Online appendix to "Compensation Shifting from Salary to Dividends"

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We present tables at the end of each appendix.

Content

Online Appendix A. Details Regarding Tax Rates and Tax Brackets

Table OA1 provides complete details on the following.

- Tax rates on labor income (columns 1 through 3), dividend income (columns 6 and 7), and corporate income (column 11).
- Tax brackets on labor income (columns 4 and 5) and dividend income (columns 9 and 10).
- Combined capital income tax rate on dividend and corporate income (columns 12 through 14).
- A comparison of income tax rates on labor income versus capital income (columns 15 through 20).

Column 20 presents the difference between the labor income tax rate and the capital income tax rate when labor income and dividend income are in the highest tax bracket. The differences are relatively small due to approximate tax neutrality.

Table OA1. Marginal tax rates over time, Denmark

	Labor income					Capital income										Comparison (Labor minus capital income)					
	Labor income tax rate					Dividend income tax rate					Corp. tax rate	Dividend and corporate tax rate				Lowest dividend bracket			Highest dividend bracket		
	Tax bracket			Thresholds		Tax bracket			Thresholds			Tax bracket				Labor tax bracket			Labor tax bracket		
	1	2	3	1→2	2→3	1	2	3	1→2	2→3		1	2	3		1	2	3	1	2	3
																Calculation columns			Calculation columns		
																1-12	2-12	3-12	1-13	2-13	3-13
																			(or –14 if available)		
	(%)	(%)	(%)	DKK '000	DKK '000	(%)	(%)	(%)	DKK '000	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)		(15)	(16)	(17)	(18)	(19)	(20)
2021	39.4		55.9		544.8	27.0	42.0		56.5		22.0	43.1	54.8			-3.7		12.8	-15.4		**1.1**
2020	39.5		55.9		531.0	27.0	42.0		55.3		22.0	43.1	54.8			-3.6		12.8	-15.3		**1.1**
2019	39.6		55.9		513.4	27.0	42.0		54.0		22.0	43.1	54.8			-3.5		12.8	-15.2		**1.1**
2018	39.6		55.9		498.9	27.0	42.0		52.9		22.0	43.1	54.8			-3.5		12.8	-15.2		**1.1**
2017	39.7		55.8		479.6	27.0	42.0		51.7		22.0	43.1	54.8			-3.4		12.7	-15.1		**1.0**
2016	39.7		55.8		467.3	27.0	42.0		50.6		22.0	43.1	54.8			-3.4		12.7	-15.1		**1.0**
2015	39.7		55.8		459.2	27.0	42.0		49.9		23.5	44.2	55.6			-4.5		11.6	-15.9		**0.2**
2014	39.5		55.6		449.1	27.0	42.0		49.2		24.5	44.9	56.2			-5.4		10.7	-16.7		**-0.6**
2013	39.7		55.6		421.0	27.0	42.0		48.3		25.0	45.3	56.5			-5.6		10.4	-16.8		**-0.9**
2012	40.2		55.4		389.9	27.0	42.0		48.3		25.0	45.3	56.5			-5.1		10.2	-16.3		**-1.1**
2011	40.2		55.4		389.9	28.0	42.0		48.3		25.0	46.0	56.5			-5.8		9.4	-16.3		**-1.1**
2010	40.2		55.4		389.9	28.0	42.0		48.3		25.0	46.0	56.5			-5.8		9.4	-16.3		**-1.1**
2009	41.4	56.6	62.1	347.2	347.2	28.0	43.0	45.0	48.3	106.1	25.0	46.0	57.3	58.8		-4.6	10.6	16.1	-15.9	-0.6	**3.4**
2008	41.9	48.7	62.3	279.8	335.8	28.0	43.0	45.0	46.7	102.6	25.0	46.0	57.3	58.8		-4.1	2.7	16.3	-15.4	-8.6	**3.6**
2007	42.2	48.5	62.3	272.6	327.2	28.0	43.0		45.5		25.0	46.0	57.3			-3.8	2.5	16.3	-15.1	-8.8	**5.1**
2006	42.2	48.6	62.3	265.5	318.7	28.0	43.0		44.3		28.0	48.2	59.0			-6.0	0.4	14.1	-16.8	-10.4	**3.3**
2005	42.2	48.6	62.3	259.5	311.5	28.0	43.0		43.3		28.0	48.2	59.0			-6.0	0.4	14.1	-16.8	-10.4	**3.3**
2004	42.2	48.5	62.3	254.0	304.8	28.0	43.0		42.4		30.0	49.6	60.1			-7.4	-1.1	12.7	-17.9	-11.6	**2.2**
2003	43.0	48.6	62.3	198.0	295.3	28.0	43.0		41.1		30.0	49.6	60.1			-6.6	-1.0	12.7	-17.1	-11.5	**2.2**
2002	43.0	48.5	62.3	191.2	285.2	28.0	43.0		39.7		30.0	49.6	60.1			-6.6	-1.1	12.7	-17.1	-11.6	**2.2**
2001	44.2	49.7	62.7	177.9	276.9	28.0	40.0		38.5		30.0	49.6	58.0			-5.4	0.1	13.1	-13.8	-8.3	**4.7**

