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Panel 4: State and Local Labor Markets

Moderator

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Disability Insurance for State and Local Employees: A Lay of the Land

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Disability Insurance for State and Local Employees: A Lay of the Land

Anek Belbase, Laura D. Quinby, and James Giles
(Center for Retirement Research at Boston College)[*]

Introduction

One out of every four young workers today could develop a work-limiting disability over the course of their career. For those unable to continue in the labor force, programs like Social Security Disability Insurance (SSDI) serve as a much-needed economic safety net. Despite broad agreement on this need, policymakers continue to vigorously debate the best way to design a DI program that protects individuals and families from loss of income while incentivizing work among those who are still able.

This study investigates whether researchers could turn to a unique population of workers – state and local government employees – to assess how DI program structure affects claiming and other outcomes. State and local workers create a promising research environment because about one quarter of them – 6.5 million workers – are not covered by Social Security on their current job and instead have access to employer-sponsored DI programs that vary in generosity. The remaining three quarters are covered by both SSDI and employer-sponsored programs. Moreover, detailed information on program structure and outcomes is often publicly available in member handbooks and actuarial valuations.

To assess DI for state and local employees, the first step is to create a comprehensive database of benefit provisions and claiming trends. Most state and local DI programs are administered by retirement systems that also provide pension benefits. Thus, the sample of programs developed for this study includes those associated with the 100 largest retirement systems in the *Public Plans Database* as well as a few smaller systems. This new DI database will be publicly available on the website of the Center for Retirement Research at Boston College in the fall of 2020.

Summarizing the data shows that many state and local programs are relatively lenient in their eligibility requirements and set benefit levels comparable to SSDI for long-tenured workers. Nevertheless, the programs still vary widely in their work-ability criteria, administrative

processes, and replacement rates. And this policy variation seems to affect substantive outcomes of interest. For example, a simple regression analysis linking multiple elements of program structure to the percentage of retirement-system beneficiaries on DI suggests a strong relationship. Much work remains, however, so this project is intended to start a conversation, rather than settle the debate.

Overview of State and Local DI Programs

Government employers have two primary levers that they can pull to influence DI outcomes – policies that regulate who can receive benefits and policies that regulate the generosity of benefits paid. One way to restrict who can receive benefits is to require a certain level of tenure before a worker is eligible. Vesting periods for the programs in our sample range from immediate vesting (16 percent of programs) to eight or more years of tenure (22 percent), with nearly half of programs requiring employees to complete five years of service.

Another way to restrict access is by establishing a high threshold on the severity of the disability. Whereas SSDI is strict in this regard – disqualifying applicants if they are able to perform *any* job in the national economy – 75 percent of state and local programs simply require that the applicant be unable to perform their previous government job (see Table 1). The other programs have requirements similar to SSDI, and 6 percent actually require that employees also receive SSDI benefits in order to qualify.

Table 1. *Eligibility Requirements in State and Local DI Programs, 2020*

Requirement	Percentage of programs
Work-ability requirement	
Previous or comparable job	75%
Any job in the national economy	19
Must qualify for SSDI	6
Medical evaluation requirement	
Own doctor	77
Independent evaluation always required	13
Independent evaluation required on an ad-hoc basis	10
Periodic re-evaluation of medical status	42

Source: Authors' calculations from the *Public Disability Insurance Programs Dataset* (2020 forthcoming).

A key step in determining who qualifies for benefits is a medical exam to certify the severity of the employee's disability. While most of the programs sampled allow employees to go to their own doctor to be certified for DI, around one quarter often rely on an independent medical evaluation conducted by a doctor chosen by program administrators (see Table 1). Of these programs, around half require all DI applicants to receive the independent evaluation; the other programs use independent evaluation on an ad-hoc basis. And nearly half of all the state and local DI programs periodically re-evaluate the medical condition of existing beneficiaries

While the structures described so far regulate who is eligible to receive DI, governments can also affect outcomes through benefit generosity. Government sponsors typically calculate a recipient's benefit using the formula: *benefit = tenure * final average salary * multiplier*. The benefit formulas for the different state and local programs can be used to calculate replacement rates – DI benefits relative to pre-disability earnings – for a hypothetical worker with 20 years of tenure. This calculation suggests that half of the programs provide replacement rates between 32 and 48 percent, although the overall range exceeds 70 percentage points (see Figure 1).

