (also defined above).

Net debt issues (abbreviated as ND) is long-term debt issues minus long-term debt reduction plus the change in current debt (Compustat data items dltis - dltr + dlcch).

Firm-initiated equity issues (abbreviated as FE) follows McKeon (2015). Using Compustat quarterly data on equity issues (Compustat data item *sstky*), we identify an equity issue as firm-initiated if the dollar value of equity raised during the quarter scaled by the firm's market value of equity (Compustat data items $prccq \times cshoq + pstkq$) is equal to or greater than 0.025.

Employee-initiated equity issues (abbreviated as EE) is defined as equity issues (Compustat data item *sstk*) minus firm-initiated equity issues (defined above).

Firm-initiated security issues (abbreviated as SI) is the sum of net debt issues (defined above) and firm-initiated security issues (also defined above).

Free cash flow (abbreviated as FCF) is operating cash flow (Compustat data items *oancf* + *exre* + *txbcof*) plus net investment cash flow (Compustat data item *ivncf*). Note that net investment cash flow is typically negative because capital expenditures and acquisitions are negative cash flows, but it can be positive if such negative flows are offset by asset sales. To ensure that all cash flows are accounted for, we add to our measure of free cash flow other financing activities (Compustat data item *fiao*).

Change in cash (abbreviated as CC) is the change in cash and cash equivalents (Compustat data item *chech*).

Cash reduction (abbreviated as CR) is -min{change in cash, 0}, where change in cash is defined above.

Variables in Tables 7, 8, 10, IA.2, IA.3, IA.4, and IA.5

Firm size (FIRM_SIZE) is the natural logarithm of real total assets (Compustat data item *at*, deflated to millions of 2012 U.S. dollars using the annual GDP deflator).

Investment-grade credit rating (INVESTMENT-GRADE_RATING) is an indicator equal to one if the firm has an investment-grade grade credit rating according to Standard & Poor's (i.e., a rating equal to BBB– or better), and zero otherwise. Credit rating data through February 2017 come from Compustat (Compustat data item *splticrm*); thereafter, the data come from Capital IQ.

Operating cash flow (OPERATING_CASH_FLOW) is defined as Compustat data items *oancf* + *exre* + *txbcof* scaled by total assets (Compustat data item *at*).

Market-to-book (MARKET-TO-BOOK) is defined as Compustat data items $(prcc_f \times csho + pstkl + dltt + dlc - txditc) / at$.

Low sales growth (LOW_SALES_GROWTH) is an indicator set equal to one if the firm's sales growth is in the lower tercile of the sales growth distribution. Sales growth in year *t* is defined as Compustat data items $(sale_t - sale_{t-1}) / sale_{t-1}$, where $sale_t$ is sale in year *t*.

Medium sales growth (MEDIUM_SALES_GROWTH) is an indicator set equal to one if the firm's sales growth is in the middle tercile of the sales growth distribution.

Leverage (LEVERAGE) is book leverage, defined as Compustat data items (dltt + dlc) / at.

Cash (CASH) is defined as Compustat data items che / at.

Tax cost of repatriating foreign earnings (TAX_COST_OF_REPATRIATING_EARNINGS or TAX_COST_OF_REPATRIATING for brevity) is the product of a firm's foreign pretax earnings (Compustat data item *pifo*) and the pre-TCJA U.S. statutory corporate tax rate of 35% (34% prior to 1993), minus the firm's income taxes payable to foreign governments (*txfo*). We scale the resulting difference (which we set to zero if negative and for firms with no foreign earnings) by the firm's total assets (*at*).

Industry is the firm's most recent industry according to Compustat (data item *sic*).

Variables in Table 9

ROA (ROA) is Compustat data items *oibdp / at*.

Firm size (FIRM_SIZE) is the natural logarithm of real total assets (Compustat data item *at*, deflated to 2012 U.S. dollars using the annual GDP deflator).

Tangibility (TANGIBILITY) is Compustat data items *ppent / at*.

Market-to-book (MARKET-TO-BOOK) is defined as Compustat data items ($prcc_f \times csho + pstkl + dltt + dlc - txditc$) / at.

Default spread (DEFAULT_SPREAD) is the difference in yields between Moody's seasoned Baa and Aaa bonds, both available monthly from FRED and measured in each firm's fiscal-year-end month. All spreads and growth rates are measured such that one percentage point is 0.01.

GSP growth rate (GSP_GROWTH_RATE) data come from the Bureau of Economic Analysis (https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1#reqid=70&step=1, Annual GDP by state). We calculate real GSP growth rates using the annual GDP deflator.

State unemployment rate (STATE_UNEMPLOYMENT_RATE) data come from the Bureau of Labor Statistics (https://www.bls.gov/data/#unemployment, Local Area Unemployment Statistics (LAUS)).

Industry is the firm's most recent industry according to Compustat (data item *sic*).

Variables in Tables 11, IA.6, and IA.7

3-day CAR (in percentage points) around payout announcement date is $100 \times ((1 + eret_{d-1}) \times (1 + eret_d) \times (1 + eret_{d+1}) - 1)$, where *d* is the payout announcement date, and *eret* equals CRSP data items *ret* – *vwretd*.

Repurchase last year? (REPURCHASE_LAST_YEAR?) is an indicator set equal to one if the firm conducted a share repurchase (defined as in Table 7) during the fiscal year immediately preceding the payout announcement.

Debt-financed repurchase last year? (DEBT–FINANCED_REPURCHASE_LAST_YEAR?) is an indicator set equal to one if the firm conducted a debt-financed share repurchase (defined as in Table 7) during the fiscal year immediately preceding the payout announcement.

Debt-financed dividend last year? (DEBT–FINANCED_DIVIDEND_LAST_YEAR?) is an indicator set equal to one if the firm conducted a debt-financed dividend (defined as in Table 7) during the fiscal year immediately preceding the payout announcement.