This table shows the marginal tax rates and thresholds on labor income (excluding church tax) and capital income (consisting of dividend and corporate income).
Source: The Danish Customs and Tax Administration. Datasets are available at https://www.skm.dk/skattetal/satser/tidsserier/#/?page=1.

Online Appendix B. Interview Evidence

To explore the channel through which firms can obtain interest rate benefits, we interviewed four of the five systematically important Danish banks, which cover a large share of the Danish loan market. Table OA2 provides an overview of the interviews, including a general description of the interview setting and interviewees (Panel A), an interview guide (Panel B), and insights from interviews coded with NVIVO (Panel C).

From these interviews, we learn the following key points, mainly supporting our empirical findings in the manuscript. (1) Credit scoring models of banks "penalize" firms with negative income. (2) Banks are concerned about owner-managers squeezing dry the company by paying an abnormally high salary rather than owner-managers using salary strategically to influence reported earnings. (3) Salary and dividend levels are not of concern if the borrower firm's performance is good. (4) Most banks agree that compensation shifting could induce lower interest rates. (5) Banks rely on financial statements. Some banks extract financial statement information from central databases, and others manually enter the information based on publicly available reports. Both sources contain accounting information as reported. (6) Banks can and do adjust reported figures, typically on the balance sheet, and they typically look for changes in accounting standards or unexplained changes in working capital. (7) Banks collect private information, such as revenue and EBITDA data (which are not always publicly disclosed in the annual report), and soft information, such as assessments of management quality, market position, supply chain, customers, suppliers, and other general risks. However, none of the banks indicated that it consistently collected salary information. (8) Danish banks rely on internally developed credit scoring models rather than ratings provided by rating agencies, at least for small engagements.

Table OA2. Interview detail

Panel A: Interview information Because the interviewees reveal proprietary and business-sensitive information, all interviewees prefer to be anonymous. To avoid the identification of any specific bank, we aim to keep our descriptions and insights on a general level.	
Interview form	We conducted the interviews with a semi-structured approach, where we prepared an interview guide preceding the interviews but allowed the interviewees to speak freely. To avoid blurring the interviewees' answers, we introduced our overall aim – to understand lending decisions – and let the interviewees know that we were investigating earnings management in private firms. But, importantly, we did not reveal that we are specifically investigating owner-managers that shift their income from salary to dividends. During the interviews, we asked how lenders use salary and dividend information and how they treat different ownership structures. Ultimately, we revealed that we looked at compensation shifting and asked for their opinion.
Interviewers	We conducted two of the four interviews with two of the authors present and two interviews with only one of the authors present.
Interviewees	At one interview, four interviewees were present. At another interview, three interviewees were present. At a third interview, two interviewees were present. Finally, at a fourth interview, one interviewee was present. The interviewees covered a range of positions and tasks, including top management of rating (back office), management of business customers, financial analysts (back office), and lending officers (front office). The interviewees were responsible for loan exposures of DKK 250,000 – DKK 500 million (EUR 33,000 – EUR 67 million). We specifically asked about loans in the lower range.
Timing of interviews	One interview was conducted in the fall of 2018, and three were conducted during the summer of 2019.
Interview length	The interviews had a length of 45-60 minutes.
Site	Three interviews were conducted on-site (at the banks' headquarters), and one was conducted via telephone.

