THE YALE LAW JOURNAL FORUM

SEPTEMBER 27, 2024

The Effects of 401(k) Vesting Schedules—in Numbers

Samantha J. Prince, Timothy G. Azizkhan, Cassidy R. Prince & Luke Gorman

ABSTRACT. Many Americans terminate employment, voluntarily or involuntarily, prior to vesting in their 401(k) plans. This costs them a lot of money; it also saves companies a lot of money. Vesting schedules used by some 401(k) plans cause plan participants to forfeit significant portions of their compensation—employer contributions made on their behalf—that should be increasing their retirement savings. This money is recycled by such plans to offset their employer contribution obligations and other costs.

We analyzed data from Form 5500s to identify trends in and implications of vesting schedule use by 408 single-employer 401(k) plans over the five-year period of 2018-2022. Our findings show that the number of participants terminated before full vesting is growing rapidly. Further, we analyzed data from Form 5500s for 909 single-employer 401(k) plans for 2022. We found that 1.8 million plan participants forfeited compensation because they terminated employment (voluntarily or involuntarily) without being fully vested in their employer plan contributions. Amazon's and Home Depot's 401(k) plans have had the most affected participants for the past three years. Additionally, in the 909 plans we analyzed, we found that forfeitures used in 2022 amounted to a staggering $1.5 billion, most of which was used to reduce an employer's contribution obligation. Our findings highlight the magnitude of the implications of 401(k) vesting schedule use and identify key companies whose plans have the most affected participants and the highest amounts of forfeitures at their disposal.

INTRODUCTION

A majority of Americans do not have enough money saved to support themselves through retirement.[1] Accumulating retirement savings is no easy task:

1. Dan Doonan, *Americans Are Worried About Retirement Savings, and They Should Be*, FORBES (Apr. 11, 2024, 5:22 PM EDT), https://www.forbes.com/sites/dandoonan/2024/04/11/americans-are-worried-about-retirement-savings-and-they-should-be [https://perma.cc/C6YJ-NWSK]; *New AARP Survey: 1 in 5 Americans Ages 50+ Have No Retirement Savings and over Half Worry They Will Not Have Enough to Last in Retirement*, AARP (Apr. 24, 2024),

Americans are expected to set aside money for retirement while many struggle to cover high, inflation-induced costs for food, housing, transportation, healthcare, and more.[2] The difficulty of saving for retirement is a problem not only for savers and their families, but also for federal and state governments and their taxpayers.[3]

---

https://press.aarp.org/2024-4-24-New-AARP-Survey-1-in-5-Americans-Ages-50-Have-No-Retirement-Savings [https://perma.cc/7N93-WMNR]; *see also* Tyler Bond, Dan Doonan, Michael Kreps, John Lowell, Jonathan Price & Zoris Wadia, *Policy Ideas for Boosting Defined Benefit Pension in the Private Sector*, NAT'L INST. ON RET. SEC. 3 (May 2024), https://www.nirsonline.org/wp-content/uploads/2024/05/NIRS_Boosting-DB-Pensions-in-the-Private-Sector_FINAL.pdf [https://perma.cc/Y6QZ-3PFA] (noting that "[a]bout half of American households are 'at risk' of not having enough to maintain their living standards in retirement"). For additional data on this finding, see the *2022 Survey of Consumer Finances*, BD. GOVERNORS FED. RSRV. SYS., https://www.federalreserve.gov/econres/scfindex.htm [https://perma.cc/UWP2-47XG]. Accumulating sufficient retirement savings has become a challenge for Americans. Retirement costs such as housing, healthcare, and long-term care continue to rise at alarming rates. *See S&P CoreLogic Case-Shiller U.S. National Home Price Index*, FED. RSRV. BANK ST. LOUIS, https://fred.stlouisfed.org/series/CSUSHPISA [https://perma.cc/8SBM-RRA3]. Social Security reserves, once a reliable source of modest yet crucial income for retired individuals, are estimated to become completely depleted of assets in 2033 without significant government intervention. *2023 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, BD. OF TRS. OF THE FED. OLD-AGE & SURVIVORS INS. & FED. DISABILITY INS. TR. FUNDS (Mar. 31, 2023), https://www.ssa.gov/oact/TR/2023/tr2023.pdf [https://perma.cc/62CS-5TTV]. These constantly evolving factors make it difficult for retiree hopefuls to estimate how much they need to save, and by when.

2. *See Summary Findings*, U.S. DEP'T AGRIC., https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings [https://perma.cc/N33Z-BR8F] (noting that, in 2023, food prices increased by 5.8%); *see also S&P CoreLogic Case-Shiller U.S. National Home Price Index*, FED. RSRV. BANK ST. LOUIS, https://fred.stlouisfed.org/series/CSUSHPISA [https://perma.cc/8SBM-RRA3] (noting that housing prices have increased by about 15% over the last twelve months); *The High Cost of Transportation in the United States*, INST. TRANSP. & DEV. POL'Y (Jan. 24, 2024), https://www.itdp.org/2024/01/24/high-cost-transportation-united-states [https://perma.cc/JXA7-5TT8] (noting that low-income households spent about 30% of their after-tax income on transportation). *See generally The Cost of Living in America: Helping Families Move Ahead*, WHITE HOUSE (Aug. 11, 2021), https://www.whitehouse.gov/cea/written-materials/2021/08/11/the-cost-of-living-in-america-helping-families-move-ahead [https://perma.cc/3DE4-7Q3D] (noting that, on average, lower- and middle-income families spend a higher share of their budgets on food, clothing, housing, transportation, health, education, and child and elder care).

3. *See* John Scott, *American Has a Retirement Crisis. We Need to Make It Easier to Save*, PEW (Jan. 18, 2024), https://www.pewtrusts.org/en/about/news-room/opinion/2024/01/18/america-has-a-retirement-crisis-we-need-to-make-it-easier-to-save [https://perma.cc/P5EY-YFNP]; John Scott & Andrew Blevins, *States Face $334.3 Billion Shortfall over 20 Years Due to Insufficient Retirement Savings*, PEW (June 1, 2023), https://www.pewtrusts.org/en/research-and-analysis/articles/2023/06/01/states-face-334-billion-shortfall-over-20-years-due-to-insufficient-retirement-savings [https://perma.cc/8TSD-UGXB].

Employers have tax incentives to assist their employees with saving for retirement. As a result, many employers offer retirement savings vehicles such as 401(k) plans and contribute vast sums of money to their plans annually. But not all 401(k) plans are created equal. Plan features can vary significantly: participants who work for some companies have lesser benefits than others, and some also forfeit such compensation upon termination of employment. Our research primarily focused on one specific 401(k) plan feature—vesting schedules—and the resulting forfeitures. This Essay's purpose is to summarize and release our data together with our findings. Future articles will discuss the policy implications of our findings.

When creating a 401(k) plan, an employer chooses whether to vest its contributions immediately or utilize a vesting schedule. Employers view this choice differently. Some employers do not use a vesting schedule, likely because they want to offer better benefits to attract and retain workers. Perhaps offering better retirement benefits is also part of the company's culture. Other employers—particularly those who experience high turnover—use vesting schedules to incentivize workers to stay longer, in the hope that workers will stay at least long enough to vest in their employer contributions.[4] Employee retention is often paired with other financial advantages as well. When a plan participant's employment ends prior to vesting, the plan must use the forfeited funds, and this recycling generates savings for employers as well.[5]

Employer savings achieved by vesting schedules certainly benefit employers, but vesting schedules often become mechanisms that negatively foster wealth redistribution. Forfeited employer contributions are removed from participant accounts—which are commonly held by vulnerable groups that traditionally struggle to accumulate retirement wealth—and are returned to the plan trust. In turn, plan administrators can redistribute forfeited funds to remaining participants who likely hold higher-paid positions with drastically diminished turnover rates. Retirement savings are essentially transferred from workers that will need those funds when ready to retire to workers that can much more easily accumulate retirement wealth. Over the past three years, the Amazon 401(k) Plan and the Home Depot Futurebuilder Plan have seen the highest numbers of participants terminate employment without being fully vested. As such, we emphasize throughout how Amazon's and Home Depot's plan numbers compare to others.

In this Essay, we present several figures and tables that provide a glimpse into the implications of vesting schedule usage. At times, we refer to companies

4. Employee retention through the use of vesting schedules is ineffective. Paul Mulholland, *Non-Immediate Vesting Does Not Help Companies Retain Employees*, PLANADVISOR (Mar. 23, 2023), https://www.planadviser.com/non-immediate-vesting-not-help-companies-retain-employees [https://perma.cc/E9F7-DNE6].

5. *See infra* notes 21-30 and accompanying text.

rather than their 401(k) plans for succinctness. When reference is made to the company, it incorporates its 401(k) plan. For instance, we sometimes refer to the Home Depot Futurebuilder plan as Home Depot or Home Depot's 401(k) plan for short. Additionally, the term "affected participants" refers to participants who terminated without being fully vested in their account balances. The term "terminated" means ceased employment, whether voluntarily or involuntarily.

In our study, we share data on the number of participants who have terminated without being fully vested in 909 single-employer qualified 401(k) plans for 2022.[6] We also highlight the top ten companies with the greatest numbers of these participants over the past five years. We compiled data that show the astronomical amounts of money that participants forfeit and what plans do with this money. We analyzed this data both cumulatively and individually to identify the plans that used the largest forfeiture dollar amounts in 2022. We then compared competitor companies and found that companies' plans that use vesting schedules have competitors whose plans immediately vest their participants and hence have no forfeitures to use. Companies that assist other employers in forming, amending, or administering 401(k) plans, while also using vesting schedules themselves, were closely examined in comparison to competitors that offer immediate vesting for company contributions. Lastly, we compiled a nonexhaustive list of plans that changed from immediate vesting to a vesting schedule.

In the United States, workers rely heavily on money that employers contribute to supplement their retirement savings. Our findings suggest that the problems with vesting schedules together with their resulting forfeitures loom large and in practice run afoul of this reliance. Permitting the use of vesting schedules for employer contributions minimizes workers' ability to save because they forfeit the money that employers contribute on their behalf to the extent not yet vested. Once forfeited, a majority of the plans we studied use this money in a manner that allows employers to experience savings. Indeed, most of this money is used to offset future employer contributions. Since matching contributions—a prevalent type of employer contribution—are contingent upon salary deferrals, it is possible that higher-paid participants receive more money in employer

6. References to any years between 2018-2022 in this Essay should be understood as referencing plan years, not calendar years. Many plan sponsors do correspond their plan years with the calendar year, but there are some that do not. For the plans that do not correspond to the calendar year, we refer to the year in which a given plan year ended.

contributions.[7] And vesting schedule use exacerbates the ability of the more vulnerable members of society to accumulate retirement wealth.[8]

I. HOW VESTING SCHEDULES AND FORFEITURES WORK[9]

Employees, as participants in a company's retirement plan, are able to make direct contributions to their 401(k) plans by contributing a certain percentage of their salary.[10] These direct contributions made by participants are known as "salary deferrals."[11] Participants are 100% vested in funds they contribute as salary deferrals.[12] But employer contributions are either immediately vested or can be subject to one of two types of vesting schedules: cliff vesting or graded vesting.[13] Cliff vesting means that the plan participant will vest 100% after a certain number of years of service (usually defined as 1,000 hours in a year) but will have no

7. Consider also that forfeitures can be used to provide additional contributions to current participants, and in those instances the longer-tenured, higher-paid participants will benefit as well.

8. Samantha J. Prince, *Megacompany Employee Churn Meets 401(k) Vesting Schedules: A Sabotage on Workers' Retirement Wealth*, 41 YALE L. & POL'Y REV. 1, 44 (2022) [hereinafter Prince, *Megacompany*] ("Women, Black people, Latinx people, and low-paid workers tend to change jobs more frequently. This makes it harder for them to become vested in plans where vesting schedules are being used, and therefore harder for them to accumulate retirement wealth.").

9. For a more detailed explanation of how vesting schedules and forfeitures work, see *id.* at 7-18.

10. *See Retirement Topics: 401(k) and Profit-Sharing Plan Contribution Limits*, INTERNAL REVENUE SERV. (Apr. 3, 2024), https://www.irs.gov/retirement-plans/plan-participant-employee/retirement-topics-401k-and-profit-sharing-plan-contribution-limits [https://perma.cc/W5J8-VZ56].