Fraction last 5 years with repurchases (FRACTION_LAST_5 YEARS_WITH_REPURCHASES) is the fraction of the five years immediately preceding the payout announcement when the firm conducted a share repurchase (defined as in Table 7). It equals 0 if the firm conducted no share repurchases during the prior five years; 0.2 if it conducted a share repurchase in only one of the prior five years; ...; and 1 if it conducted a share repurchase in all five of the prior five years.

Fraction last 5 years with dividends (FRACTION_LAST_5 YEARS_WITH_DIVIDENDS) is the fraction of the five years immediately preceding the payout announcement when the firm paid a dividend (defined as in Table 7).

Fraction last 5 years with debt-financed repurchases (FRACTION_LAST_5 YEARS_WITH_DEBT-FINANCED_REPURCHASES) is the fraction of the five years immediately preceding the payout announcement when the firm conducted debt-financed repurchases (defined as in Table 7). Note that, by construction, *Fraction last 5 years with debt-financed repurchases* \leq *Fraction last 5 years with repurchases*.

Fraction last 5 years with debt-financed dividends (FRACTION_LAST_5 YEARS_WITH_DEBT-FINANCED_DIVIDENDS) is the fraction of the five years immediately preceding the payout announcement when the firm conducted debt-financed dividends (defined as in Table 7). Note that, by construction, *Fraction last 5 years with debt-financed dividends* \leq *Fraction last 5 years with dividends*.

Log(size repurchase announced) (Log(SIZE_REPURCHASE_ANNOUNCED)) is the natural logarithm of the dollar amount of the share repurchase announcement, SDC Platinum data item *ValueofTransactionmil*, deflated to millions of 2012 U.S. dollars using the annual GDP deflator.

Log(|*size dividend change announced*|*)* (Log(|SIZE_DIVIDEND_CHANGE_ANNOUNCED|)) is the natural logarithm of the absolute value of the relative quarterly dividend change announced. The relative quarterly dividend change announced is $divamt_adj_q / divamt_adj_{q-1} - 1$, where q is the quarter when the announced (i.e., declared) dividend will be paid and $divamt_adj$ equals CRSP data items divamt / cfacpr. We focus on quarterly taxable cash dividends paid in U.S. dollars (i.e., dividends for which CRSP data item distcd equals 1232).

Industry information comes from CRSP. We use the firm's most recent industry according to CRSP (data item *siccd*). When not available or not consistently defined within *gvkey*, we use industry information from Compustat (data item *sic*).

All additional controls from Table 7 (firm size, an indicator for firms with an investment-grade rating, operating cash flow, market-to-book, leverage, cash, and sales growth tercile) are defined as in Table 7 (see above).

Variables that control for debt- and equity-market conditions in Table IA.2

Credit spread is the difference in yields between Moody's seasoned Baa bonds and ten-year Treasury notes, both available monthly from FRED.

Excess bond premium is the difference between a measure of the actual credit spread and the spread that would be predicted by a model that captures systematic movements in individual firms' default risk. The variable was introduced by Gilchrist and Zakrajsek (2012),¹ and it is available at https://www.federalreserve.gov/econresdata/notes/feds-notes/2016/recession-risk-and-the-excess-bond-premium-20160408.html.

Term spread is the difference in yields between ten-year Treasury bonds and three-month Treasury bills, both available monthly from FRED.

Term premium is the difference between the actual term spread and the predicted spread given investors' implied expectations of the future path of short-term Treasury yields. The variable was introduced by Adrian, Crump, and Moench (2013),² and it is available monthly at https://www.newyorkfed.org/research/data indicators/term premia.html.

Shiller earnings-price ratio (E10/P) is the inverse of the cyclically adjusted price-earnings ratio (P/E10 or CAPE), available monthly at Prof. Shiller's website (http://www.econ.yale.edu/~shiller/data.htm).

Output gap is measured as the difference between the natural logarithm of real (annualized) GDP and the natural logarithm of real (annualized) potential GDP, both available quarterly from FRED.

¹ Gilchrist, S., and E. Zakrajšek. "Credit spreads and business cycle fluctuations." *American Economic Review*, 102 (2012), 1692–1720.

² Adrian, T., R. K. Crump, and E. Moench. "Pricing the term structure with linear regressions." *Journal of Financial Economics*, 110 (2013), 110–138.

Internet Appendix B. Comparing the Effects on Leverage and Cash of Debt-Financed and Internally Funded Payouts.

This Appendix provides a simple algebraic proof of the following intuitive statement: When a firm conducts a debt-financed payout, the firm ends up with both higher leverage and higher cash than if it makes an internally funded payout of the same size, all else equal.

<u>*Proof.*</u> Consider a firm that has A dollars in total assets such that A = E + D, where E > 0 denotes the firm's equity and $D \ge 0$ denotes its debt. Let $C \le A$ denote the firm's cash holdings. Suppose that the firm decides to pay out P dollars to its shareholders, where $P \le C$ and P < E. The firm can fund its payout in two main ways:³

• Option A: The payout is debt-financed.

In this case, the firm raises *P* dollars of debt and pays them out. We then have:

- The firm's cash holdings remain unchanged at *C*; its total assets also remain unchanged at *A*.
- The firm's debt increases to D + P; its equity decreases to E P. Thus, the firm's leverage increases to (D + P) / A.
- Option B: The payout is internally funded.

In this case, the firm reduces it cash holdings by P dollars to fund its payout. We then have:

- The firm's cash holdings decrease to C P; its total assets decrease to A P.
- The firm's debt remains unchanged at D; its equity decreases to E P. Thus, the firm's leverage increases to D / (A P).

 $^{^{3}}$ A third option is for the firm to initiate an equity issue to finance its payout, which is uncommon (Table 2). Trivially, payouts financed via equity issues leave both a firm's leverage and its cash unchanged. Therefore, when a firm conducts a debt-financed payout, the firm ends up with higher leverage and the same cash level than if it makes an equity-financed payout of the same size.