Panel B: Interview guide The following outlines the interview guide we used to guide our interviews. The interviews were conducted in Danish, and the interview guide is translated into English here.	
Introduction	We are investigating earnings management in private firms. We will tell you in the end what we are specifically examining.
General	• What are your roles? Size of loan engagements? • Please explain the lending process. What happens if I walk into your shop and want a loan for my company? • What happens when the loan is issued? How do you monitor your loans?
Hard information	• How important is the annual report (are the financial statements)? • How do you get data from the annual report? Who gathers the information and enters it into the system? • Do you adjust the reported figures? If so, how? Who makes adjustments? • Please mention the last three adjustments you made to the reported figures • How do you treat loss firms?
Soft information	• What information do you collect besides the annual report? What do you look for? • How much discretion do you grant the lending officer to deviate from the credit score? Why do lending officers deviate?
Corporate governance	• How does the board of directors influence the credit evaluation? • How does the ownership structure influence the credit evaluation? • Do you treat owner-managed firms in a special way? Any specific things you look after in this setting?
Risk compensation	• How do you compensate yourself for borrower firms' risk? • Interest rates? • Collateral? How much, what, when? Do you take collateral in firm managers' private assets (such as property)? • Debt covenants
Auditing	• Do you require borrowing firms to be audited? • How much does an audit matter?
Compensation shifting	• Do you care about the salary of the firm manager? • How do you interpret dividends? • We look at compensation shifting – could this have an effect?

Panel C. Insights from interviews From the interviews, we wrote notes and coded those notes with NVIVO. The following reveals the insights that we uncover from those interviews. To uphold the anonymity of the interviewee banks, the term "some banks" may refer to one or more banks.	
Lending process	The lending processing takes between 3 hours and 1.5 days, depending on the complexity and size of the company. Some banks extract financial statement information from centralized data providers, while others manually enter the information from publicly available annual reports. In those banks that manually enter the information, the lending officer (front office) typically does it herself/himself for small engagements, while it is the job of the financial analysts for large engagements. An internal credit rating model processes the information and produces a rating presented to the lending officer. Within certain size limits, the lending officer can change the credit rating. Above specific credit ratings, any deviation from the internal credit rating model must be approved centrally.
Monitoring over time	Some banks have annual meetings with all borrowing firms. Other banks use an automated model that predicts engagements selected for loan renegotiation/renewal. Finally, other banks discretionarily pick borrower firms for follow-ups. Loan covenants or non-legally binding trip wires are used in loan contracts, also for small private firms. However, banks differ in when covenants or other trip-wires are used. Some banks use such mechanisms for most of their business loans, whereas others use them for risky borrower firms. Loans can typically be called within a few months at the bank's discretion. The competition level is currently perceived as high, and it is possible that good customers automatically see their interest rates decrease. Because of the fierce competition, some banks find it difficult to increase the interest rate and therefore require more collateral instead.
Hard information vs. soft information and other private information.	All banks view financial statements as the central element in the lending decision. Banks assess that financial statements contribute about 70%-80% of the credit score. Some banks said they were moving away from a human factor and more towards hard information. Lending officers may be incentivized to increase the rating to issue more loans and obtain more compensation. Other banks