11. *Id.*

12. *See 401(k) Plan Overview*, INTERNAL REVENUE SERV. (Aug. 2, 2024), https://www.irs.gov/retirement-plans/plan-sponsor/401k-plan-overview [https://perma.cc/H8CN-Z3ZS].

13. Permissible schedules have been codified in some form since 1974 and have been shortened throughout the years. The last amendments on vesting schedules appeared in 2001 for matching contributions and 2006 for other employer contributions. Prince, *Megacompany*, *supra* note 8, at 14. This Essay uses the term "immediate vesting" to mean that no vesting schedule is used by a plan. *See generally 401(k) Plan Overview*, INTERNAL REVENUE SERV. (Aug. 2, 2024), https://www.irs.gov/retirement-plans/plan-sponsor/401k-plan-overview [https://perma.cc/H8CN-Z3ZS] (noting that "employer contributions can be subject to a vesting schedule . . . or be immediately vested").

vested balance before that is achieved.[14] This means that the participant is either entitled to *all* of the employer contributions or *none* of them.[15]

Unlike cliff vesting, graded vesting occurs incrementally over a number of years.[16] The Internal Revenue Code (IRC) and accompanying regulations outline the two minimum vesting schedules that serve as baselines for employer contributions to 401(k) plans: three-year cliff and six-year graded.[17]

In three-year cliff vesting, the participant vests 100% in year three after achieving 1,000 hours of service for three consecutive years.[18]

Years of Service	**Percentage Vested**
1	0%
2	0%
3	100%

In six-year graded vesting, the participant vests incrementally starting in year two and becomes fully vested after achieving six years of service.[19]

Years of Service	**Percentage Vested**
1	0%
2	20%
3	40%
4	60%
5	80%
6	100%

14. *See* Eric Droblyen, *Vesting Schedules – Everything You Need to Know*, EMP. FIDUCIARY (Jan. 30, 2023), https://www.employeefiduciary.com/blog/vesting-schedules [https://perma.cc/UD72-VDHQ].

15. *Retirement Topics – Vesting*, INTERNAL REVENUE SERV. (Apr. 17, 2024), https://www.irs.gov/retirement-plans/plan-participant-employee/retirement-topics-vesting [https://perma.cc/Q998-QDQU].

16. *See id.*

17. I.R.C. § 411(a)(2)(B) (2018).

18. *See, e.g.*, Home Depot, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (July 31, 2023) (noting that "[f]or vesting purposes, a year of service is any calendar year in which a participant completes at least 1,000 hours of service" and that "[a] participant is [100% vested] in the Company's matching contributions after three years of vesting service"). Some plans require a participant to be employed on the last day of the year in which the third year of service is achieved in order to vest. *See* Prince, *Megacompany*, *supra* note 8, at 14-16, 44.

19. *Id.* at 16.

Instead of using a vesting schedule, a plan can provide for immediate vesting, or it can adopt a variation of the above, so long as the schedule is at least as favorable to the participants as one of the two shown above.[20] For instance, a plan can have a one-year cliff, which is better for the participant than a three-year cliff, or a plan can be four-year graded, which is better for the participant than six-year graded.

When a participant's employment ends, voluntarily or involuntarily, prior to vesting, they forfeit the money that is not yet vested. Because money that gets contributed into the plan becomes a plan trust asset that must be held in a trust fund to ensure it is used "solely to benefit the participants and their beneficiaries,"[21] it cannot be returned to the employer—that is, it must be used for plan purposes. A plan document governs how the plan may use the forfeited funds. The options for forfeited-fund use are provided by a 1984 Revenue Ruling and Treasury Regulations.[22] Forfeited funds may be used (1) to reduce future employer contributions including corrective distributions; (2) to pay reasonable administrative expenses; (3) to provide additional contributions to current participants; and/or (4) to restore previously forfeited participant accounts.[23] Many plans allow for a combination of these uses, and the plan administrator can choose what is best in any given year.[24] Some plans provide a hierarchy for how forfeitures must be used.[25]

Forfeiture rules directly allow the employer to recycle monies it has contributed to its 401(k) plan, thereby reducing the requirement to continue to fund employer contributions and other related expenses with new money.[26] These

---

20. I.R.C. § 411(a)(2)(B) (2018).

21. *IRC 401(k) Plans—Establishing a 401(k) Plan*, INTERNAL REVENUE SERV. (Dec. 21, 2023), https://www.irs.gov/retirement-plans/irc-401k-plans-establishing-a-401k-plan [https://perma.cc/CBM5-BTSC]; 29 U.S.C. § 1103(a) (2018); I.R.C. § 401(a)(2) (2018).

22. Rev. Rul. 84-156, 1984-2 C.B. 97; Treas Reg. § 1.401-7(a) (1963).

23. Rev. Rul. 84-156, 1984-2 C.B. 97; Treas Reg. § 1.401-7(a) (1963). For information regarding the new rule that the Internal Revenue Service (IRS) proposed on forfeitures, see *infra* note 120.

24. In other words, if the plan allows all the statutorily permissible options, in any plan year, a company could use a portion of the money to pay expenses, a portion to reallocate to other participants, a portion to restore previous participants' accounts, and a portion to reduce future contributions. Forfeiture use was also observed to occur in the form of correcting violations of nondiscrimination testing from a prior year. *See* Greystar Management Services, L.P., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 13, 2023).

25. *See* Sprenger Enterprises, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Sept. 11, 2023) ("Forfeitures of nonvested accounts are first to be used to pay administrative expenses of the Plan. Any remaining forfeitures may reduce employer contributions or can be reallocated as additional and employer nonelective contributions.").

26. *See* Prince, *Megacompany*, *supra* note 8, at 19.

rules lead to negative effects on retirement savings for more transient low- and middle-income workers while subsequently bolstering the retirement of the highest-paid employees occupying low-turnover positions.[27] When companies know they have high turnover and use a vesting schedule, they "flout[] the historical employee retention rationale underlying vesting" by double dipping and using forfeited funds to reduce their own costs.[28] A significant number of those that fill these high-turnover positions are low-paid workers and people of color—groups that historically lack advantages such as generational wealth and greater financial literacy to assist in retirement saving.[29] These workers thus lose out on retirement savings in far higher numbers and rates than their higher-paid coworkers and supervisors.[30]

Additionally, when the plan administrator chooses the option to distribute the forfeitures among current participants (option three above), they are redistributing contributions that the employer likely made on behalf of lower-paid, high-turnover employees to employees who do not turn over and are likely paid more.[31] These higher-paid, low-turnover individuals also retain a substantially higher balance of retirement benefits than lower-income individuals and their respective households.[32] Such reallocations create a disparity because they are

---

27. *See* Michael J. Graetz, *The Troubled Marriage of Retirement Security and Tax Policies*, 135 PENN. L. REV. 852, 885-86 (1987) (noting that vesting requirements "reduce employer costs and further concentrate the tax advantages received by high-income employees"); Peter M. van Zante, *Mandated Vesting: Suppression of Voluntary Retirement Benefits*, 75 NOTRE DAME L. REV. 125, 201 (1999) (stating that non-highly compensated employees as a group are typically composed of a disproportionately large fraction of high-turnover employees, and that highly compensated employees typically stay longer).

28. *See* Prince, *Megacompany*, *supra* note 8, at 5, 22.

29. *Id.* at 29-30, 35-45; *see also* Martha Ross, Nichole Bateman & Alec Friedhoff, *A Closer Look at Low-Wage Workers Across the Country*, BROOKINGS (Mar. 2020), https://www.brookings.edu/articles/low-wage-workforce [https://perma.cc/28AF-4DM8] (noting that 48% of the United States's "low-wage" workforce is made up by people of color); *see also* van Zante, *supra* note 27, at 201 (stating that low-wage workers typically make up a large fraction of high-turnover employees).

30. U.S. GOV'T ACCOUNTABILITY OFF., GAO-23-105342, OLDER WORKERS: RETIREMENT ACCOUNT DISPARITIES HAVE INCREASED BY INCOME AND PERSISTED BY RACE OVER TIME 22-23, 23 tbl.1 (2023) (finding that "[h]igher income, longer job tenure, and a college education are each associated with substantially larger retirement account balances" and offering some potential rationales for this finding, including "an increased awareness about the need to save," "more financial education," and "receiving larger bequests from wealthier parents").

31. *See id.* at 23; Graetz, *supra* note 27, at 885-86; van Zante, *supra* note 27, at 201.

32. U.S. GOV'T ACCOUNTABILITY OFF., *supra* note 30, at 13-15.

generally based on the participants' salary deferral percentage.[33] Higher-paid employees generally are more loyal and save more by contributing higher percentages of their pay to their 401(k) plans.[34]

Fundamentally, accumulating retirement savings is difficult for many people. Every potential source of retirement savings could affect the financial security of an individual once they are no longer able to work. Retirement insecurity and an uncertain financial future represent the dangerous reality faced by millions of Americans.[35] Companies who use vesting schedules—mechanisms that foster wealth redistribution and eliminate retirement savings that individuals may desperately need in the future—exacerbate the daily struggles that Americans already experience when attempting to accumulate retirement wealth.

II. FORM 5500, METHODS, AND LIMITATIONS

A. *Form 5500*

Form 5500 is an Annual Report required of 401(k) and other plans covered by the Employee Retirement Income Security Act.[36] A publicly accessible

---

33. *See 401(k) Plans – Deferrals and Matching when Compensation Exceeds the Annual Limit*, INTERNAL REVENUE SERV. (May 14, 2024), https://www.irs.gov/retirement-plans/401k-plans-deferrals-and-matching-when-compensation-exceeds-the-annual-limit [https://perma.cc/B8ZM-J595]; *see also supra* note 12 and accompanying text (discussing salary deferrals).

34. *See* Prince, *Megacompany*, *supra* note 8, at 19.

35. The U.S. Census Bureau found that in 2022, nearly half of surveyed Americans between the retirement ages of 55-65 reported that they have less than one dollar in retirement savings. Laurence Fink, *Larry Fink's 2024 Annual Chairman's Letter to Investors*, BLACKROCK, https://www.blackrock.com/us/individual/about-us/larry-fink-annual-chairmans-letter [https://perma.cc/5J8F-75FQ]. The Federal Reserve Board's 2023 triannual Survey of Consumer Finances found that approximately 46% of American households had no savings in retirement accounts in 2022. *See* Aditya Aladangady, Jesse Bricker, Andrew C. Chang, Sarena Goodman, Jacob Krimmel, Kevin B. Moore, Sarah Reber, Alice Henriques Volz & Richard A. Windle, *Changes in U.S. Family Finances from 2019 to 2022: Evidence from the Survey of Consumer Finances*, BD. OF GOVERNORS OF THE FED. RSRV. SYS. 16 (Oct. 2023), https://www.federalreserve.gov/publications/files/scf23.pdf [https://perma.cc/CDD4-KAZF] ("[Retirement] accounts were held by 54.3 percent of families in 2022 . . . .").

36. The Department of Labor mandates that a "return/report must be filed every year for every pension benefit plan, welfare benefit plan, and for every entity that files as a DFE [Direct Filing Entity] . . . (pursuant to Code section 6058 and [Employee Retirement Income Security Act (ERISA)] sections 104 and 4065)." *Instructions for Form 5500: Annual Return/Report of Employee Benefit Plan*, U.S. DEP'T TREASURY, U.S. DEP'T LAB., PENSION BENEFIT GUAR. CORP. 3 (2023), https://www.dol.gov/sites/dolgov/files/ebsa/employers-and-advisers/plan-administration-and-compliance/reporting-and-filing/form-5500/2023-instructions.pdf [https://perma.cc/D4AC-WT8H].

disclosure document, it is used by the U.S. Department of Labor (DoL), Internal Revenue Service (IRS), and the Pension Benefit Guaranty Corporation to ensure compliance.[37] Form 5500 is also "a source of information and data for use by other Federal agencies, Congress, and the private sector in assessing employee benefit, tax, and economic trends and policies."[38] Information is provided on Form 5500 as numeric line items and in text form. We relied on Form 5500s for our research.