The above description trivially shows that debt-financed payouts leave firms with higher cash (*C*) than internally funded payouts (C - P).

In order to see that debt-financed payouts also result in higher leverage, we need to show that (D + P) / A > D / (A - P). This can be done as follows:

$$\frac{D+P}{A} > \frac{D}{A-P} \iff \frac{D+P}{A} - \frac{D}{A-P} > 0$$

$$\frac{D+P}{A} - \frac{D}{A-P} = \frac{(D+P)(A-P) - DA}{A(A-P)} = \frac{PA - DP - P^2}{A(A-P)} = \frac{P(A-D-P)}{A(A-P)} = \frac{P(E-P)}{A(A-P)} > 0,$$

where the last inequality follows from the fact that $P \le E \le A$.

Figure IA.1. Did the Tax Cuts and Jobs Act of 2017 Decrease Firms' Reliance on Debt-Financed Payouts To Avoid Paying Repatriation Taxes? Analysis of Pre-Trends.

This figure presents evidence consistent with the parallel trends assumption necessary for a causal interpretation of the diff-in-diff estimates presented in Table 10. In Graph A, we estimate a probit model for debt-financed repurchases that differs from that presented in column 1 of Table 10 in only two aspects: (1) The sample period here covers 2010-2019 instead of 2016-2019, and (2) we interact the variable *Tax cost of repatriating earnings (lagged)* with a full set of year indicators. Then, for each year from 2010 through 2019, the figure plots the conditional marginal effects (evaluated at the means of the independent variables) associated with the coefficients on the interaction terms *Tax cost of repatriating earnings (lagged)* × *Year* as well as their 95% confidence intervals. Graph B presents an analogous figure for debt-financed dividends based on the probit model estimated in column 2 of Table 10. All variables are defined as in Table 10 and are described in Internet Appendix A.

Graph A. Debt-Financed Repurchases.



Graph B. Debt-Financed Dividends.



Figure IA.2. Repatriation Tax Costs and the Fraction of Repurchases That Are Debt-Financed.

The figure compares the annual fraction of aggregate share repurchases that are debt-financed by firms facing positive and zero repatriation tax costs from 2010 through 2019. Specifically, for each year, the solid black line plots the fraction of the aggregate dollar amount of share repurchases and special dividends paid by firms facing a positive tax cost of repatriating foreign earnings (defined and lagged as in Table 10) that are debt financed. Analogously, the dotted red line plots the fraction of the aggregate dollar amount of share repurchases and special dividends paid by firms facing a positive tax cost of repatriation tax cost that are debt financed. To ensure that all firms that we classify as facing a positive repatriation tax cost face a meaningful cost, we classify firms whose tax cost of repatriating foreign earnings is smaller than the first percentile of the positive repatriation tax cost distribution as facing zero repatriation tax cost.



Table IA.1. Financed Payouts: Breaking Down the Role of Debt and Equity. Full Table.

This table examines the type of security that firms issue when they simultaneously pay out and raise capital during the same fiscal year. Panel A focuses on net debt issues; Panel B examines firm-initiated equity issues (FE); and Panel C focuses on employee-initiated equity issues (EE). Columns 1-5 examine total payouts (TP); columns 6-9 focus on the sum of share repurchases and special dividends (REP); and columns 10-13 focus on regular dividends (DIV). Table 3 in the main body of the paper provides a condensed version of this table showing only annual figures averaged over all sample years to conserve space.

Panel A. Net Debt Issues (ND).

		Tot	tal payout (TP)		Repurchases & special dividends (REP)				Regular dividends (DIV)			
		Firm count	<u>s</u>	<u>\$ mag</u>	nitude <u>s</u>	<u>Firm c</u>	<u>counts</u>	<u>\$ mag</u>	nitude <u>s</u>	Firm c	<u>counts</u>	<u>\$ magnitudes</u>	
	% public firms	0/ TD	% firms	Rat aggrega min{ <i>TP</i>	tio of te sum of <i>y</i> , <i>ND</i> } to	% public	0/ 000	Ra aggrega min{ <i>REI</i>	tio of tte sum of P, <i>ND</i> } to	% public firms that		Rat aggrega min{ <i>DIV</i>	tio of te sum of 7, <i>ND</i> } to
Annual figures averaged	that pay out capital & issue ND	% <i>TP</i> payers that also issue <i>ND</i>	ND that also pay out capital	aggreg. sum of <i>TP</i>	aggreg. sum of <i>ND</i>	firms that pay reg. dividend & issue ND	% <i>REP</i> payers that also issue <i>ND</i>	aggreg. sum of <i>REP</i>	aggreg. sum of <i>ND</i>	or pay special div. & issue ND	% DIV firms that also issue ND	aggreg. sum of <i>DIV</i>	aggreg. sum of <i>ND</i>
over	1	2	3	4	5	6	7	8	9	10	11	12	13
1989-1994	17.9%	40.5%	48.5%	36.5%	37.9%	9.8%	39.7%	42.2%	14.7%	14.7%	42.3%	41.3%	28.6%
1995-1999	20.7%	46.2%	47.7%	35.6%	32.0%	14.5%	45.8%	39.5%	19.1%	14.2%	50.0%	45.3%	18.4%
2000-2004	14.6%	31.7%	48.6%	26.0%	29.7%	10.6%	31.2%	25.2%	16.7%	9.1%	35.1%	37.4%	18.3%
2005-2009	17.1%	32.7%	55.9%	23.4%	46.9%	13.2%	32.6%	26.0%	34.3%	11.3%	36.4%	35.7%	24.3%
2010-2014	22.1%	36.4%	65.7%	25.6%	51.7%	17.9%	36.4%	33.4%	42.4%	14.1%	39.2%	38.2%	28.5%
2015-2019	25.4%	38.9%	71.6%	28.2%	48.4%	22.5%	39.2%	34.6%	35.7%	15.1%	41.7%	40.0%	27.0%
all years	19.4%	37.9%	55.5%	29.7%	40.8%	14.3%	37.6%	34.0%	26.6%	13.1%	40.9%	40.0%	24.3%