	note that the quality assessment of borrower firm management is becoming relatively more important. All banks include qualitative information in their credit scoring to some extent. Qualitative information includes management quality, market position, supply chain, customers, suppliers, and general risks. One interviewee mentioned that although much automation is ongoing in the lending market, business lending is still "craftsmanship." Banks frequently ask for periodic reports, such as quarterly or monthly. However, this typically applies to more significant engagements. Further, banks request revenue and EBITDA data (which are only sometimes disclosed in the financial reports because they are not legally mandatory). The banks' software systems automatically calculate cash flow statements from balance sheet numbers. Budgets are sometimes collected but do not seem to matter much in the credit decision.
Adjustments to reported numbers	Adjustments can vary significantly between industries. At several banks, we heard that they follow external guidelines in the lending decision, such as S&P or Moody's (we note that S&P and Moody's do not mention income shifting). Some banks use scenario analysis regarding credit rating. For example credit ratings are calculated with and without goodwill. Adjustments happen frequently on the balance sheet but only sometimes on performance measures. Lenders typically look for changes in accounting practices, and essentially all lenders mentioned that they look for unexplained changes in working capital accounts (closely related to accrual earnings management). Non-recurring expenses are typically excluded, but we see variation between banks on this practice. Further, banks look into and sometimes adjust for goodwill (or make sensitivity analyses as described above), work in progress, tax assets, and other debt.

	However, it was also pointed out that time and resources are limited, and the time spent adjusting numbers (and the lending decision in general) depends on the loan size. Notably, no interviewees mentioned the manager's salary – even when asked, "do you look for something particular when the owner and the manager is the same person?"
Loss firms	Loss firms are typically penalized by banks. Some banks in their credit rating model have "bins" of earnings – and one bin naturally starts at zero. Others have an indicator for "loss" in their credit rating model. Interviewees generally agree that getting a loan is "difficult" if net income is negative. One interviewee mentioned herself/himself that it is difficult for loss firms and firms with negative equity to get funding because the bank is legally required to hold more capital when lending to these firms. One interviewee mentioned that "a loss is a loss – the magnitude is not so important." Banks assess if the loss is non-recurring or persistent.
Compensation shifting	*Constituents of compensation shifting: Salary and dividends* When we asked about how banks view the salary of the borrowing firm's manager (we asked both in general and when the owner and the manager is the same person), the general concern was that the manager was squeeze-drying the firm (i.e., paying an abnormally high salary). However, no banks answered that they looked at changes in salary and their potential influence on reported net income. If the performance in the company looks good, salary is not a concern. When we asked about dividends, some banks mentioned that it is the standard that the bank must approve dividends before they can be paid out. However, not all banks had such a policy. As with the salary level, the attention dividends attract depends on the performance of the firm. Extraordinary dividends typically attract attention. *Compensation shifting*

	In the end, we revealed what we were investigating – income shifting from salary to dividends and lower interest rates. Three of four banks agreed that this could indeed induce interest rate benefits. One bank disagreed and argued that the bank would capture such accounting gimmicks and *qualitatively* adjust the numbers – although the bank did not consistently require salary data from borrowing firms (hence cannot consistently unravel compensation shifting).

Online Appendix C. Entropy-balancing

C.1 Salary and Dividend Increases and Decreases and the Propensity to Shift Compensation

Potential benchmark beaters could differ from non-potential beaters. Therefore we use entropy balancing (e.g., Hainmueller, 2012; McMullin & Schonberger, 2020) to match the covariates of potential beaters to non-potential beaters. The entropy-balanced control sample is balanced on three moments (mean, variance, and skewness) and a tolerance of 0.015. We balance the control variables of Eq. 1.

Table OA3 presents the results. Panel A presents descriptive statistics of matching variables. The covariates are well-balanced, exhibiting differences in means of about zero and no statistical differences based on *t*-tests. Panels B and C show the results of estimating Eq. 1 (cf. panels A and B of Table 3 reported in the manuscript) using the entropy-balanced sample. Any prior inferences remain unchanged.