B. Methods

Song Yi and Lynn Johnson of the DoL Employee Benefits Security Administration Office of Research and Analysis provided us with a compilation of publicly available data from Form 5500 filings for single-employer plans with the most affected participants over a period of five years. Their data extraction method was to determine generally whether a plan was a 401(k) plan based on whether the "TYPE_PENSION_BNFT_CODE" variable reported use of the "2J" code in the Form 5500 filing.[39] They provided us with 1,000 of the top Form 5500 filings based on line item 6(h). Line item 6(h) represents the number of participants who terminated prior to being fully vested during the applicable plan year.[40]

Data we used in our analyses from DoL's Form 5500 dataset were: line 6(h) (SEP_PARTCP_PARTL_VSTD_CNT); the plan name (PLAN_NAME); the North American Industry Classification System (NAICS) code

37. All Form 5500 filings were accessed via the Department of Labor's EFAST Form 5500 Search. *See Form 5500 Search*, U.S. DEP'T LAB., https://www.efast.dol.gov/5500Search [https://perma.cc/TA57-48HT].

38. Emp. Benefits Sec. Admin., *Form 5500 Series*, U.S. DEP'T LAB., https://www.dol.gov/agencies/ebsa/employers-and-advisers/plan-administration-and-compliance/reporting-and-filing/form-5500 [https://perma.cc/DMR9-MBXR].

39. There was one exception made to include the filing for "TARGET CW 401(K) PLAN" in 2020 and 2021, even though it did not have the "2J" code. This exception was made because it had "401(K)" in the plan name and because the affected participant count came within the range of the ones comprising the 2J list.

40. *See, e.g.*, Amazon.com Services, LLC, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 5, 2023) (indicating line item 6(h) as "Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested"). The 909 plans that were analyzed were organized by 6(h) numbers subject to the limitations brought by the current line item. One such limitation is that the number of employees that terminated employment prior to participating actively will be excluded from inclusion in 6(h). *See* Prince, *Megacompany, supra* note 8, at 49. The limitation would not apply to plans containing auto-enrollment provisions. *See id.* ("The plan would have to have immediate auto-enrollment in order to make this assertion [about how many participants terminated with less than 100% vested benefits] closer to being accurate.").

(BUSINESS_CODE); the plan sponsor name (SPONSOR_DFE_NAME); line 6(a)(2), the number of participants at end of year (TOT_ACTIVE_PARTCP_CNT); and the plan year end date (FORM _TAX_PRD).[41]

The DoL-provided dataset had occasional instances where a plan was listed more than once in the same year, likely due to an amended filing. Therefore, we did not have data for 1,000 distinct plans we could use. After data were compiled into Excel spreadsheets, data cleaning and analyses were performed in R version 4.2.2. Duplicate entries were identified as having the same year and plan name or sponsor name and were subsequently removed.[42] Plans with data present on the DoL-provided dataset for all five years were identified as plans having five instances of the same plan name or sponsor in the dataset (n=408).[43] This sub-dataset was then visually inspected, and instances of a plan or sponsor name changing slightly over time were identified and conformed (e.g., "Inc." to "LLC") for ease of analysis. The first two numbers of NAICS codes were used to define industry sectors as described by the U.S. Bureau of Labor Statistics.[44]

For 2022, the dataset includes plans that had affected participants ranging from 289,820 (the highest) to 453, as indicated on line 6(h). While 453 does not represent the absolute lowest number of affected participants found in all existing 2022 Form 5500 filings, it does represent the lowest number in the 1,000 plans we were given.

For each of the 909 plans in our 2022 dataset, we manually extracted data from the Form 5500 text that reflected employer contribution types, vesting schedules used, forfeiture amounts, and forfeiture use. Manual extraction was necessary because there are no line items for information pertaining to these characteristics in Form 5500.[45]

Ultimately, the dataset gives future researchers a uniquely comprehensive look into retirement plans. First, the dataset includes data that are publicly

---

41. The noted variable names each correspond to a column within the dataset published alongside this Essay. This dataset is publicly available at the *Yale Law Journal*'s Dataverse page: https://dataverse.harvard.edu/dataverse/ylj.

42. In order to have a broader spectrum of companies, we only chose one 401(k) plan per company in our grouping of 909 plans in 2022 and 408 plans from 2018-2022. Because of this selectivity, numbers of affected participants and forfeitures used are higher than we present.

43. *See* Appendix 2. Appendix 1 and Appendix 2 are publicly available at the *Yale Law Journal*'s Dataverse page: https://dataverse.harvard.edu/dataverse/ylj.

44. *Industries at a Glance*, U.S. BUREAU LAB. STATS., https://www.bls.gov/iag/tgs/iag_index_naics.htm [https://perma.cc/ZMC3-9LDW].

45. *See infra* Section II.C and Part IV.

accessible, ensuring that data are collected regardless of the plan administrator.[46] Additionally, because Form 5500 reporting is mandatory, the dataset is inclusive of all businesses and is not reliant on eliciting responses through surveys. These two important considerations ensure that the dataset presents an accurate representation of the administration of retirement plans broadly.

C. *Limitations: Forfeiture Data*

In our research, we observed that a majority of plans reported clear and accurate forfeiture data. However, some plans reported inconsistent and inconclusive information relative to the amount of forfeitures and forfeiture use. In those cases, we were unable to extract reliable forfeiture data because plan descriptions (1) only reported a total balance of forfeitures on the last day of a plan year; (2) only reported the total number of forfeitures created in the plan year; (3) only provided information pertaining to how forfeitures could be used according to plan provisions; or (4) were precluded from public disclosure by DoL.

Remaining limitations stemmed from imprecise language found in forfeiture disclosures. One such limitation was our frequent inability to determine whether forfeitures were used to reduce "employer" or "company" contributions that were obligatory, discretionary, or both.[47] We note that at least a portion of the contributions that forfeitures were used to reduce in 2022 was discretionary rather than obligatory.[48] Another limitation was the use of terms like

46. Reports provided by plan administrators, while significant and helpful, are limited to data only from plans they administer. For example, every year, Vanguard publishes an informative "How America Saves" report, but its dataset is limited to its own clients. *See, e.g.*, *How America Saves 2024*, VANGUARD 4 (2024), https://institutional.vanguard.com/content/dam/inst/iig-transformation/insights/pdf/2024/has/how_america_saves_report_2024.pdf [https://perma.cc/B8UX-GWX9] (noting that the research focuses on "Vanguard participants").

47. While a plan is required to make "mandatory" or "obligatory" contributions, certain employer contributions may be made that are not mandatory, that is, discretionary. Generally, matching contributions, whether mandatory or discretionary, are determined based on an individual participant's salary deferrals. However, discretionary nonmatching contributions may be made on behalf of all plan participants regardless of deferrals. *Retirement Topics: Contributions*, INTERNAL REVENUE SERV. (Dec. 22, 2023), https://www.irs.gov/retirement-plans/plan-participant-employee/retirement-topics-contributions [https://perma.cc/2DGG-NFAB]; *see also infra* Section III.B (discussing the use of forfeited funds generally).

48. *See* Communications Test Design, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 13, 2023) (noting that forfeited "accounts may be used to reduce future employer contributions" and that the "accrued employer discretionary profit sharing contributions for the year ended December 31, 2021, were reduced by $994,474 when it was funded in 2022").

"approximately" or "immaterial" in forfeiture disclosures.[49] Our research exacted these approximate numbers for analyses and regarded any amount labeled immaterial as having no value. As a result, the numbers provided throughout this Essay reflect the most accurate findings that could be exacted from forfeiture disclosures found in Form 5500 submissions. Our discussion in Part IV provides further information on these limitations and make suggestions for amending Form 5500.

III. INSIGHTS FROM ORIGINAL DATA ANALYSIS OF FORM 5500S

A. *Rising Numbers of Affected Participants: Amazon, Home Depot, and the Trade, Transportation, and Utilities Sector Lead the Pack*

1. *A Rapid Increase in Affected Participants*[50]

The total number of affected participants is increasing rapidly. Figure 1 shows the number of affected participants from 2018-2022 with varying numbers of plans (n-values). For 2022, 909 plans were analyzed, showing over 1.87 million affected participants; for 2018, 886 plans were analyzed, showing over 1.22 million affected participants.[51] This analysis shows that large numbers of people forfeited funds, losing compensation that could be increasing their retirement savings.

49. *See* General Motors, LLC, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 13, 2023) ("Forfeitures are used to offset GM contributions and were not significant during 2022."); Intel Corporation, Annual Return/Report of Employee Benefit Plan (Form 5500) (Aug. 30, 2023) (noting that "[a]s of December 31, 2022 . . . approximately $6,000,000 . . . of forfeitures were available to be used to reduce future Company matching contributions"). For forfeiture approximations, we exacted the amount reported by using the "approximate" amount listed on the Form 5500. For example, we considered Intel to have exactly $6,000,000 of forfeitures available to reduce their future Company matching contributions, while in reality the actual number was likely not exactly $6,000,000.

50. Amazon's and Home Depot's 401(k) plans, for the past three years, are the two plans with the highest number of affected participants. As such, they are illuminated in numerous figures.

51. *See infra* Figure 1.

FIGURE 1. NUMBER OF AFFECTED PARTICIPANTS OVER FIVE YEARS (N=NUMBER OF PLANS)

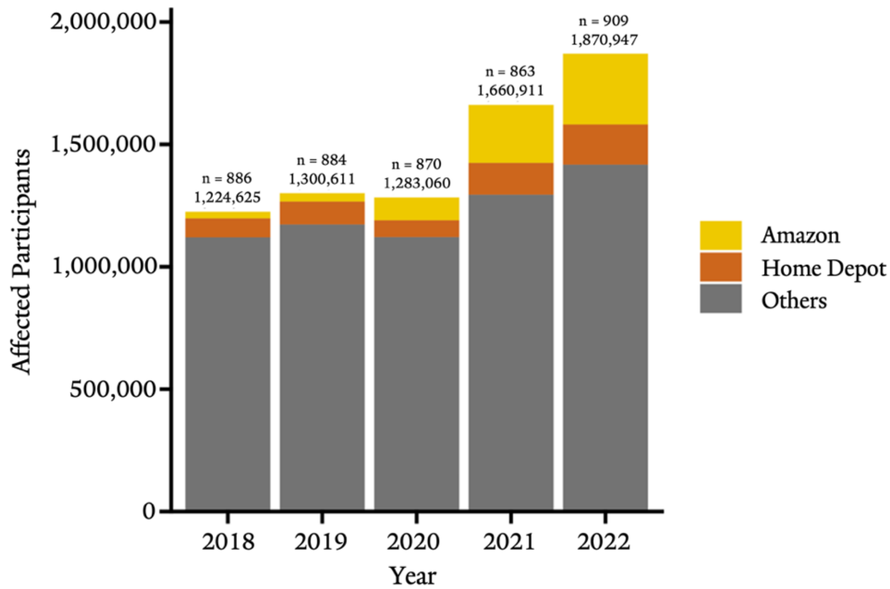


Figure 2 shows our analysis of 408 plans that were consistent across all five years. Using this grouping, there were over 1.36 million affected participants in 2022.[52] This subset holds the same trend as the full dataset used in Figure 1. This trend is not solely attributable to Amazon; however, as Amazon has grown, so has the number of affected participants in its 401(k) plan.[53]

It is important to remember that these numbers reflect individuals who participated in the companies' 401(k) plans but did not receive the benefit of their employer contributions—at least not fully. When plans use a three-year cliff vesting schedule, and a participant has terminated prior to completing three years of service, they receive *none* of their employer contributions. When plans use a graded schedule, and a participant has terminated before working the number of years required to vest fully, they receive only a percentage of their employer contributions.

52. *See infra* Figure 2.

53. *See* Figures 1-3.