		Tot	al payout (TP)		Repurchases & special dividends (REP)				Regular dividends (DIV)			
		Firm count.	<u>s</u>	<u>\$ mag</u>	nitude <u>s</u>	<u>Firm c</u>	<i><u>Firm counts</u> § magnitudes</i>			Firm c	<u>counts</u>	<u>\$ magnitudes</u>	
	% public firms	0/ <i>T</i> D	% firms	Ra aggrega min{ <i>TF</i>	tio of te sum of <i>P</i> , <i>FE</i> } to	% public	0/ 000	Ra aggrega min{ <i>RE</i>	tio of te sum of P, <i>FE</i> } to	% public firms that	0/ D.W	Rat aggrega min {DI	tio of tte sum of <i>V</i> , <i>FE</i> } to
Annual figures averaged	out capital & issue FE	% <i>IP</i> payers that also issue <i>FE</i>	<i>FE</i> that also pay out capital	aggreg. sum of <i>TP</i>	aggreg. sum of <i>FE</i>	a firms that pay reg. dividend & issue FE	% REP payers that also issue FE	aggreg. sum of <i>REP</i>	aggreg. sum of <i>FE</i>	or pay special div. & issue FE	% DIV firms that also issue FE	aggreg. sum of <i>DIV</i>	aggreg. sum of <i>FE</i>
over	1	2	3	4	5	6	7	8	9	10	11	12	13
1989-1994	4.6%	10.4%	28.3%	7.5%	31.7%	2.2%	9.3%	8.0%	14.2%	3.5%	10.0%	8.3%	22.0%
1995-1999	4.4%	9.8%	24.6%	2.1%	11.3%	2.6%	8.3%	2.8%	8.0%	2.6%	9.3%	2.1%	5.0%
2000-2004	3.9%	8.6%	24.0%	3.4%	17.2%	2.5%	7.3%	3.4%	10.3%	2.1%	8.1%	3.8%	8.2%
2005-2009	3.1%	6.0%	24.1%	1.4%	16.3%	1.7%	4.3%	0.7%	5.9%	1.9%	6.3%	2.8%	10.6%
2010-2014	3.1%	5.1%	23.6%	0.7%	12.6%	2.0%	4.1%	0.6%	7.8%	1.7%	4.8%	1.0%	7.6%
2015-2019	4.9%	7.4%	26.2%	0.9%	12.0%	4.0%	6.9%	0.8%	6.4%	1.7%	4.8%	1.4%	7.6%
all years	4.0%	8.0%	25.2%	2.9%	17.3%	2.4%	6.8%	3.0%	8.9%	2.3%	7.4%	3.4%	10.4%

Panel B. Firm-Initiated Equity Issues (FE).

		Tot	al payout ((TP)		Repurchases & special dividends (REP)				Regular dividends (DIV)			
		Firm count	<u>s</u>	<u>\$ mag</u>	nitudes	<u>Firm c</u>	<i><u>Firm counts</u> § magnitudes</i>			<u>Firm counts</u>		<u>\$ magnitudes</u>	
	% public firms	0/ TD	% firms	Ra aggrega min{ <i>TF</i>	tio of tte sum of <i>P</i> , <i>EE</i> } to	% public	0/ DED	Ra aggrega min{ <i>RE</i>	tio of tte sum of P, EE} to	% public firms that	9/ DIV	Ra aggrega min { <i>DI</i>	tio of tte sum of <i>V</i> , <i>EE</i> } to
Annual figures averaged	out capital & issue EE	% <i>IP</i> payers that also issue <i>EE</i>	<i>EE</i> that also pay out capital	aggreg. sum of <i>TP</i>	aggreg. sum of <i>EE</i>	dividend & issue EE	% <i>REP</i> payers that also issue <i>EE</i>	aggreg. sum of <i>REP</i>	aggreg. sum of <i>EE</i>	or pay special div. & issue EE	% DIV firms that also issue EE	aggreg. sum of <i>DIV</i>	aggreg. sum of <i>EE</i>
over	1	2	3	4	5	6	7	8	9	10	11	12	13
1989-1994	23.3%	52.9%	53.8%	9.6%	82.6%	13.5%	56.2%	15.9%	45.9%	18.7%	54.2%	12.6%	72.9%
1995-1999	29.0%	64.7%	48.3%	11.4%	73.8%	21.4%	67.5%	16.1%	55.7%	18.1%	63.9%	17.8%	53.2%
2000-2004	34.6%	75.5%	49.0%	13.5%	70.9%	26.5%	78.9%	18.5%	55.5%	19.0%	72.8%	20.6%	45.5%
2005-2009	41.6%	79.9%	56.8%	10.6%	85.8%	33.5%	84.0%	14.5%	77.6%	23.9%	77.1%	22.5%	56.7%
2010-2014	44.9%	74.4%	65.5%	9.4%	89.3%	37.6%	77.5%	13.7%	81.4%	25.9%	72.6%	19.2%	69.5%
2015-2019	41.6%	63.5%	69.9%	4.5%	85.7%	37.8%	65.8%	6.9%	78.9%	21.8%	60.3%	9.4%	69.6%
all years	35.3%	68.3%	56.6%	10.0%	81.4%	27.6%	71.5%	14.6%	64.8%	21.3%	66.9%	17.2%	61.6%

Panel C. Employee-Initiated Equity Issues (EE).

Table IA.2. Characteristics of Firms That Finance Their Payouts With Debt: Including Controls for Debt- and Equity-Market Conditions.