C.2 Interest Rate Changes

We also use entropy-balancing to balance covariates of potential beaters who do not beat the benchmark to compensation-shifting benchmark beaters. That is, the control sample to compensation-shifting benchmark beaters comprises non-beaters who could beat but do not. This entropy-balanced control sample is balanced on three moments (mean, variance, and skewness) and a tolerance of 0.015. We balance the variables used in Eq. 2, excluding *negNI_ExcludingSalaryChange*, because all the observations report negative net income before salary changes (they are all potential beaters). In addition, we match the size of the owner-manager's salary the year before ($Salary/TA_{t-1}$) to match the capacity for decreasing salaries.

Panel A of Table OA4 presents the descriptive statistics of the sample of compensation-shifting benchmark beaters and the entropy-balanced control sample (potential beaters who do not beat the benchmark). The covariates are well-balanced. Panel B presents the results of estimating a changes regression using the matched samples. We use change estimations instead of levels with firm fixed effects because not all observations for each firm are included in the matched sample. Therefore estimations with firm fixed effects are infeasible. Any prior inferences remain unchanged. Column 3 includes controls in the regression. The results suggest that *CompShiftingBeater* is associated with a decrease in the interest rate of about 20 bps. The economic effect is slightly lower than reported in the main specification of 29 bps (Table 4 of the manuscript).

Table OA3. Entropy-balancing: Reporting incentives and compensation shifting

Panel A: Entropy-balanced sample statistics

	Treated (*PotentialBeater*=1) N=25,097		Weighted control sample (*PontialBeater*=0) N=129,868		Difference	
	Mean (1)	Std. Dev. (2)	Mean (3)	Std. Dev. (4)	Diff. (5)	*t*-value (6)
ΔNI_ExcludingSalary/TA $_{t}$	-0.060	0.126	-0.060	0.126	0.00	0.00
TL/TA $_{t-1}$	0.681	0.267	0.681	0.267	0.00	0.00
ΔGP/TA $_{t}$	-0.077	0.223	-0.077	0.223	0.00	0.00
Ln(TA) $_{t-1}$	8.139	0.830	8.139	0.830	0.00	0.00
Salary/TA $_{t-1}$	0.153	0.126	0.153	0.126	0.00	0.00
Cash/TA $_{t-1}$	0.115	0.168	0.115	0.168	0.00	0.00

Panel B: Salary and dividend changes (cf. Panel A of Table 3 of the manuscript)

N=154,965

Dependent variable:	Salary changes $\Delta Salary/TA_t$		Dividend changes $\Delta Dividends/TA_t$		
	(1)	(2)	(3)	(4)	(5)
$\Delta NI\_ExcludingSalary/TA_t$		0.0232***		0.2341***	0.2341***
		(9.13)		(20.76)	(20.76)
$PotentialBeater_t$ (H1)	-0.0138***	-0.0184***	-0.0022*	-0.0008	-0.0013
	(-11.79)	(-15.24)	(-1.97)	(-0.63)	(-0.93)
$PotentialBeater \times \Delta NI\_ExcludingSalary/TA_t$		-0.0168***		-0.1207***	-0.1213***
		(-5.05)		(-14.01)	(-13.93)
$SalaryBeater_t$ (H1)					0.0022*
					(1.82)
$negNI\_ExcludingSalary_t$		-0.0171***		0.0060**	0.0059**
		(-11.70)		(2.51)	(2.47)
$negNI\_ExcludingSalary_t \times \Delta NI\_ExcludingSalary/TA_t$		-0.0074		-0.1898***	-0.1899***
		(-1.50)		(-22.83)	(-22.88)
TL/TA_{t-1}		0.0096***		-0.0039	-0.0040
		(6.62)		(-0.59)	(-0.62)
$TL/TA_{t-1} \times TL/TA_{t-1}$		-0.0076***		0.0015	0.0015
		(-6.40)		(0.37)	(0.40)
$\Delta GP/TA_t$		0.0033**		0.0181***	0.0181***
		(2.79)		(7.23)	(7.20)
$Ln(TA)_{t-1}$		-0.0013***		-0.0015**	-0.0015**
		(-4.46)		(-2.75)	(-2.79)
$Salary/TA_{t-1}$		-0.0493***		0.0314***	0.0308***
		(-14.98)		(7.84)	(7.47)
$Cash/TA_{t-1}$		-0.0010		-0.0190***	-0.0191***
		(-0.79)		(-6.41)	(-6.44)
Industry-Year fixed effects	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.0534	0.1097	0.0165	0.1040	0.1041