FIGURE 2. NUMBER OF AFFECTED PARTICIPANTS OVER FIVE YEARS (N=408 PLANS)

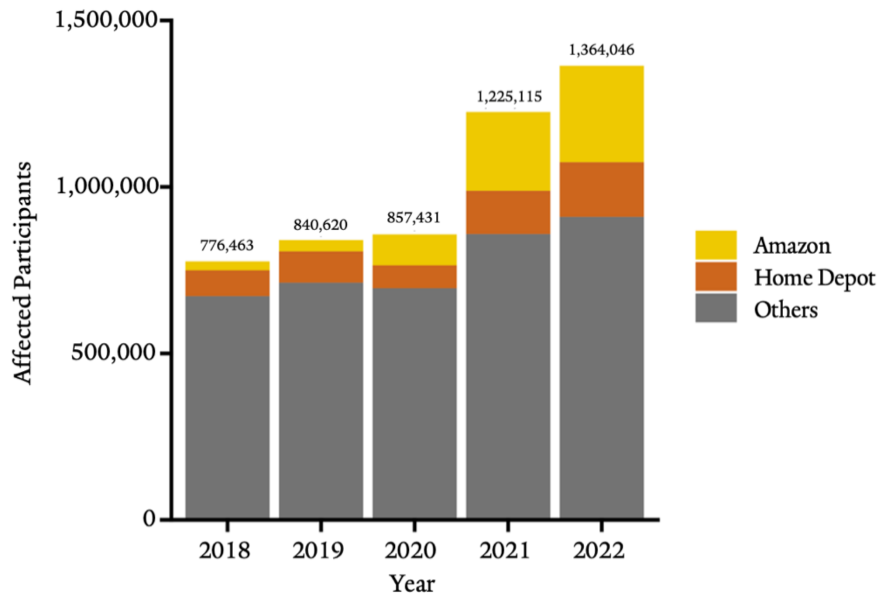
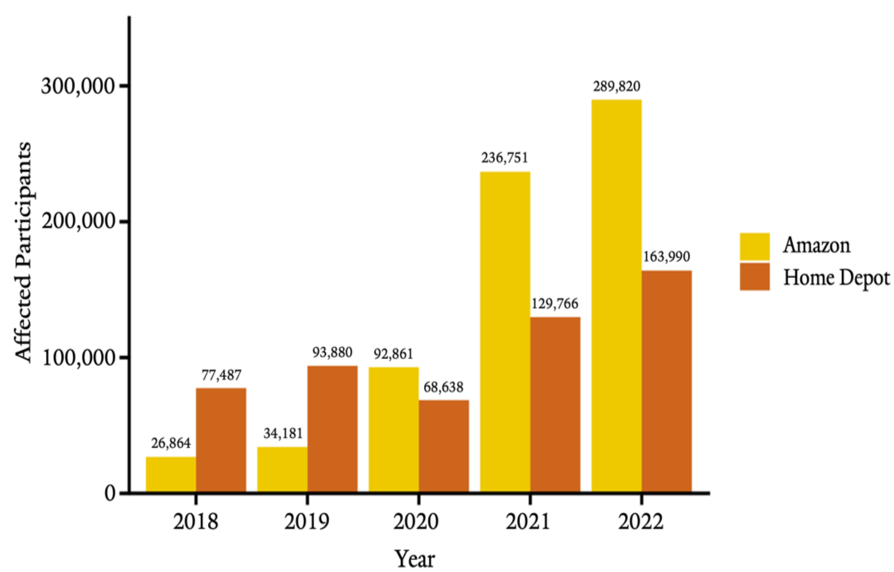


FIGURE 3. NUMBER OF AFFECTED PARTICIPANTS OVER FIVE YEARS: AMAZON AND HOME DEPOT



2. *Amazon's and Home Depot's 401(k) Plans*

Amazon's and Home Depot's 401(k) plans have by far the most affected participants in the past three years. Tables 1-5 show the top ten plans based on numbers of affected participants. As shown, Amazon's plan jumped to the top spot in 2020 and has retained this position throughout 2021 and 2022.[54] Home Depot's plan has been either first or second on the lists for the past five years.[55] This signals that large numbers of Amazon's and Home Depot's workers are missing out on a valuable benefit—additional retirement savings.

The number of affected participants can show which of the companies using vesting schedules in their 401(k) plans churn more employees. If one assumes Amazon's warehouse business is the part that incurs the highest turnover, one can infer that those in lower socioeconomic positions—warehouse workers—make up a significant portion of the affected group in their plans. Amazon's warehouse ("Field & Customer Support") demographics for 2022 reveal that those workers identify as 32.1% Black, 28.5% Latino/a/x, 27.8% White, 9.8% Asian, 2.1% Native American, 1.6% Multiracial, and 0.6% Other.[56]

A majority of the top ten plans with the most affected participants remained consistent over the five-year period. The six plans that appear in all five years are Amazon's 401(k) Plan; The Home Depot Futurebuilder; HCA 401(k) Plan; J.C. Penney Corporation Inc. Safe Harbor 401(k) Savings Plan; Charter Communications Inc. 401(k) Savings Plan; and Sodexo 401(k) Employees Retirement Savings Plan and Trust.[57]

The data indicate that the number of affected participants who have forfeited retirement benefits in the top ten plans has more than doubled from 2018 to 2022.[58] The percentage of affected participants has also increased from less than a quarter to over a third of the total participants in the plans that we analyzed. Broken down by year, the data conveyed the following:

---

54. The Amazon 401(k) Plan experienced a 212% increase in affected participants between 2020-2022. *See infra* Tables 1-3.

55. *See infra* Tables 1-5.

56. *See Our Workforce Data*, AMAZON (June 17, 2024), https://www.aboutamazon.com/news/workplace/our-workforce-data [https://perma.cc/VH2F-ZU4H]. Amazon has since updated its workforce demographic data for 2023. In 2023, Amazon's warehouse demographics reveal that workers identify as 36.8% Black, 29.8% Latino/a/x, 25.6% White, 8.8% Asian, 1.7% Native American, 0.9% Multiracial, and 1.1% Other. *See id.* See also Prince, *Megacompany*, *supra* note 8, at 5, 55, which discusses this issue extensively.

57. *See infra* Tables 1-5.

58. *See supra* Figure 2.

- In **2018**, the number of affected participants from the top ten plans is **282,855**, which represented **23%** of the 886 plans we analyzed.
- In **2019**, the number of affected participants from the top ten plans is **303,804**, which represented **over 23%** of the 884 plans we analyzed.
- In **2020**, the number of affected participants from the top ten plans is **329,642**, which represented **nearly 26%** of the 870 plans we analyzed.
- In **2021**, the number of affected participants from the top ten plans is **535,574**, which represented **32%** of the 863 plans we analyzed.
- In **2022**, the number of affected participants from the top ten plans was **635,547**, which represented **nearly 34%** of the 909 plans we analyzed.

TABLE 1. TOP TEN PLANS WITH MOST AFFECTED PARTICIPANTS IN 2022

Plan Name	Affected Participants
Amazon 401(k) Plan	289,820
The Home Depot Futurebuilder	163,990
HCA 401(k) Plan	32,801
Nordstrom 401(k) Plan	30,461
J C Penney Corporation Inc. Safe Harbor 401(k) Savings Plan	29,186
Charter Communications Inc. 401(k) Savings Plan	21,180
Fedex Corporation Retirement Savings Plan	21,120
Costco 401(k) Retirement Plan	15,935
Sodexo 401(k) Employees Retirement Savings Plan and Trust	15,704
The PepsiCo Savings Plan	15,350

TABLE 2. TOP TEN PLANS WITH MOST AFFECTED PARTICIPANTS IN 2021

Plan Name	Affected Participants
Amazon 401(k) Plan	236,751
The Home Depot Futurebuilder	129,766
HCA 401(k) Plan	32,745
J C Penney Corporation Inc. Safe Harbor 401(k) Savings Plan	28,757
Charter Communications Inc. 401(k) Savings Plan	21,501
Pilgrim's Pride Retirement Savings Plan	18,890
Fedex Corporation Retirement Savings Plan	18,389
Nordstrom 401(k) Plan	17,910
Costco 401(k) Retirement Plan	15,828
Sodexo 401(k) Employees Retirement Savings Plan and Trust	15,037

TABLE 3. TOP TEN PLANS WITH MOST AFFECTED PARTICIPANTS IN 2020

Plan Name	Affected Participants
Amazon 401(k) Plan	92,861
The Home Depot Futurebuilder	68,638
J C Penney Corporation Inc. Safe Harbor 401(k) Savings Plan	38,341
NPC International Inc. Profit Sharing Plan	27,831
HCA 401(k) Plan	22,360
Sodexo 401(k) Employees Retirement Savings Plan and Trust	18,206
Pilgrim's Pride Retirement Savings Plan	18,088
Charter Communications Inc. 401(k) Savings Plan	17,395
JBS 401(k) Savings Plan	13,515
Enterprise Holdings Retirement Savings Plan	12,407

TABLE 4. TOP TEN PLANS WITH MOST AFFECTED PARTICIPANTS IN 2019

Plan Name	Affected Participants
The Home Depot Futurebuilder	93,880
J C Penney Corporation Inc. Safe Harbor 401(k) Savings Plan	38,752
NPC International Inc. Profit Sharing Plan	35,064
Amazon 401(k) Plan	34,181
Charter Communications Inc. 401(k) Savings Plan	22,173
Sodexo 401(k) Employees Retirement Savings Plan and Trust	20,729
HCA 401(k) Plan	20,490
Fedex Corporation Retirement Savings Plan	13,181
JBS 401(k) Savings Plan	12,850
Tpusa 401(k) Plan	12,504

TABLE 5. TOP TEN PLANS WITH MOST AFFECTED PARTICIPANTS IN 2018

Plan Name	Affected Participants
The Home Depot Futurebuilder	77,487
NPC International Inc. Profit Sharing Plan	42,824
J C Penney Corporation Inc. Safe Harbor 401(k) Savings Plan	40,910
Amazon 401(k) Plan	26,864
HCA 401(k) Plan	21,202
Sodexo 401(k) Employees Retirement Savings Plan and Trust	19,032
Charter Communications Inc. 401(k) Savings Plan	17,928
Tpusa 401(k) Plan	12,473
JBS 401(k) Savings Plan	12,085
Dollar Tree Retirement Savings Plan	12,050

3. The Trade, Transportation, and Utilities Sector

Plans within the NAICS sector for "Trade, Transportation, and Utilities" account for the largest portion of affected participants. Indeed, within our 2022 group of 909 plans, this sector had the highest number of affected participants by percentage, even when excluding Amazon and Home Depot from the total.[59] We determined it was necessary to view the data both with Amazon and Home Depot[60] and without them[61] for two reasons. First, Amazon is categorized under the "Professional and Business Services" NAICS code. However, the majority of Amazon's turnover likely occurs within jobs that would normally be considered part of the "Trade, Transportation, and Utilities" sector.[62] Second, because the numbers of affected participants in Amazon's and Home Depot's plans are so much higher than those in other companies' plans, the figure excluding them would be illustrative.

Amazon drives the "Professional and Business Services" sector's status as having the second-highest number of affected participants. Including Amazon and Home Depot, "Professional and Business Services" has the second-most affected participants with 27%, and "Manufacturing" comes third with 15%.[63] Excluding them, the "Manufacturing" sector is second with 19%, and "Professional and Business Services" falls to third at 15% (slightly above the "Education and Health Services" sector's 14%).[64]

---

59. *See infra* Figures 4-5.

60. *See infra* Figure 4.

61. *See infra* Figure 5.

62. Michael Sainato, *Amazon Could Run Out of Workers in US in Two Years, Internal Memo Suggests*, GUARDIAN (June 22, 2022, 4:00 PM EDT), https://www.theguardian.com/technology/2022/jun/22/amazon-workers-shortage-leaked-memo-warehouse [https://perma.cc/37YZ-EZAP].

63. *See infra* Figure 4.

64. *See infra* Figure 5.