This table examines the characteristics of firms with debt-financed and internally funded payouts. Panels A and B are analogous to columns 1-2 and 3-4 of Table 7, respectively, with the only difference that here we follow Ma (2019) and include controls for debt- and equity-market conditions. These macroeconomic controls are incompatible with the inclusion of year fixed effects; instead, we add a linear time trend. All independent variables are defined in Internet Appendix A. In all columns, we estimate probit models with industry (three-digit SIC) fixed effects. For ease of interpretation, we report conditional marginal effects evaluated at the means of the independent variables. Robust standard errors clustered at the firm level are shown in italics beneath the coefficient estimates. ***, **, and * denote significance at the 1%, 5%, and 10% level (two-sided), respectively.

Dependent variable:	Debt-fii repurc	nanced hase?	Internally repurc	y funded hase?
	1	2	3	4
Firm size (end of prior year)	0.030***	0.030***	0.037***	0.037***
	0.001	0.001	0.002	0.002
Investment-grade rating (end of prior year)	0.031***	0.031***	-0.024***	-0.024***
	0.005	0.005	0.007	0.007
Operating cash flow (lagged)	0.167^{***}	0.167^{***}	0.490^{***}	0.491***
	0.014	0.014	0.019	0.019
Market-to-book (end of prior year)	0.006^{***}	0.006^{***}	-0.008***	-0.008***
	0.001	0.001	0.002	0.002
Low sales growth (lagged)	-0.011***	-0.010***	0.049^{***}	0.048^{***}
	0.003	0.003	0.004	0.004
Medium sales growth (lagged)	0.019^{***}	0.019^{***}	0.053***	0.054^{***}
	0.003	0.003	0.004	0.004
Leverage (end of prior year)	-0.088***	-0.088***	-0.179***	-0.180***
	0.008	0.008	0.012	0.012
Cash (end of prior year)	-0.235***	-0.235***	0.289^{***}	0.290^{***}
	0.012	0.012	0.013	0.013
Controls for debt- and equity-market conditions				
Credit spread (end of prior year)	-2.483***		0.758^{***}	
	0.169		0.213	
Credit premium (end of prior year)		-2.528***		1.391***
		0.166		0.205
Term spread (end of prior year)	-0.809***		-0.734***	
	0.125		0.170	
Term premium (end of prior year)		-1.843***		-0.391
		0.192		0.259
Shiller earnings-price ratio (E10/P, end of	0.222	0.637***	0.416^{*}	0.377
prior year)	0.164	0.166	0.227	0.232
Output gap (end of prior year)	0.388***	0.722^{***}	0.868^{***}	1.016^{***}
	0.125	0.116	0.162	0.151
Linear time trend	0.0030***	0.0008^{***}	0.0054***	0.0054***
	0.0002	0.0003	0.0003	0.0004
No. observations	94,369	94,369	94,374	94,374
No. firms	10,067	10,067	10,074	10,074
% observations with dependent var. = 1	14.9%	14.9%	24.3%	24.3%

Panel A. Share Repurchases and Special Dividends.

Dependent variable:	Debt-fi divid	nanced lend?	Internall divid	y funded end?
	1	2	3	4
Firm size (end of prior year)	0.029***	0.029***	0.033***	0.033***
	0.001	0.001	0.002	0.002
Investment-grade rating (end of prior year)	0.049***	0.048^{***}	0.040^{***}	0.040^{***}
	0.006	0.006	0.009	0.009
Operating cash flow (lagged)	0.101***	0.102^{***}	0.319***	0.318***
	0.014	0.014	0.024	0.024
Market-to-book (end of prior year)	0.007^{***}	0.008^{***}	0.002	0.002
	0.001	0.001	0.002	0.002
Low sales growth (lagged)	0.004	0.005^{*}	0.066^{***}	0.066^{***}
	0.003	0.003	0.004	0.004
Medium sales growth (lagged)	0.026^{***}	0.027^{***}	0.061^{***}	0.062^{***}
	0.003	0.003	0.004	0.004
Leverage (end of prior year)	-0.092***	-0.091***	-0.160***	-0.160***
	0.008	0.008	0.014	0.014
Cash (end of prior year)	-0.268***	-0.269***	0.020	0.020
	0.013	0.013	0.017	0.017
Controls for debt- and equity-market condition	5			
Credit spread (end of prior year)	-2.787***		-0.708***	
	0.154		0.189	
Credit premium (end of prior year)		-2.698***		-0.287
		0.152		0.177
Term spread (end of prior year)	-0.340***		0.373***	
	0.104		0.141	
Term premium (end of prior year)		-1.605***		0.283
		0.165		0.224
Shiller earnings price ratio (E10/P, end of	0.925***	1.200***	2.282***	2.179***
prior year)	0.135	0.137	0.193	0.198
Output gap (end of prior year)	-0.031	0.115	0.264**	0.249**
	0.100	0.094	0.131	0.125
Linear time trend	-0.0004*	-0.0025***	0.0004	0.0003
	0.0002	0.0003	0.0003	0.0004
No. observations	94,176	94,176	94,198	94,198
No. firms	10,050	10,050	10,046	10,046
% observations with dependent var. = 1	14.2%	14.2%	20.0%	20.0%

Panel B. Regular Dividends.

Table IA.3. Characteristics of Firms That Finance Their Payouts With Equity.