Panel C: Salary and dividend decreases and increases and compensation shifting (cf. Panel B of Table 3 of the manuscript)

N=154,965

Dependent variable:	Salary				Dividends					Compensation shifting	
	Decrease *SalaryDecrease*		Increase *SalaryIncrease*		Decrease *DividendDecrease*		Increase *DividendIncrease*			*CompShifting*$_t$	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
$\Delta NI\_ExcludingSalary/TA_t$		-0.1530***		0.1722***		-0.7317***		0.4369***	0.4355***		0.0298
		(-6.29)		(6.69)		(-13.88)		(10.35)	(10.34)		(1.52)
PotentialBeater$_t$ (H1)	0.1570***	0.2029***	-0.1623***	-0.2168***	-0.0786***	-0.1684***	-0.1149***	-0.1860***	-0.2092***	0.0134***	0.0084**
	(16.70)	(39.73)	(-17.66)	(-23.87)	(-9.68)	(-14.83)	(-14.13)	(-34.93)	(-33.17)	(5.79)	(2.27)
PotentialBeater		0.2323***		-0.3679***		-0.3556***		-0.5570***	-0.5846***		-0.0316**
× $\Delta NI\_ExcludingSalary/TA_t$		(8.82)		(-11.55)		(-9.25)		(-12.08)	(-12.81)		(-2.32)
SalaryBeater$_t$ (H1)									0.0983***		
									(10.80)		
negNI_ExcludingSalary$_t$		0.2141***		-0.2020***		-0.2624***		-0.3177***	-0.3203***		-0.0368***
		(28.05)		(-14.36)		(-19.02)		(-36.69)	(-36.73)		(-6.10)
negNI_ExcludingSalary$_t$		0.1470***		-0.3307***		0.0807*		-0.4383***	-0.4420***		-0.0160
× $\Delta NI\_ExcludingSalary/TA_t$		(4.81)		(-8.25)		(1.78)		(-6.73)	(-6.80)		(-0.54)
TL/TA_{t-1}		-0.0276		0.0733***		1.2569***		0.6594***	0.6573***		0.1620***
		(-1.37)		(2.87)		(14.40)		(10.36)	(10.27)		(9.80)
$TL/TA_{t-1} \times TL/TA_{t-1}$		0.0297**		-0.0168		-1.2693***		-0.7148***	-0.7150***		-0.1848***
		(2.39)		(-1.00)		(-18.53)		(-14.48)	(-14.45)		(-13.48)
$\Delta GP/TA_t$		-0.0361***		0.0641***		-0.0494***		0.0279**	0.0251**		-0.0045
		(-3.57)		(6.49)		(-4.66)		(2.32)	(2.07)		(-0.67)
$Ln(TA)_{t-1}$		0.0043		-0.0279***		0.0888***		0.0862***	0.0850***		0.0230***
		(0.83)		(-4.85)		(27.19)		(26.56)	(25.44)		(11.20)
$Salary/TA_{t-1}$		0.2514***		-0.3485***		-0.0264		0.1775***	0.1516***		0.0718***
		(8.55)		(-9.50)		(-0.91)		(6.94)	(5.93)		(5.44)
$Cash/TA_{t-1}$		0.0189		-0.0180		0.1587***		0.1046***	0.1007***		0.0284***
		(1.52)		(-1.09)		(14.30)		(8.13)	(7.55)		(3.96)
Industry-Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo R^2	0.0409	0.0681	0.0373	0.0519	0.0287	0.1609	0.0267	0.0954	0.0979	0.0166	0.0387
AUROC	0.6277	0.6641	0.6101	0.6430	0.5884	0.7005	0.6116	0.7126	0.7128	0.5682	0.6148