FIGURE 4. PERCENTAGE OF AFFECTED PARTICIPANTS BY NAICS CODE SECTOR: 2022 (N=909)

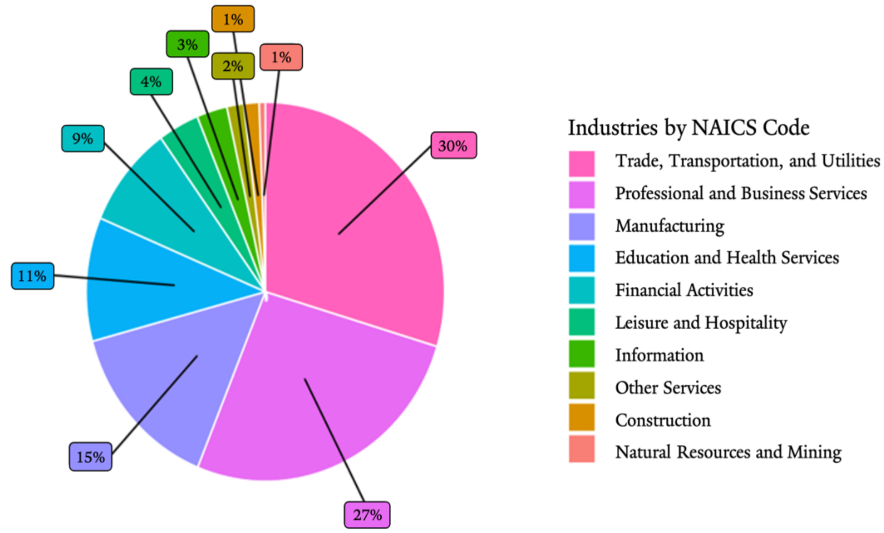
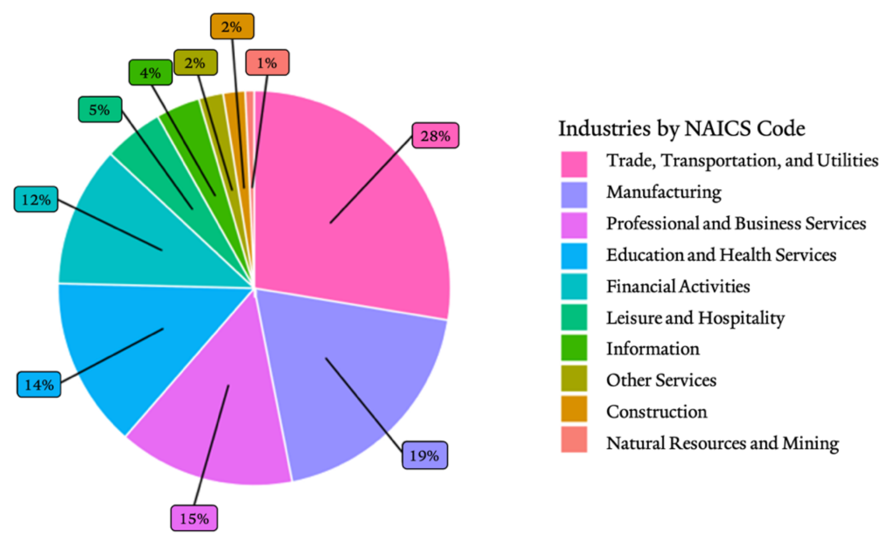


FIGURE 5. PERCENTAGE OF AFFECTED PARTICIPANTS BY NAICS CODE SECTOR EXCLUDING AMAZON AND HOME DEPOT: 2022 (N=907)



B. *Massive Forfeitures: Uses of Forfeited Funds and the Choice of Cliff or Graded Versus Immediate Vesting*

1. *Forfeited Funds Used in 2022*

In our 909-plan group, over $1.5 billion in forfeitures were used in 2022.[65] As noted above, Form 5500 forfeiture disclosures vary. There is no line item for forfeiture information on Form 5500. Instead, forfeiture information is mainly found in Notes to the Financial Statements attached as part of a Form 5500 submission. Therefore, individuals submitting the form have discretion over how forfeiture information is presented. All results presented below are based on our analysis of Form 5500s that provided adequate information both to calculate and to categorize forfeiture use.[66]

Forfeitures can be used in various ways: to offset employer contributions, to offset expenses related to plan administration, to restore or reinstate accounts, or to reallocate to other participants on top of what they would have normally received in employer contributions.[67] We first show forfeitures that were disclosed as being used for offsetting employer contributions. We then show forfeitures that were disclosed as being used for offsetting expenses related to plan administration. Some disclosures combined the forfeiture use into one amount by stating a total amount of forfeitures that were used to offset employer contributions and/or plan expenses. We use the term "unspecified use" where forfeitures were disclosed as an amount but where the category in which amounts were used was not specified.

Our findings show that most forfeitures are used to offset employer contributions.[68] This is true even when Amazon's $102 million is removed from the comparison. The $1,271,882,586 value in Table 6 may actually be an underrepresentation because, as stated above, we do not know how much of the combined or unspecified use amounts was attributable to offsetting employer contributions.

65. *See infra* Table 6. More precisely, $1,537,811,554 represents the minimum amount of forfeitures used in 2022. We observed 123 plans lacking adequately detailed disclosure of forfeiture use in 2022. We therefore removed them from our overall forfeiture analyses. Among the remaining 786 plans providing clear and reliable forfeiture data, 17 included disclosures specifying the amount, but not the category, of forfeitures used in 2022. These 17 plans and their amounts are categorized as "unspecified" in Table 6.

66. Forfeitures used can come from the prior year (and in some cases earlier years). *See infra* note 124 and accompanying text.

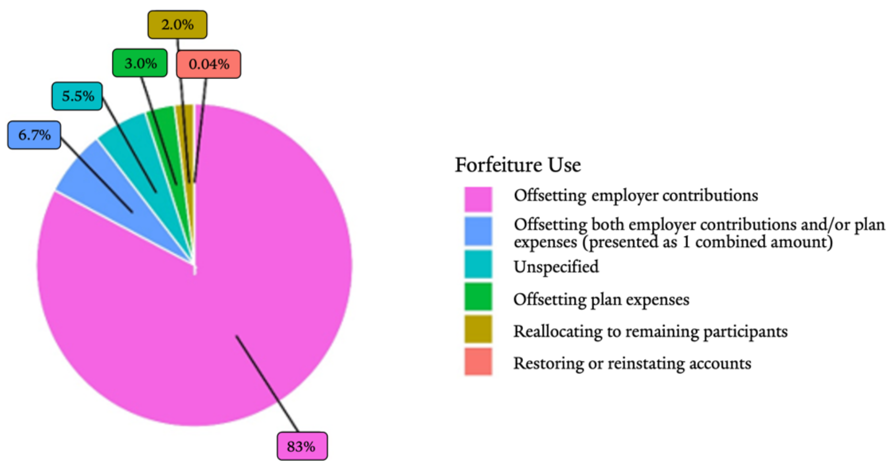
67. *See supra* note 23 and accompanying text.

68. *See infra* Table 6.

TABLE 6. TOTAL NUMBER OF FORFEITURES USED BY CATEGORY IN 2022

How Forfeitures Were Used	Amount
Offsetting employer contributions	$1,271,882,586
Offsetting plan expenses	$46,808,775
Offsetting employer contributions and/or plan expenses (presented as one combined amount)	$102,647,738
Reallocating to remaining participants	$30,608,942
Restoring or reinstating accounts	$615,835
Unspecified Use	$85,247,678
Total	**$1,537,811,554**

FIGURE 6. FORFEITURE USE BY CATEGORY REFLECTED AS PERCENTAGES IN 2022



2. *Vesting and Forfeitures*

The three-year cliff vesting schedule subjects a participant who works fewer than three years to forfeiting all employer contributions.[69] As such, one would

69. *See* Home Depot, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (July 31, 2023) (noting that "[f]or vesting purposes, a year of service is any calendar year in which a participant completes at least 1,000 hours of service" and "[a] participant is [100% vested] in the Company's matching contributions after three years of vesting service"). Some plans

hypothesize that plans with the most forfeiture amounts would use the three-year cliff schedule. We found that the majority of the top ten plans (six out of ten) with the highest amounts of forfeitures used three-year cliff schedules, *but not all did*.[70]

For example, HCA Healthcare uses a six-year graded schedule, yet it used $44.6 million in forfeited money to offset its obligations.[71] Providence Health & Services' 401(k) plan merged with several other plans in 2021 and 2022.[72] These merged plans have retained their various vesting schedules; some are five-year graded and some are immediate. Providence's 401(k) plan used $63.6 million in forfeitures in 2022, but it did not disclose how it used them or their origin.[73]

The total amount of forfeitures used in 2022 for the top ten plans was more than $365 million.[74] However, the plans with the most forfeitures used are not always the ones with the highest number of affected participants.[75] Only four of the top ten plans with the highest number of affected participants are in the top ten of forfeiture dollar amounts.[76] For example, Home Depot's plan had 163,990 affected participants in 2022 but did not make the top ten with the $7.3 million in forfeitures it used to offset its contribution obligation.[77]

There are several possible reasons for the apparent disconnect between the plans with the highest forfeiture and those with the highest number of affected participants. One reason could be a plan's ability to use forfeitures in the next year. Companies may be carrying forward forfeited money into the next year, rather than using it for the year in which it was generated. Another reason could be the amount of employer contributions and how they are calculated. Some plans match at a lower rate and therefore have less of an employer contribution obligation. And lower paid participants are likely deferring less as well yielding lower matching contributions. While these potential explanations are plausible, there does not appear to be a singular explanation for this phenomenon.

---

require that a participant be employed on the last day of year three and 1,000 hours of service. Prince, *Megacompany*, *supra* note 8, at 44. This means someone who terminated employment just before the end of the year would lose all three years' worth of employer contributions, assuming they immediately participated in the plan upon being employed.

70. *See infra* Table 7.

71. HCA Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 13, 2023). The exact amount used to offset obligations was $44,583,945.

72. Providence Health & Services, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 16, 2023).

73. The exact amount used was $63,604,261. *Id.*

74. The precise, computed number was $365,375,662. *See infra* Table 7.

75. *See infra* Table 7.

76. *See supra* Table 1 and *infra* Table 7.

77. *Id.*

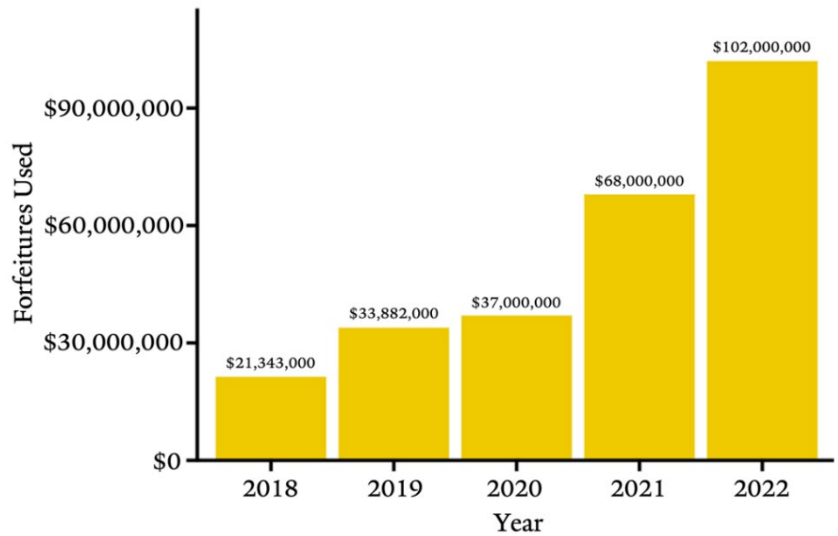
TABLE 7. TOP TEN PLANS BASED ON FORFEITURE USE IN 2022

Plan Name	Vesting Schedule	Forfeiture Amount	How Forfeitures Were Used
Amazon 401(k) Plan	Three-year cliff	$102,000,000	Offsetting employer contributions
401(k) Savings Plan (Providence Health & Services)	Five-year graded	$63,604,261	Unspecified
HCA 401K Plan	Six-year graded	$44,583,945	Offsetting employer contributions
Charter Communications Inc. 401(k) Savings Plan	Three-year cliff	$44,400,000	Offsetting employer contributions
Enterprise Holdings Retirement Savings Plan	Six-year graded	$22,468,818	Reallocating to remaining participants
Verizon Savings Plan for Management Employees	Three-year cliff	$18,900,000	Offsetting employer contributions and plan expenses
Northrop Grumman Savings Plan	Three-year cliff	$18,900,000	Offsetting employer contributions
Fidelity Retirement Savings Plan	Six-year graded	$17,405,947	Offsetting employer contributions
Automatic Data Processing Inc. Retirement and Savings Plan	Three-year cliff	$17,112,691	Offsetting employer contributions and plan expenses
The PepsiCo Savings Plan	Three-year cliff	$16,000,000	Offsetting employer contributions