This table examines the characteristics of firms that finance their payouts via firm-initiated equity issues. The table is analogous to Table 7, but the focus here is on equity-financed payouts instead of debt-financed payouts. In column 1, we estimate a probit model within the full sample of public firms where the dependent variable is an indicator set equal to one if the firm conducts an equity-financed repurchase (i.e., if min{*Rep*_{it}, *Firm-initiated equity issues*_{it}} > \$100,000, where *Rep* denotes the sum of share repurchases and special dividends). Column 2 reports the results of an analogous probit model for equity-financed regular dividends. All independent variables are defined in Internet Appendix A, and they are lagged (thus, for stock variables such as size, they are measured as of the end of the prior fiscal year or, equivalently, as of the beginning of the current one). All columns include industry (three-digit SIC) and year fixed effects. For ease of interpretation, we report conditional marginal effects evaluated at the means of the independent variables. Robust standard errors clustered at the firm level are shown in italics beneath the coefficient estimates. ***, **, and * denote significance at the 1%, 5%, and 10% level (two-sided), respectively.

Dependent variable:	Equity- financed repurchase?	Equity- financed dividend?
	1	2
Firm size (end of prior year)	0.002***	0.002***
	0.000	0.000
Investment-grade rating (end of prior year)	-0.007***	-0.002
	0.002	0.002
Operating cash flow (lagged)	-0.021***	-0.027***
	0.003	0.003
Market-to-book (end of prior year)	0.001^{**}	0.001^{*}
	0.000	0.000
Low sales growth (lagged)	-0.008***	-0.006***
	0.001	0.001
Medium sales growth (lagged)	-0.008***	-0.006***
	0.001	0.001
Leverage (end of prior year)	0.012***	0.020^{***}
	0.002	0.002
Cash (end of prior year)	-0.003	-0.021***
	0.003	0.004
No. observations	91,791	92,189
No. firms	9,808	9,831
% observations with dependent variable = 1	2.4%	2.4%

Table IA.4. How Much of the Cross-Sectional Variation in Firms' Tendency To Finance Their Payouts Is Explained by Industry Fixed Effects?

This table examines how much of the cross-sectional variation in firms' tendency to finance their payouts is explained by industry fixed effects. To do so, we re-estimate equation (4) with and without 3-digit SIC (SIC-3) industry fixed effects using linear probability models, and we examine how much the R^2 increases with the addition of the fixed effects. Thus, the R^2 's reported in columns 1 through 4 correspond to estimating the exact same equations estimated in columns 1 through 4 of Table 7, respectively, with only two differences: (1) Here we estimate linear probability models instead of probit models, and (2) here we estimate both models with and without 3-digit SIC industry fixed effects whereas in Table 7 all models include industry fixed effects.

Dependent variable:	Debt- financed repurchase?	Internally funded repurchase?	Debt- financed dividend?	Internally funded dividend?
	1	2	3	4
R^2 with SIC-3 fixed effects	12.9%	12.0%	17.9%	14.4%
R^2 without SIC-3 fixed effects	11.6%	10.3%	15.1%	9.7%
% increase in R^2 from SIC-3 fixed effects	11.7%	16.0%	18.5%	48.5%

Table IA.5. Did the Tax Cuts and Jobs Act of 2017 Decrease Firms' Use of Debt-Financed Payouts To Avoid Paying Repatriation Taxes? Full Table.

This table uses a diff-in-diff approach to examine whether the Tax Cuts and Jobs Act of 2017 (TCJA) decreased firms' reliance on debt-financed payouts as a tool to avoid paying repatriation taxes. The table is identical to Table 10, with the only difference being that this table reports those control variables that we do not report in Table 10 to conserve space. In columns 1 and 3, the dependent variable is an indicator set equal to one for firms that conduct a debt-financed repurchase or special dividend (defined as in column 1 of Table 7); in columns 2 and 4, the dependent variable is an indicator that identifies firms with an internally funded repurchase or special dividend (defined as in column 2 of Table 7). In columns 1 and 2, the sample focuses on a four-year window around 2018 (the year the TCJA became effective), with the *Post TJCA* indicator set equal to one for years 2018-2019, and to zero for years 2016-2017. Columns 3 and 4 report an analogous placebo analysis over the 2014-2017 window, with the *Post 2015* indicator set equal to one for years 2016-2017, and to zero for years 2014-2015. Columns 5-8 present analogous results for regular dividends, with debt-financed and internally funded regular dividends defined as in columns 3 and 4 of Table 7, respectively. All independent variables are described in Internet Appendix A. In all columns, we estimate probit models with industry (three-digit SIC) and year fixed effects (the year fixed effects subsume the non-interacted *Post TCJA* and *Post 2015* indicators). For ease of interpretation, we report conditional marginal effects evaluated at the means of the independent variables. Robust standard errors clustered at the firm level are shown in italics beneath the coefficient estimates. ***, ***, and * denote significance at the 1%, 5%, and 10% level (two-sided), respectively.