This table uses entropy-balancing to balance covariates of potential beaters (*PotentialBeater*=1) with nonpotential beaters (*PotentialBeater*=0). Grey shading marks coefficients of interest. Panel A shows the descriptive statistics of the two balanced samples and their differences. Panels B and C show the results of estimating Eq. 1 using the balanced sample. The entropy-balanced sample is balanced on three moments (mean, variance, and skewness) and a tolerance of 0.015. The control sample comprises non-potential beaters. The covariates include the control variables of Eq. 1. *PotentialBeater* indicates that an owner-manager can decrease her or his salary and avoid reporting a loss and proxies for reporting incentives. All variables are defined in Appendix A of the manuscript. An intercept, as well as industry-year fixed effects, are estimated but, for brevity, not reported. The standard errors are clustered by firm and year in Panels B and C. Accounting ratios are winsorized at the lower and upper 1% level. *t* statistics are in parentheses. ***, **, * represent significance levels at 0.01, 0.05, and 0.10, respectively (two-tailed test).

Table OA4. Entropy-balancing: Benchmark beating and interest rates

Panel A: Entropy-balanced sample statistics

	Treated (*CompShiftingBeater*=1) N=649		Weighted control sample (*PontialBeater*=1 & *SalaryBeater*=0) N=13,038		Difference	
	Mean (1)	Std. Dev. (2)	Mean (3)	Std. Dev. (4)	Diff. (5)	*t*-value (6)
$NI\_ExcludingSalaryChanges/TA_t$	-0.018	0.029	-0.018	0.029	0.00	0.00
TL/TA_t	0.663	0.215	0.663	0.215	0.00	0.00
$Std(ROA)_t$	0.090	0.095	0.090	0.095	0.00	0.00
$ln\_InterestCoverage_t$	3.776	0.545	3.776	0.546	0.00	0.00
PPE/TA_t	0.292	0.265	0.292	0.265	0.00	0.00
$CASH/TA_t$	0.123	0.177	0.123	0.177	0.00	0.00
$Ln(TA)_t$	8.261	0.896	8.261	0.896	0.00	0.00
$\Delta GP/TA_t$	-0.071	0.211	-0.071	0.211	0.00	0.00
$Salary/TA_{t-1}$	0.158	0.131	0.158	0.131	0.00	0.00

Panel B: Changes regression with entropy-balanced sample (cf. Table 3 of the manuscript)
N=13,687

Dep. variable	$\Delta InterestRate_{[t\,;\,t+1]}$	
	(1)	(2)
$CompShifterBeater_t$	-0.0020**	-0.0020**
	(-2.29)	(-2.01)
$\Delta NI\_ExcludingSalaryChanges/TA_{[t-1\,;\,t]}$		-0.0154***
		(-4.77)
$\Delta TL/TA_{[t-1\,;\,t]}$		-0.0147***
		(-2.88)
$\Delta Std(ROA)_{[t-1\,;\,t]}$		-0.0323**
		(-2.25)
$\Delta ln\_InterestCoverage_t$		-0.0003
		(-0.72)
$\Delta PPE/TA_{[t-1\,;\,t]}$		-0.0087
		(-1.30)
$\Delta CASH/TA_{[t-1\,;\,t]}$		0.0020
		(0.45)
$\Delta Ln(TA)_{[t-1\,;\,t]}$		-0.0044**
		(-2.07)
$\Delta GP/TA_{[t-1\,;\,t]}$		0.0009
		(0.59)
$\Delta SAL/TA_{[t-2\,;\,t-1]}$		-0.0030
		(-0.42)
Industry-year fixed effects	No	Yes
Adjusted R^2	0.0025	0.0858

