

## A Appendix

Health and retirement benefits are tax-advantaged, relative to cash compensation. For example, regular cash wages are typically tax deductible from the firm’s point of view (thereby lowering firm federal income taxes), but taxable from the employee’s point of view (leading to higher individual federal income taxes). Employer contributions to a 401(k) plan are typically tax deductible from the firm’s perspective and any individual tax implications can be deferred until distribution.<sup>34</sup> Likewise, premiums paid by employers for health insurance reduce firms’ tax liability, but do not create tax liabilities for individuals.

In order to qualify for these tax benefits, firms must meet non-discrimination standards, which act to ensure that tax-qualified nonwage benefits do not accrue disproportionately to the highly compensated individuals within the firm. Similar to the US tax code, these nondiscrimination tests are complicated. For example, a 401(k) sponsor must annually pass the Actual Deferral Percentage (ADP) test and the Actual Contribution Percentage (ACP) test. The ADP and ACP tests look for discrimination by comparing average deferrals and contributions of highly compensated employees (HCEs) to non-highly compensated employees (NCHEs). An HCE is defined as an employee who meets either of the following criteria: 1) owns more than 5% of the firm; or 2) earns more than \$135,000 a year and was in the top 20% of employees ranked by compensation.<sup>35</sup> Most plans must also pass the Top-Heavy test each year. A plan will fail the top-heavy test if the value of assets in accounts held by key employees sums to more than 60% of total plan assets, where “key employees” are defined as officers earning \$200,000 or more or company owners. To make things more complicated, firms can still benefit from preferential tax treatment, but avoid these tests, if they qualify as a “safe harbor 401(k).” Such plans are required to satisfy a mandatory contribution requirement either as a match or nonelective contribution. A common example would provide a 100% match on the first 3% of deferred wages and a 50% match on the next 2% of deferred wages. Such a plan would still lead to compression in benefits given high wage earners are subject to maximum deferral limits,

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<sup>34</sup>See <https://www.irs.gov/retirement-plans/plan-sponsor/401k-plan-overview> for more information.

<sup>35</sup>\$135,000 is the 2022 cutoff. This threshold is revised each year.

currently indexed at \$20,500.

IRS nondiscrimination rules for health plans are similar but only apply to self-insured health plans and arrangements where employees contribute pre-tax dollars to pay for certain employee benefits, typically referred to as Section 125 or cafeteria plans. Employer-sponsored health insurance plans must also comply with other federal laws that ban discrimination, such as the Americans with Disabilities Act (ADA), the Age Discrimination in Employment Act (ADEA), and the Health Insurance Portability and Accountability Act (HIPAA), which all limit the ability to design health plans that have different eligibility requirements, contributions, or benefits across workers within a firm.

Leave benefits are unique as there is no specific nondiscrimination regulation that applies. However, there may still be pressures to equalize leave benefits within a firm to reduce the administrative burden of managing multiple plans or out of fairness concerns, which could be particularly acute for leave benefits given the visibility of days of absence.

**Internet Appendix Table 1. Establishment-level Variance Decomposition.** *Between Variance* is the equal-weighted time-series average of total between-establishment variance, estimated quarter-by-quarter. *Within Variance* is the time-series average of total within-establishment variance, estimated quarter-by-quarter. *Total Variance* is the sum of *Between Variance* and *Within Variance*. *% Between Variance* is the percent of *Total Variance* that is attributed to between-establishment variance. Variance decomposition statistics apply to nonwage benefits (inverse hyperbolic sine transformed) in columns 1-4 and wages (log transformed) in columns 5-8. All statistics in a given row are estimated on the same sample. The unit of observation is at the establishment job quarter level. The sample includes all observations in the NCS between 2004-2014 for full-time employees with non-missing data and non-imputed wages which can be matched to the LBD. We exclude the public sector (NAICS92). Row 6 drops observations where health benefits are imputed. Row 7 drop observations where retirement benefits are imputed. Row 8 drop observations where leave benefits are imputed. All dollar values are normalized to \$2014.

	<b>Benefits</b>				<b>Wages</b>			
	Between Variance (1)	Within Variance (2)	Total Variance (3)	% Between Variance (4)	Between Variance (5)	Within Variance (6)	Total Variance (7)	% Between Variance (8)
Health	0.619	0.096	0.715	86.6%	0.183	0.133	0.316	57.9%
Retirement	0.757	0.126	0.883	85.7%	0.185	0.132	0.317	58.4%
Leave	0.428	0.16	0.588	72.8%	0.184	0.118	0.302	60.9%