TABLE 8. TOP TEN PLANS THAT USED FORFEITURES TO OFFSET EMPLOYER CONTRIBUTIONS IN 2022

Plan Name	Vesting Schedule	Forfeitures Used to Offset Employee Contributions
Amazon 401(k) Plan	Three-year cliff	$102,000,000
HCA 401(k) Plan	Six-year graded	$44,583,945
Charter Communications Inc. 401(k) Savings Plan	Three-year cliff	$44,400,000
Northrop Grumman Savings Plan	Three-year cliff	$18,900,000
Fidelity Retirement Savings Plan	Six-year graded	$17,405,947
Automatic Data Processing Inc. Retirement and Savings Plan	Three-year cliff	$16,225,751
The PepsiCo Savings Plan	Three-year cliff	$16,000,000
Medtronic Savings and Investment Plan	Three-year cliff	$15,647,000
CommonSpirit Health 401(k) Retirement Savings Plan	Three-year cliff	$15,371,840
USAA Retirement Savings Plan	Six-year graded	$15,051,000

FIGURE 7. ANNUAL FORFEITURES USED BY AMAZON'S 401(K) PLAN TO OFFSET MATCHING CONTRIBUTIONS



3. *Use of Cliff or Graded Versus Immediate Vesting Among Industry Competitors*

Companies whose plans use vesting schedules often have close industry competitors whose plans use immediate vesting. Not all large or high-turnover companies' 401(k) plans use a vesting schedule. We found industry-competitor plans that immediately vested their matching contributions rather than using a vesting schedule.[78] As already shown, companies whose 401(k) plans use vesting schedules directly benefit from the use of compensation forfeited by affected participants. The tables below show a sampling of 401(k) plans that use vesting schedules – and therefore had affected participants – compared to competitor-company plans that do not use a vesting schedule (i.e., whose employer contributions immediately vest).[79] The plans that use vesting schedules also used

---

78. *See infra* Tables 9-10. The plans with immediate vesting did not come from our original dataset; we sought them out and analyzed their Form 5500s. Competitor pairings were made based upon vesting schedule use versus immediate vesting, comparable service offerings, and total number of participants. These plans have other provisions or characteristics that may differ, but this Essay's primary focus was the number of people being negatively affected and the large amounts of money they lost.

79. Companies and their corresponding plans were paired together based upon service offerings. As such, their NAICS codes as reflected on their Form 5500 may not match. Companies often forfeitures to offset their employer contribution obligations in 2022. The comparisons discussed below are just a few of the many examples shown in Tables 9-10.

As noted throughout this Essay, Amazon's 401(k) plan uses a three-year cliff vesting schedule and had the highest number of affected participants and forfeitures used in 2022.[80] We offer a comparison to Walmart's plan, which uses immediate vesting for matching contributions and had a higher number of participants.[81] In addition to matching, Walmart's 401(k) plan offers additional profit-sharing contributions, and those contributions are subject to a six-year graded vesting schedule, which is why its plan had a small number of affected participants.[82]

Home Depot's 401(k) plan uses a three-year cliff vesting schedule and had the second highest number of affected participants in 2022.[83] Home Depot's most direct competitor is Lowe's, and the Lowe's 401(k) plan provides for immediate vesting.[84] While the Home Depot plan's used-forfeiture amount did not make it into the top ten, $7.3 million is quite significant.

We also compared the plans of aerospace defense contractors Northrup Grumman and Lockheed Martin.[85] Northrup Grumman's 401(k) plan had $18.9 million in forfeitures, while Lockheed Martin's plan had none because it does not use a vesting schedule.[86] Notably, the Lowe's and Lockheed Martin plans have fewer participants than their competitors' plans,[87] yet their plans are better for workers from a retirement planning perspective.

have several NAICS codes, and the dataset provided by the Department of Labor identified only one NAICS code per company. Companies that are direct competitors were therefore observed to have different NAICS codes, prompting our organization of competitors by service offering over NAICS codes.

80. *See supra* Tables 1, 7; Amazon.com Services, LLC, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 5, 2023).

81. *See infra* Table 9.

82. Walmart, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Sept. 20, 2023).

83. *See supra* Table 1 and *infra* Table 9; *see also* Home Depot, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (July 31, 2023) ("A participant is cliff vested 100% in the Company's matching contributions after three years of vesting service.").

84. *See infra* Table 9; Lowe's Companies Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (June 27, 2023).

85. Lockheed Martin Corporation, Annual Return/Report of Employee Benefit Plan (Form 5500) (July 27, 2023); Northrop Grumman Corporation, Annual Return/Report of Employee Benefit Plan (Form 5500) (June 20, 2023).

86. *See infra* Table 10.

87. *Id.*

Finally, we compared the Trader Joe's 401(k) plan to the Whole Foods 401(k) plan. The Trader Joe's 401(k) plan had 15,155 affected participants and over $7 million in used forfeitures.[88] It has significantly fewer participants than competitor Whole Foods's plan, and Whole Foods's plan provides immediate vesting.[89]

Employees have choices on where to work, and factors that influence decision making on where to work are varied. Employees with the same relevant skillset could likely work at either of the competing companies presented in Tables 9-10. If the best retirement plan is important to the employee, they should consider which plans enable them to take advantage of maximized employer contributions. An important aspect of actually receiving employer contributions is knowing whether a plan has a vesting schedule that has to be satisfied. The below table presents numerous companies and their direct competitors to showcase that many employees across industries have an opportunity to benefit from employer contributions regardless of their tenure, and that companies can be successful despite forgoing the ability to recycle forfeitures by using immediate vesting in their 401(k) plans.

88. *See infra* Table 9.

89. *Id.* Whole Foods is owned by Amazon. Katie Tarasov, *Amazon Bought Whole Foods Five Years Ago for $13.7 Billion. Here's What's Changed at the High-End Grocer*, CNBC (Aug. 25, 2022), https://www.cnbc.com/2022/08/25/how-whole-foods-has-changed-in-the-five-years-since-amazon-took-over.html [https://perma.cc/377Y-KQST]. While not important for our analysis, the Whole Foods plan's offering of immediate vesting alludes to Amazon's ability to offer immediate vesting. However, tellingly, immediate vesting is available only to employees of Amazon's subsidiaries, not to employees of Amazon itself.

TABLE 9. COMPANY COMPETITORS: VESTING SCHEDULE USE VERSUS IMMEDIATE VESTING IN RETAIL

Plan Name	Number of Participants in Plan (EOY)	Vesting Schedule	Number of Affected Participants	Forfeitures Used to Offset Employer Contributions
Amazon 401(k) Plan	1,103,349	Three-year cliff	**289,820**	$102,000,000
Walmart 401(k) Plan	1,611,202	Immediate	284	Not Specified
The Home Depot Futurebuilder	413,365	Three-year cliff	**163,990**	$7,300,000
Lowe's 401(k) Plan	275,854	Immediate	0	Immaterial
Trader Joe's Company Retirement Plan	53,296	Six-year graded	**15,155**	$7,459,845
Whole Foods Market Growing Your Future 401(k) Plan	100,700	Immediate	0	$0
The TJX Companies, Inc. General Savings/Profit Sharing Plan	108,909	Four-year graded	**13,177**	$3,319,000
Ross Stores, Inc. 401(k) Savings Plan	50,399	Immediate	0	$0
Ashley Furniture Industries, LLC Profit Sharing 401(k) Plan	16,968	Six-year graded	**5,522**	$2,428,679
Wayfair LLC 401(k) Plan & Trust	14,049	Immediate	0	$0

TABLE 10. COMPANY COMPETITORS: VESTING SCHEDULE USE VERSUS IMMEDIATE VESTING IN MANUFACTURING, TECHNOLOGY SERVICES, AND FINANCIAL SERVICES

Plan Name	Number of Participants in Plan (EOY)	Vesting Schedule	Number of Affected Participants	Forfeitures Used to Offset Employer Contributions
Manufacturing				
JBS 401(k) Savings Plan	36,043	Six-year graded	**14,124**	$937,762
Tyson Foods, Inc. Retirement Savings Plan	113,806	Immediate	1	$0
Northrop Grumman Savings Plan	97,987	Three-year cliff	**3,917**	$18,900,000
Lockheed Martin Corporation Salaried Savings Plan	90,679	Immediate	0	$0
Technology Services				
Oracle Corporation 401(k) Savings and Investment Plan	63,105	Four-year graded	**3,882**	$5,500,000
Microsoft Corporation Savings Plus 401(k) Plan	123,296	Immediate	0	$0
Automatic Data Processing Inc. Retirement and Savings Plan	33,407	Three-year cliff	**954**	$16,225,751
Workday, Inc. 401(k) Plan	11,805	Immediate	0	$0
Financial Services				
JPMorgan Chase 401(k) Savings Plan	176,168	Three-year cliff	**2,175**	$12,952,282
U.S. Bank 401(k) Savings Plan	68,145	Immediate	0	$0
BlackRock Retirement Savings Plan	9,268	Three-year cliff	**393**	$2,200,000
Edward D. Jones & Co. Profit Sharing and 401(k) Plan	49,944	Immediate	0	$0

C. *The Trend Toward Vesting Schedules*

1. *Financial Services Companies and Vesting Schedules*

Financial companies with the largest number of assets under management commonly offer services that assist other employers in forming, amending, and administering their own 401(k) plans. We found that a few of the 401(k) plans for the largest asset management companies in the United States used immediate vesting, but a majority utilized vesting schedules.[90]

Five of the seven plans with vesting schedules identified in Table 11 used three-year cliff. Goldman Sachs's plan now uses a two-year cliff after abandoning its immediate vesting in 2022.[91] The PNC Financial Services Group's 401(k) plan—despite having a lower number of plan participants compared to the plans of Bank of America, JP Morgan, and Fidelity Investments—had the highest number of affected participants at 3,370.[92] U.S. Bancorp's plan, with 6,448 more plan participants than the PNC Financial Services Group's plan, used immediate vesting.[93]

Fidelity Investments's and JP Morgan's 401(k) plans had the highest amounts of forfeitures used to offset employer contributions at over $17.4 million and nearly $13.0 million, respectively.[94] Unfortunately, we cannot report comparable information relative to the plans for PNC Financial Services Group, Bank of America, and Goldman Sachs since they all neglected to disclose the amount of forfeitures they used to offset employer contributions.[95]

The Vanguard Retirement and Savings Plan and the Citi Retirement Savings Plan both use immediate vesting for matching contributions but had affected

90. *See infra* Table 11. Table 11 does not provide an exhaustive list of financial services companies but rather a subset that includes plan administrators and those that offer services to help companies establish plans.

91. *See infra* Table 12.

92. *See infra* Table 11.

93. *Id.*

94. *See supra* Tables 7, 10.

95. The ability of plans to report information insufficiently is one reason why we advocate for line-item disclosure. *See infra* Section IV.B; *see also* PNC Financial Services Group, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 13, 2023) (noting that "[p]lan forfeitures are used to either reduce administrative expenses of the [p]lan or employer matching contributions" though not specifying how forfeitures for 2022 were specifically used); Bank of America Corporation, Annual Return/Report of Employee Benefit Plan (Form 5500) (July 28, 2023) (failing to indicate how forfeitures were used, only reporting "actual cash remitted by the Corporation" after the consideration of forfeitures); Goldman Sachs Group, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 10, 2023) (failing to discuss the use of forfeited funds).

participants due to other contributions being subject to vesting schedules.[96] Vanguard's 401(k) plan had 2,290 affected participants who forfeited nearly $10 million in "[r]etirement [p]lan [c]ontributions," which are made by Vanguard in addition to immediately vested matching contributions but are subject to a six-year graded schedule.[97] Citi's 401(k) plan had 695 affected participants who forfeited "fixed and transition contributions" made on their behalf due to the use of a three-year cliff schedule.[98]

TABLE 11. VESTING SCHEDULE USE IN THE FINANCIAL SECTOR

Plan Name	Number of Participants in Plan (EOY)	Vesting Schedule	Number of Affected Participants	Forfeitures Used to Offset Employer Contributions
The PNC Financial Services Group, Inc. Incentive Savings Plan	61,697	Three-year cliff	**3,370**	Not Specified
The Bank of America 401(k) Plan	173,899	Three-year cliff	**3,242**	Not Specified
The Vanguard Retirement and Savings Plan	18,200	Immediate	**2,290**	$9,799,947
JPMorgan Chase 401(k) Savings Plan	176,168	Three-year cliff	**2,175**	$12,952,282
Fidelity Retirement Savings Plan	62,289	Five-year graded	**1,394**	$17,405,947
Morgan Stanley 401(k) Plan	51,602	Three-year cliff	**1,394**	$6,697,206
Citi Retirement Savings Plan	78,295	Immediate	**695**	$421,712
BlackRock Retirement Savings Plan	9,268	Three-year cliff	**393**	$2,200,000
The Goldman Sachs 401(k) Plan	24,866	Two-year cliff	**189**	Not Specified
SchwabPlan Retirement Savings and Investment Plan	33,913	Immediate	**6**	Not Material
Truist Financial Corporation 401(k) Savings Plan	55,480	Immediate	**0**	$1,879
U.S. Bank 401(k) Savings Plan	68,145	Immediate	**0**	$0

96. *See supra* Table 11.