This table displays the results of using an entropy-balanced sample. Grey shading marks coefficients of interest. Panel A shows descriptive statistics of the two balanced samples and their differences. Panel B shows change regression results using the balanced sample. The entropy-balanced sample is balanced on three moments (mean, variance, and skewness) and a tolerance of 0.015. The control sample comprises potential beaters who do not decrease their salary to beat the benchmark and hence report negative net income. We use levels of the variables in Eq. 2 in year *t* for balancing, excluding *negNI_ExcludingSalaryChange* because all the observations report negative net income before salary changes. *CompShiftingBeater* indicates that the owner-manager decreases her or his salary to avoid reporting a

loss and simultaneously increases the dividends to offset the salary decrease. All variables are defined in Appendix A of the manuscript. An intercept, as well as industry-year fixed effects, are estimated but, for brevity, not reported. The standard errors are clustered by firm and year in Panel B. Accounting ratios are winsorized at the lower and upper 1% level. *t* statistics are in parentheses. ***, **, * represent significance levels at 0.01, 0.05, and 0.10, respectively (two-tailed test).

Online appendix D. Salary beaters

We investigate whether other benchmark beaters than compensation-shifting benchmark beaters obtain interest rate benefits. Specifically, we re-estimate Eq. 2 and substitute *SalaryBeater* (owner-managers who decrease their salary to beat the benchmark) for *CompShiftingBeater*. That is, we examine whether benchmark beaters, who beat the benchmark by decreasing their salaries, not conditional on increasing dividends, obtain lower interest rates than firms reporting losses. Table OA5 presents the results. The coefficient on *SalaryBeater* is negative and significant at the 1% level. The absolute coefficient on *SalaryBeater* is not significantly different from the coefficient on *negNI_ExcludingSalaryChanges* indicating that salary benchmark beaters avoid the penalizing effect of reporting a loss by transforming a loss into a profit and that *SalaryBeater* does not capture effects beyond benchmark beating. Salary beaters, like compensation-shifting beaters, obtain lower interest rates than firms that report losses.

Table OA5. Benchmark beating and interest rates: Salary beating

	Dependent variable: $InterestRate_{t+1}$
	(1)
$SalaryBeater_t$	-0.0015***
	(-4.45)
$NI\_ExcludingSalaryChange/TA_t$	-0.0087***
	(-9.59)
$negNI\_ExcludingSalaryChange_t$	0.0020***
	(11.00)
$negNI\_ExcludingSalaryChange_t$	0.0082***
× $NI\_ExcludingSalaryChang/TA_t$	(4.53)
TL/TA_t	0.0087***
	(8.09)
$Std(ROA)_t$	-0.0005
	(-0.44)
$ln\_InterestCoverage_t$	-0.0002**
	(-2.73)
PPE/TA_t	0.0011
	(1.21)
$CASH/TA_t$	-0.0104***
	(-14.22)
$Ln(TA)_t$	0.0007**
	(2.18)
$\Delta GP/TA_t$	-0.0002
	(-0.66)
$SalaryDecrease_t$	0.0002*
	(1.75)
Firm fixed effects	Yes
Industry-Year fixed effects	Yes
N	154,965
Adjusted R. sq.	0.5283
Test for equality in mean slopes	
H0: *SalaryBeater*+*negNI_ExcludingSalaryChange*=0	
F-statistic	2.31
p-value	0.15

This table estimates the interest rate as a function of salary beaters and controls. *SalaryBeater* indicates that the owner-manager does decrease her or his salary and avoids reporting a loss. All variables are defined in Appendix A. Firm and Industry-Year fixed effects and an intercept, as estimated but, for brevity, not reported. The standard errors are clustered by firm and year. Accounting ratios are winsorized at the lower and upper 1% level. t statistics are in parentheses. ***, **, * represent significance levels at 0.01, 0.05, and 0.10, respectively (two-tailed test).

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