Dependent variable:	Debt- financed	Internally funded	Debt- financed	Internally funded	Debt- financed	Internally funded	Debt- financed	Internally funded
	repur	chase?	repur	chase?	divid	lend?	divid	end?
Sample period:	2016	- 2019	2014 - 201	7 (placebo)	2016	- 2019	2014 - 201	7 (placebo)
	1	2	3	4	5	6	7	8
Tax cost of repatriating earnings (lagged)	5.458***	-5.056***	5.460***	-3.486**	3.386***	-3.325***	3.779***	-2.054*
	1.009	1.380	0.905	1.420	0.636	1.179	0.663	1.098
Tax cost of repatriating × Post TCJA	-4.302***	4.802***			-2.692***	3.033***		
	1.119	1.545			0.721	1.087		
Tax cost of repatriating × Post 2015			-0.436	-1.855			0.424	-0.628
			1.136	1.606			0.742	1.078
Firm size (end of prior year)	0.039***	0.050^{***}	0.048^{***}	0.039***	0.022^{***}	0.024^{***}	0.031***	0.016^{***}
	0.004	0.005	0.004	0.005	0.003	0.004	0.003	0.004
Investment-grade rating (end of prior year)	0.032^{*}	-0.106***	0.043**	-0.068***	0.080^{***}	0.105^{***}	0.081^{***}	0.088^{***}
	0.019	0.022	0.018	0.021	0.018	0.023	0.018	0.022
Operating cash flow (lagged)	0.112^{***}	0.570^{***}	0.236***	0.553***	0.203^{***}	0.543***	0.213***	0.522^{***}
	0.040	0.063	0.058	0.065	0.052	0.083	0.053	0.079
Market-to-book (end of prior year)	0.022^{***}	-0.005	0.012^{***}	-0.008	0.011^{***}	-0.003	0.012^{***}	-0.008
	0.004	0.005	0.004	0.006	0.003	0.006	0.004	0.006
Low sales growth (lagged)	-0.003	0.030^{*}	0.018	0.048^{***}	0.029^{***}	0.053^{***}	0.049^{***}	0.080^{***}
	0.013	0.016	0.013	0.016	0.009	0.012	0.010	0.013
Medium sales growth (lagged)	0.022^{*}	0.041***	0.047^{***}	0.052^{***}	0.040^{***}	0.050^{***}	0.054^{***}	0.056^{***}
	0.013	0.016	0.013	0.016	0.009	0.012	0.010	0.012
Leverage (end of prior year)	-0.003	-0.163***	-0.036	-0.160***	-0.025	-0.148***	-0.050**	-0.133***
	0.028	0.038	0.029	0.036	0.021	0.033	0.023	0.035
Cash (end of prior year)	-0.357***	0.298^{***}	-0.369***	0.332***	-0.259***	0.037	-0.287***	0.047
	0.039	0.047	0.041	0.045	0.033	0.045	0.035	0.044
No. observations	8,568	8,644	8,781	8,833	8,360	8,569	8,635	8,781
No. firms	2,605	2,628	2,709	2,721	2,541	2,604	2,666	2,703
% observations with dependent var. = 1	24.4%	39.3%	24.7%	34.1%	16.7%	24.0%	18.6%	22.9%
χ^2 test: Tax cost repatriating + Tax cost repatriating × Post TCJA = 0 (<i>p</i> value)	0.183	0.835	0.000***	0.000***	0.206	0.730	0.000***	0.019**

Table IA.6. Characteristics of Firms That Finance Their Payouts With Debt: Controlling for the Tax Cost of Repatriating Earnings.

This table examines the characteristics of firms with debt-financed and internally funded payouts. The table is analogous to Table 7, with the only difference that here we include as a control the tax cost of repatriating earnings during the pre-TCJA tax regime. Specifically, the variable *Tax cost of repatriating earnings* is defined as in Table 10, except that here the *Tax cost of repatriating earnings* is set to zero for years 2018 and 2019, when the TCJA was in effect. All independent variables are defined in Internet Appendix A. In all columns, we estimate probit models with industry (three-digit SIC) and year fixed effects. For ease of interpretation, we report conditional marginal effects evaluated at the means of the independent variables. Robust standard errors clustered at the firm level are shown in italics beneath the coefficient estimates. ***, **, and * denote significance at the 1%, 5%, and 10% level (two-sided), respectively.

Dependent variable:	Debt-	Internally	Debt-	Internally
	financed	funded	financed	funded
	repurchase?	repurchase?	dividend?	dividend?
	1	2	3	4
Firm size (end of prior year)	0.029***	0.038***	0.028***	0.034***
Investment-grade rating (end of prior year)	0.029***	-0.024*** 0.007	0.007	0.002 0.040*** 0.009
Operating cash flow (lagged)	0.157 ^{***}	0.494 ^{***}	0.098 ^{***}	0.327 ^{***}
	0.014	0.019	0.014	0.024
Market-to-book (end of prior year)	0.005 ^{***}	-0.008 ^{***}	0.007 ^{***}	0.002
	0.001	0.002	0.001	0.002
Low sales growth (lagged)	-0.011***	0.045^{***}	0.004	0.066 ^{***}
	0.003	0.004	<i>0.003</i>	0.004
Medium sales growth (lagged)	0.019 ^{***}	0.053^{***}	0.026 ^{***}	0.060^{***}
	0.003	0.004	0.003	0.004
Leverage (end of prior year)	-0.096 ^{***}	-0.189***	-0.095***	-0.164 ^{***}
	0.008	0.012	0.008	0.014
Cash (end of prior year)	-0.236***	0.293 ^{***}	-0.269***	0.025
	0.012	0.013	0.013	0.017
Tax cost of repatriating earnings (lagged)	1.996***	-1.093***	1.352***	-2.011****
	0.255	0.408	0.224	0.506
No. observations	94,369	94,374	94,176	94,198
No. firms	10,067	10,074	10,050	10,046
% observations with dependent var. = 1	14.9%	24.3%	14.2%	20.0%

Table IA.7. Market Reaction to Payout Announcements: Does the Source of Payout Funding Matter? Full Table.

This table analyzes whether the market reaction to payout announcements depends on the source of payout financing. The table is identical to Table 11, with the only difference being that this table reports those control variables that we do not report in Table 11 to conserve space. The dependent variable in all columns is the three-day cumulative return over the value-weighted market return around the payout announcement date. Columns 1-2 examine share repurchase announcements, columns 3-4 focus on quarterly dividend increase announcements, and columns 5-6 examine quarterly dividend cut announcements. Data on share repurchase announcements come from SDC Platinum. In order to capture meaningful transactions, we focus on announcements where the value of repurchased shares is at least \$10 million. Data on dividend change announcements come from CRSP. We follow Michaely, Rossi, and Weber (2021) in screening dividend change announcements and in focusing on dividend increases and cuts in the (12.5%, 500%) and (-100%, -12.5%) ranges, respectively. By construction, all firms announcing a dividend change paid a dividend during the last year, and thus we omit the *Dividend last year*? indicator from columns 3-6. All columns include all the same controls as Table 7 (firm size, an indicator for firms with an investment-grade rating, operating cash flow, market-to-book, leverage, cash, and sales growth tercile), measured as of the end of the fiscal year immediately preceding the payout announcement year fixed effects. Robust standard errors clustered at both the firm and announcement quarter level are shown in italics beneath the coefficient estimates. ***, **, and * denote significance at the 1%, 5%, and 10% level (two-sided), respectively.