97. *Id.*; Vanguard Group, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 5, 2023).

98. *See infra* Table 11; Citigroup Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (July 22, 2023).

2. *Changes from Immediate Vesting to Vesting Schedules*

We found that several companies recently amended plan provisions to use a vesting schedule, thereby making it more difficult for participants to accumulate retirement wealth. Table 12's list is not exhaustive but rather displays plans that we either came across in our dataset or found when analyzing Form 5500s for other reasons.

TABLE 12. 401(K) PLANS THAT RECENTLY CHANGED FROM IMMEDIATE VESTING TO A VESTING SCHEDULE

Plan Name	Year Switch from Immediate Vesting to Vesting Schedule Became Effective	Current Vesting Schedule
CommonSpirit Health 401(k) Retirement Savings Plan	2014	Three-year cliff
DaVita Retirement Savings Plan	2018	Four-year graded
Cognizant Technology Solutions 401(k) Savings Plan	2021	Five-year graded
Wells Fargo & Company 401(k) Plan	2021	Three-year cliff
The Goldman Sachs 401(k) Plan	2022	Two-year cliff

IV. IMPLICATIONS AND RECOMMENDATIONS FROM OUR DATA

A. *Implications for American Workers' Retirement Plans*

Economic topics such as interest rates, inflation, and job reports have recently become the subject of intense reporting.[99] While the inadequacy of

99. *See, e.g.*, Scott Horsley, *Wages, Employment, Inflation Are Up, Causing Headaches for the Fed*, NPR (Apr. 30, 2024, 2:57 PM ET), https://www.npr.org/2024/04/30/1247891312/economy-federal-reserve-inflation-interest-rates [https://perma.cc/FQ8D-39EY]; Eva Rothenberg, *Inflation, Jobs and Labor: The Economy a New Democratic Nominee Will Face*, CNN (July 22, 2024, 5:00 AM EDT), https://www.cnn.com/2024/07/22/economy/democratic-nominee-2024-economy/index.html [https://perma.cc/K63T-4U6T]; Christopher Rugaber, *Sluggish US Jobs Report Clears the Way for Federal Reserve to Cut Interest Rates*, AP (September 6, 2024, 5:20 PM EDT), https://apnews.com/article/jobs-hiring-federal-reserve-inflation-unemployment-economy-bac1b453d3873d5f23f2061344d28fd9 [https://perma.cc/2ZWN-LZ47].

retirement savings is not usually covered with the same fervor, it is a salient issue for the American worker.[100] We have sought to show how vesting schedules—which often are not even part of the conversation—exacerbate retirement insecurity for many.

In just the 909 plans we analyzed for the 2022 plan year, over 1.8 million people ceased employment prior to being fully vested in their employer contributions.[101] Other years have large numbers of affected participants, too.[102] Even given the low number of plans we analyzed, the data indicated that there were well over 1.2 million affected participants in each year since 2018, and the numbers have been increasing over time.[103]

Equally troublesome is the amount of money involved, with over $1.5 billion in forfeitures used by these 909 plans in 2022.[104] Over $1.2 billion of these forfeitures were used to offset employer contributions alone.[105] The total amount of forfeitures used in 2022 just for the top ten plans based on forfeiture use was over $365 million.[106]

Amazon's 401(k) plan leads the pack when it comes to the most affected participants and forfeitures used in 2022.[107] The reason for Amazon's first-place status is not that it had the most employees or even the most plan participants. Its direct competitor, Walmart, had more employees and more plan participants.[108] Despite Amazon and Walmart reigning as the two top employers in the country,

---

100. Nicole Goodkind, *Retirement Crisis Looms as Americans Struggle to Save*, CNN (Apr. 2, 2024), https://www.cnn.com/2024/04/02/economy/americans-struggle-to-save-as-retirement-crisis-looms [https://perma.cc/BLJ7-GBPZ]; Fink, *supra* note 35 ("America needs an organized, high-level effort to ensure that future generations can live out their final years with dignity.").

101. *See supra* Figure 1.

102. *Id.*

103. *Id.*

104. *See supra* Table 6 and Section III.B.1. Remember this number is solely based on our survey of 909 plans. An analysis outside of our 909 plans would lead to a higher amount for 2022. Looking ahead, given the trends indicating that affected participants are increasing annually, we anticipate that forfeitures will also increase over time.

105. *See supra* Table 6.

106. *See supra* Table 7.

107. *See supra* Tables 1, 7.

108. *See About*, WALMART U.S., https://corporate.walmart.com/about [https://perma.cc/7PTN-7PN9] (noting that Walmart currently employs "nearly 1.6 million [associates] in the U.S. alone"); Amazon.com Inc., *U.S. Equal Employment Opportunity Commission (EEOC) 2022 Employer Information Report (EEO-1 Component 1)*, EEOC (2022), https://assets.aboutamazon.com/9a/b0/8adc6b044b899fc826d4e35bda2d/2022-ee01-amazon.pdf [https://perma.cc/2VTP-JRRD] (indicating that, for the "workforce snapshot period" of October 2022, Amazon employed 1,099,439 total employees).

their 401(k) plans are vastly different: Amazon's plan uses a three-year cliff schedule while Walmart's plan uses immediate vesting. Participants in Amazon's 401(k) plan do not have the same benefits as those who participate in Walmart's 401(k) plan, and vesting schedules are a prime example. Amazon's plan uses the three-year cliff schedule with full knowledge that the average tenure of Amazon warehouse employees is just one year.[109] This pairing produces large volumes of forfeitures that the Amazon plan recycles to offset its plan contribution obligations.[110] Our data show that Amazon's 401(k) plan has had the most affected participants in each of the past three years and had the highest amount of forfeitures used in 2022—the only year for which we analyzed data concerning forfeiture use.[111]

We also conducted a close examination of the financial services sector because, in our opinion and experience, (1) companies in this sector manage large sums of money that emanate from 401(k) plans; (2) many asset managers also operate as third-party administrators and advisors for their clients' 401(k) plans; and (3) these companies employ the leading financial experts in the country, if not the world.[112] We observed that a majority of plans belonging to financial sector companies used vesting schedules for matching contributions—predominantly a three-year cliff.[113] However, some plans, like Vanguard's and Citi's, have immediate vesting for matching contributions and only use a vesting schedule for other employer contributions they make.[114] Further, Bancorp's 401(k) plan has immediate vesting for all forms of employer contributions, despite having

109. *The Least Loyal Employees*, PAYSCALE (2021), https://www.payscale.com/data-packages/employee-loyalty/least-loyal-employees [https://perma.cc/KJK8-W2UF].

110. *See* Prince, *Megacompany*, *supra* note 8, at 18-21.

111. Amazon's 401(k) plan had affected participants totaling 92,861 (in plan year 2020), 236,751 (2021), and 289,820 (2022). These numbers represent a 212% increase in affected participants in just three years. The plan used $102 million in forfeitures to offset company contributions in 2022 alone. *See* Amazon.com Services, LLC, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 8, 2021); Amazon.com Services, LLC, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 6, 2022); Amazon.com Services, LLC, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 5, 2023).

112. *See generally Profiles of the Largest 401(k) Managers*, INVESTMENTNEWS (Dec. 17, 2007), https://www.investmentnews.com/industry-news/news/profiles-of-the-largest-401k-managers-12871 [https://perma.cc/9MX3-MW4J] (listing the profiles of the largest 401(k) managers in the United States).

113. *See supra* Table 11.

114. Vanguard Group, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 5, 2023); Citigroup, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (July 22, 2023).

more plan participants than many of its schedule-using counterparts.[115] Notably, Fidelity's plan uses a five-year graded schedule that generated over $17 million in forfeitures in 2022 that it used to offset employer contributions.[116]

How does this all play out for the American worker? No matter how one slices it, the numbers are alarming. While a 401(k) plan is typically touted as a significant employee "benefit" with monetary value arising from employer contributions, if a plan uses a vesting schedule and the worker ceases employment for whatever reason prior to fully vesting, the plan's value to the worker can be significantly diminished. Our data illustrate that vesting schedules lead to astronomical amounts of forfeited funds. Each dollar of forfeitures represents money that could have been in the hands of workers who likely thought they were benefiting from employer contributions to their 401(k) plan and who could use that money for retirement.

Finally, our data indicate that financial services companies could set better examples by switching to immediate vesting rather than contributing to the retirement-insecurity problem. They could also use their positions as financial advisors to encourage their clients to cease using vesting schedules.

B. Recommendations for Improving Form 5500 Disclosures

Our ability to make certain and additional conclusions was limited by the deficient data disclosure permitted in Form 5500's current iteration.[117] Our research was ultimately conducted to show that the pervasive use of vesting schedules exacerbates retirement insecurity through the forfeiture of immense amounts of employee compensation. Metrics we sought to achieve for the 2022 plan year included (1) the exact number of forfeitures incurred and reused; (2) exact numbers for how these forfeitures were repurposed based on permissible IRS uses; and (3) accurate representations for the percentage of costs offset by forfeitures. Our results, especially the finding that over $1.5 billion of forfeitures were used to offset costs in 2022, definitively display that immense amounts of employee compensation are lost by participants as a direct result of vesting

115. U.S. Bancorp, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 6, 2023). *See generally supra* Table 11 (showing that the U.S. Bank 401(k) Plan, despite having immediate vesting, has more plan participants than the following plans, which utilize vesting schedules: Blackrock; PNC Financial Services Group; Fidelity; Morgan Stanley; and Goldman Sachs).

116. *See supra* Table 11.

117. *See Instructions for Form 5500: Annual Return/Report of Employee Benefit Plan*, U.S. DEP'T TREASURY, U.S. DEP'T LAB., PENSION BENEFIT GUAR. CORP. 18 (2022), https://www.dol.gov/sites/dolgov/files/EBSA/employers-and-advisers/plan-administration-and-compliance/reporting-and-filing/form-5500/2022-instructions.pdf [https://perma.cc/A7WN-HJ87].

schedules. However, because our data could only generate a reliable variation of our intended metrics and because we only analyzed 909 plans, the findings we display are limited to representing minimum values. The exact number of forfeitures used to offset costs in 2022—a metric our research could not wholly achieve—should be understood to be even higher than the staggering numbers we have already generated.

1. *Limitations of Current Form 5500's Line Item 6(h)*

We first observed that Form 5500's line item 6(h), while helpful in some respects, limited our research results. The current strength in line 6(h) is that, for a given plan year, it effectively reports the number of participants that terminated employment with accrued benefits less than 100% vested.[118] However, the line item does not allow for differentiation between accrued benefits such as employer matching, profit sharing, and other contributions. Differentiation can be significant with accrued benefits because benefits such as matching contributions are tied to salary deferrals, which means those who can afford to save less get less in employer contributions. We found that some plans only provide matching contributions, whereas some offer several types of contributions. We also found many instances of plans with more than one type of contribution using different vesting schedules for each type of contribution. This was true with Walmart's 401(k) plan, which offers immediately vested matching but uses a six-year graded schedule for its profit-sharing contributions.[119]

Additionally, the number of affected participants identified by 6(h) cannot be directly tied to the amount of forfeitures for any given year. This is because forfeitures can be used across multiple years; that is, forfeitures from a prior year can be used the following year.[120] And because Form 5500 does not mandate

118. Save for the limitation mentioned above. *See supra* note 40.

119. *See* Walmart, Inc., Annual Return/Report of Employee Benefit Plan (Form 5500) (Sept. 20, 2023).

120. Currently, forfeitures must be reallocated in the plan year that the forfeiture occurs; they are generally not allowed to be carried forward. *See* Rev. Rul. 80-155, 1980-1 C.B. 84; Rev. Rul. 84-156, 1984-2 C.B. 97. There is an exception that allows forfeitures to carry over to the next plan year if forfeitures are used to reduce plan expenses or as employer contributions. *See* Prince, *Megacompany*, *supra* note 8, at 18. But some plans were interpreting the rules differently and not using their forfeitures within the time set forth in the revenue rulings. Therefore, in 2023, the IRS issued proposed regulations that would specify deadlines for the use of forfeitures in defined contributions plans. If codified, the regulations would permit defined contribution plans to use forfeitures no later than twelve months after the close of the plan year in which the forfeitures are incurred. *See* Use of Forfeitures in Qualified Retirement Plans, Prop. Treas. Reg. § 1.401–7, 88 Fed. Reg. 12282, 12282-85 (Feb. 27, 2023) (to be codified at I.R.C. pt. 1).

disclosure as to how much money was forfeited in the plan year for which line 6(h) is reported, we could not provide a conclusion as to how much money affected participants in a given plan year forfeited during that same plan year. We also could not distinguish how much of the forfeitures reported was attributable to originally employer-contributed funds or investment growth on those funds.[121]

2. *Benefits of Adding Line Items for Forfeitures, Vesting Schedules, and Demographic Data*

In addition to data-entry line items, Form 5500 requires attached textual disclosures, such as "Notes to the Financial Statements" wherein lies a "plan description." Unfortunately, there are no line items for forfeitures or vesting schedules. Form 5500's lack of line items for forfeitures and vesting schedules limited the research results that we could generate because such information is relegated to the Notes to the Financial Statements, in the plan description section.[122] Therefore, plan sponsors are afforded wide discretion in choosing the verbiage describing their forfeiture and vesting schedule information as well as the specificity of the reported information. Uniformity that could be achieved through the line-item structure is largely absent and leads to inadequate disclosure.

For example, some disclosures only cited plan provisions that detailed how forfeitures *could* be used, while others provided a detailed breakdown of how

---

121. Some plans were observed to invest forfeited funds before applying them. For example, the Chesterman Company 401(k) Profit Sharing Plan reported $1,366 of earnings resulting from forfeiture investment in 2022. However, the vast majority of forfeiture disclosures that were analyzed did not specify whether the presented forfeiture amounts included or excluded investment earnings. Chesterman Company, Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 13, 2023).

122. Within the 2022 instructions for Form 5500, the IRS requires adherence to various regulations, standards, and statutes when preparing the Notes to the Financial Statements. *See Instructions for Form 5500*, *supra* note 117, at 38 (citing several Department of Labor regulations, section 103(a)(3)(A) of ERISA, and the Auditing Standards Board's Statement on Auditing Standards (SAS) 136). Among these regulations, standards, and statutes, we have found that SAS 136 is likely what people are using as a guideline. *See* FORMING AN OP. & REPORTING ON FIN. STATEMENTS OF EMP. BENEFITS SUBJECT TO ERISA, Statement on Auditing Standards No. 136, ¶¶ 127-35 (AM. INST. OF CERTIFIED PUB. ACCTS. 2019) (outlining an auditor's responsibilities when reporting on ERISA-required supplemental schedules). Within SAS 136, forfeitures are categorized as "typical plan provisions." *See id.* § A26. SAS 136 also categorizes forfeitures as provisions included under the "Individual Participant Accounts" and "Contributions and Contributions Receivable" audit areas. *See id.* § A153. However, these guidelines fail to outline explicit requirements for the disclosure of forfeitures. *See id.* §§ A26, A153.

forfeitures were *actually* used.[123] Similarly, some disclosures revealed the number of years until a plan participant would be fully vested in contributions but omitted the vesting gradation throughout that time period.[124] These types of disclosures made it difficult to compare and get a large-scale view of the problem. Forfeitures and vesting schedules are two critical components of a 401(k) plan, and consistent reporting is necessary for producing sufficient disclosure information.

We propose that the ideal disclosure for forfeitures would be achieved by disaggregating information and creating uniformity.[125] This would be accomplished by adding the following line items to Form 5500:

- (1) the total number of forfeitures available for plan use on the first day of a given plan year;
- (2) the total number of contributions forfeited by affected participants in a given plan year;
- (3) the total number of additional funds created in a given plan year through the placement of forfeitures into investment accounts;[126]
- (4) the total number of forfeitures used to offset costs for each allowable use by the IRC;
- (5) the total number of forfeitures used in the current plan year to offset costs for a previous plan year; and
- (6) the total number of remaining and unused forfeitures existing on the last day of a given plan year.

---

123. *Compare* Freedom Mortgage 401k Plan, Annual Return/Report of Employee Benefit Plan (Form 5500) (Dec. 29, 2023) (specifying the amount of forfeited funds that were used to reduce company matching contributions ($1,654,692) and administrative expenses ($35,437)), *with* Kraft Heinz Savings Plan, Annual Return/Report of Employee Benefit Plan (Form 5500) (Aug. 30, 2023) (noting only that "[f]orfeitures may be used to restore forfeited amounts to other participants, offset Kraft Heinz Matching Contributions and Kraft Heinz Non-Elective Contributions, and pay certain expenses").

124. *See, e.g.*, Cognizant Tech. Sol., Annual Return/Report of Employee Benefit Plan (Form 5500) (Oct. 12, 2023).

125. Clearer, uniform disclosure also benefits other stakeholders. For example, consumers and investors consider human capital management important when they choose who to buy from or invest in. Employee benefits such as 401(k) plans and their distinct features per company could directly impact these stakeholders' decisions. *See* Samantha J. Prince, *Benefits Transparency*, 108 MARQ. L. REV. (forthcoming 2024) (manuscript at 20-23), https://ssrn.com/abstract=4784385 [https://perma.cc/2TAL-EPGM].

126. We seek a line item for additional funds created through the placement of forfeitures into investment accounts because these additional funds can provide a significant benefit to plans and plan sponsors. The additional funds not only allow an employer to offset more of its contribution obligations but also are the result of tax-exempt investment growth.

These proposed line items would yield data points that could be used to produce even more accurate, nuanced, and insightful conclusions about forfeitures created by vesting schedules. They would also provide key data points that would be easier to extract.[127] Federal agencies, Congress, and those in the private sector doing research would find such information useful.

Our research, which was somewhat limited to reflecting minimum values, would be more in-depth if we had the ability to discern exact amounts of forfeitures created and used, which would lead to the generation of solidified results. With increased disclosure uniformity, we would also be readily able to compare changes in forfeiture numbers across plan years. And the disclosure uniformity would create the opportunity to present a more accurate representation of the extent to which forfeitures continue to benefit employers at the expense of plan participants. Deeper analysis could show when and how plans use their forfeitures, how many additional funds are created by the investment of retained forfeitures, and the percentage of employer contributions that were offset by forfeitures in a given plan year. Such conclusions would produce a more intricate assessment of the disparities between the benefits employers receive and the benefits affected participants sacrifice as a direct result of pervasive vesting schedule use.

Further, Form 5500 and line 6(h) lack demographic data, which impedes our ability to see which groups—based on race, ethnicity, gender, disability, income, veteran status, and so on—are forfeiting the most funds due to vesting schedules.[128] Access to such information could be instrumental in understanding the impact of vesting schedules on groups and could help explain why certain groups have greater retirement insecurity than others.[129]

CONCLUSION

Based on our findings, serious consideration should be given to disallowing—not just shortening—vesting schedules. The use of vesting schedules is pervasive, and as shown throughout this Essay, their use exacerbates the retirement insecurity of so many people. Ultimately, lower retirement savings stemming from vesting schedule use negatively impact affected participants, their families, and taxpayers. Pursuing legislative action to eliminate vesting schedules is both

---

127. Compiling data on plan vesting schedules and forfeitures is labor intensive given the lack of line-item disclosure. Vesting schedule and forfeiture information must be manually extracted and often requires judgment to interpret the intended meaning of disclosure language properly. In addition, some Form 5500s are scanned versions and unsearchable, which makes data location and extraction even more burdensome.

128. Prince, *Megacompany*, *supra* note 8, at 49.

129. *Id.* at 46-51.

feasible and realistic. Despite increasing political polarization and gridlock in Washington, legislation focused on retirement savings has historically enjoyed bipartisan support from Congress.[130]

Retirement plans are complicated. Vesting schedules are complicated. Plans can have various or multiple vesting schedules based on different types of employer contributions. It is unrealistic to expect workers of varying financial savviness to understand the different types of plans, contributions, and vesting schedules.[131] Yet the United States puts the onus on individuals to discern how best to save for their retirement. In a time when it has become clear that most Americans' retirement savings are insufficient to address their most basic needs, it is important that their retirement benefits actually inure to them. Every American worker should have the opportunity to retire when they are ready, and mechanisms like vesting schedules have contributed to preventing them from doing so for too long.

Samantha J. Prince is an Associate Professor of Law at Penn State Dickinson Law. She earned her L.L.M. (Tax) from Georgetown University Law Center; J.D. from Widener Commonwealth Law; and her B.S. in Chemistry from Muhlenberg College. Timothy G. Azizkhan is a third-year J.D./M.B.A. student at Penn State Dickinson Law. He earned his B.A. in English and Religious Studies from Gettysburg College. Cassidy R. Prince is a Ph.D. candidate at Cornell University. She earned her B.S. in Microbiology from Penn State University. Luke Gorman is a third-year law student at Penn State Dickinson Law. He earned his B.S. in Applied Mathematics and Political Science from the University of Pittsburgh.

We would like to thank numerous individuals for their assistance and advice. Thank you to Lynn Johnson and Song Yi for creating our initial dataset. Without this we would still be manually reviewing all of these plans. Additional thanks to Lucas Goodman and Ben Meiselman, who willingly gave their time and advice to discuss the

---

130. *See, e.g.*, Press Release, Rep. Lloyd Smucker, Bipartisan, Bicameral Retirements Savings for Americans Act Gains Momentum (Oct. 26, 2023), https://smucker.house.gov/media/press-releases/bipartisan-bicameral-retirement-savings-americans-act-gains-momentum [https://perma.cc/4KRR-QLUE] (noting that the Retirement Savings for Americans Act was introduced in the House by Republican Lloyd Smucker and Democrat Terri Sewell, and in the Senate by Democrat John Hickenlooper and Republican Thom Tillis). Congress recently enacted two bills that impact retirement savings. *See* Setting Every Community Up for Retirement Enhancement (SECURE) Act, Pub. L. No. 116-94, 133 Stat. 2534, 3137-82 (2019) (codified as amended in scattered sections of 26 U.S.C.); SECURE 2.0 Act, Pub. L. No. 117-328, 136 Stat. 4459, 5275-5404 (2022) (codified in scattered sections of 26 U.S.C.).

131. *Cf.* Michelle Meineke, *Can You Answer These 3 Questions About Your Finances? The Majority of U.S. Adults Cannot*, WORLD ECON. F. (Apr. 24, 2024), https://www.weforum.org/agenda/2024/04/financial-literacy-money-education [https://perma.cc/BF2H-QA2S] (finding that about half of Americans are financially literate).

direction and implications of our research, and Ruth Atomate, Alyssa Boob, Nikolajs Gaikis, Ana Maria Matovic, who provided research assistance. We would also like to thank Professor Howell Jackson, a luminary in his field, for his guidance, advice, and assistance with advocating for a change in the laws permitting 401(k) vesting schedules. Finally, we would like to thank the editors of the Yale Law Journal*, particularly Yang Shao, Paige E. Underwood, Lily Moore-Eissenberg, Adam J. Schwab, Beatrice L. Brown, and Deja R. Morehead.*