Dependent variable:	3-day CAR (in percentage points) around payout announcement date									
Sample:	Share rep announce	urchase ements	Dividend announc	increase ements	Divide	nd cut ements				
	1	2	3	4	5	6				
Repurchase last year?	-0.688*** 0.209									
Debt-financed repurchase last year?	-0.121 0.192									
Debt-financed dividend last year?			-0.139 <i>0.164</i>		-1.274 0.849					
Fraction last 5 years with repurchases		-0.147 0.357								
Fraction last 5 years with dividends				-0.213 0.319		7.519* <i>4.217</i>				
Fraction last 5 years with debt-financed repurchases		-0.863** 0.413								
Fraction last 5 years with debt-financed dividends				-0.712* 0.383		4.489** 2.147				
Log(size repurchase announced)	0.258*** 0.088	0.410 ^{***} 0.091								
Log(size dividend change announced)			0.679*** 0.135	0.738 ^{***} 0.151	-3.334*** 0.900	-4.163*** 1.075				

Firm size (end of prior year)	-0.419***	-0.542***	-0.245***	-0.205***	-0.074	-0.001
	0.113	0.107	0.071	0.074	0.321	0.394
Investment-grade rating (end of prior year)	-0.175	-0.169	0.137	0.194	2.857^{*}	2.486
	0.211	0.212	0.211	0.216	1.557	1.815
Operating cash flow (lagged)	-0.117	-2.295	0.238	1.963	-1.136	3.710
	1.412	1.439	1.545	1.701	7.279	7.996
Market-to-book (end of prior year)	-0.317***	-0.167**	-0.187**	-0.207**	-0.543	-0.702
	0.099	0.080	0.094	0.099	0.466	0.574
Low sales growth (lagged)	0.536**	0.416	-0.004	-0.103	-0.959	-0.354
	0.261	0.295	0.250	0.292	1.075	1.141
Medium sales growth (lagged)	0.395^{*}	0.255	0.116	0.069	1.001	1.647
	0.206	0.230	0.167	0.199	1.385	1.438
Leverage (end of prior year)	-0.041	0.232	0.752	1.143	2.066	-1.278
	0.544	0.632	0.645	0.694	2.584	3.813
Cash (end of prior year)	0.075	0.928	1.443**	1.487^{*}	4.486	9.014^{*}
	0.710	0.721	0.703	0.817	4.067	5.303
No. observations	9,931	7,482	4,977	4,013	693	511
No. firms	3,151	2,331	1,349	1,097	479	347
Mean of dependent variable	1.52%	1.52%	1.08%	1.00%	-3.06%	-2.91%

Table IA.8. Market Reaction to Payout Announcements: Does the Source of Payout Funding Matter? Without Additional Controls.

This table analyzes whether the market reaction to payout announcements depends on the source of payout financing. The table is identical to Table 11, with the only difference being that, unlike in Table 11, here we do *not* include the following controls from Table 7: an indicator for firms with an investment-grade rating, operating cash flow, market-to-book, leverage, cash, and sales growth tercile. The dependent variable in all columns is the three-day cumulative return over the value-weighted market return around the payout announcement date. Columns 1-2 examine share repurchase announcements, columns 3-4 focus on quarterly dividend increase announcements, and columns 5-6 examine quarterly dividend cut announcements. Data on share repurchase announcements come from SDC Platinum. In order to capture meaningful transactions, we focus on announcements where the value of repurchased shares is at least \$10 million. Data on dividend change announcements come from CRSP. We follow Michaely, Rossi, and Weber (2021) in screening dividend change announcements and in focusing on dividend increases and cuts in the (12.5%, 500%) and (-100%, -12.5%) ranges, respectively. By construction, all firms announcing a dividend change paid a dividend during the last year, and thus we omit the *Dividend last year*? indicator from columns 3-6. Firm size is measured as of the end of the fiscal year immediately preceding the payout announcement year fixed effects. Robust standard errors clustered at both the firm and announcement quarter level are shown in italics beneath the coefficient estimates. ****, ***, and * denote significance at the 1%, 5%, and 10% level (two-sided), respectively.

Dependent variable:	3-day	y CAR (in perce	entage points) a	round payout a	nnouncement d	late
	Share rep announc	urchase ements	Dividend announce	increase ements	Divider announc	nd cut ements
	1	2	3	4	5	6
Repurchase last year?	-0.598*** 0.201					
Debt-financed repurchase last year?	-0.165 0.183					
Debt-financed dividend last year?			-0.116		-1.160 0.894	
Fraction last 5 years with repurchases		-0.235 0.360	0.172		0.077	
Fraction last 5 years with dividends				-0.352		6.291 3.865
Fraction last 5 years with debt-financed repurchases		-0.758* 0.407		0.520		5.005
Fraction last 5 years with debt-financed dividends				-0.605** 0.299		3.653 2.262
Log(size repurchase announced)	0.073 0.075	0.266 ^{***} 0.082				
Log(size dividend change announced)			0.695 ^{***} 0.132	0.744 ^{***} 0.151	-3.445*** 0.878	-4.224*** 1.125

Firm size (end of prior year)	-0.246*** 0.090	-0.452*** 0.091	-0.219*** 0.052	-0.170*** 0.057	0.393* 0.202	0.253 0.246
No. observations	10,046	7,521	4,998	4,015	696	511
No. firms	3,190	2,338	1,351	1,097	479	347
Mean of dependent variable	1.51%	1.52%	1.08%	1.00%	-3.14%	-2.91%