Figure 1. *Distribution of Replacement Rates in State and Local DI Programs for a Hypothetical Worker with 20 Years of Tenure, 2020*
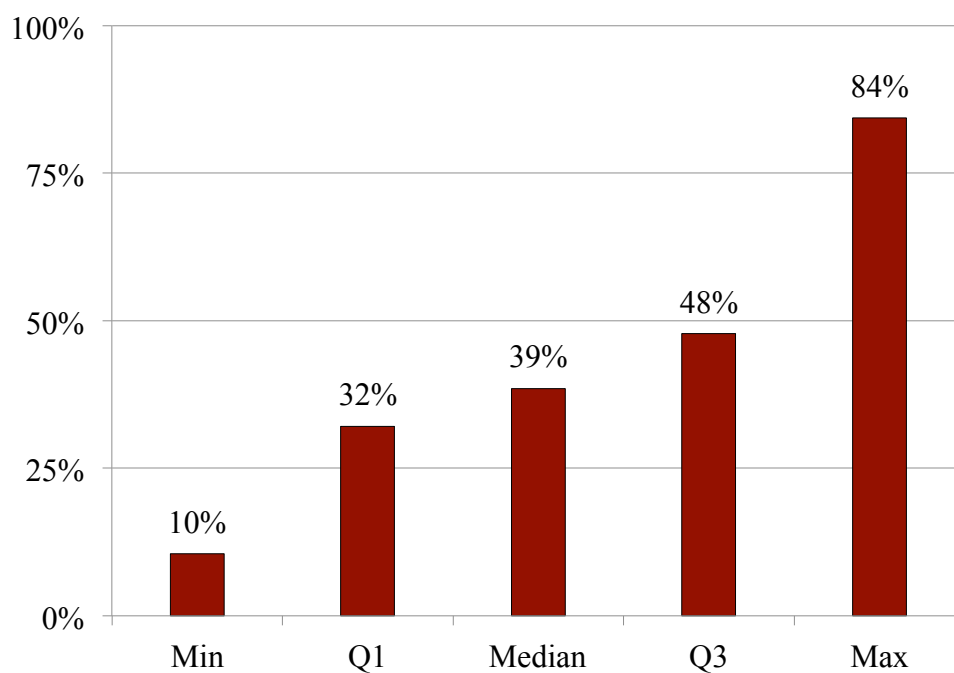
Source: Authors' estimates from the *Public Disability Insurance Programs Dataset* (2020 forthcoming).

Of particular interest to SSA is the adequacy of benefits for state and local government employees not covered by Social Security. On the eligibility front, uncovered workers face similar vesting, work-ability, and medical examination requirements as their covered colleagues – all of which are lenient relative to SSDI. Replacement rates, however, are more difficult to assess because state and local programs and SSDI use fundamentally different formulas to calculate benefits. Whereas replacement rates in SSDI depend on a worker's earnings level, with low-wage workers receiving a significantly higher portion of their pre-disability earnings than high-wage workers, replacement rates in most state and local programs disproportionately reward long tenure with the government.

Estimating replacement rates for hypothetical workers with different lengths of government tenure reveals that state and local programs for uncovered workers provide most full-career employees with higher replacement rates than SSDI. In contrast, short-tenured employees tend to earn higher replacement rates in SSDI. However, since the risk of a work-limiting disability rises with age, many short-tenure workers who end up relying on state or local DI will have previously spent time in Social-Security-covered employment, and so will also be eligible for a partial SSDI benefit. Considered alongside the relatively lenient eligibility requirements in state and local programs, these findings suggest that uncovered workers receive adequate DI benefits from their employers.

Claiming Patterns in State and Local DI Programs

Having established that state and local DI programs vary considerably in their eligibility requirements and benefit generosity, the question becomes whether these design choices affect outcomes, such as claiming patterns. While a complete answer to this question is beyond the scope of this study, we illustrate how the new dataset of DI programs can be linked to other datasets like the *Public Plans Database* in order to begin an investigation.

Specifically, we run a simple linear regression where the dependent variable equals the share of all retirement-system beneficiaries on DI in 2017, and the independent variables include the program structures governing benefit eligibility and generosity described earlier. The regression also flags programs exclusive to public safety workers in order to test the intuition that hazardous-duty employees are more likely to use DI benefits. Figure 2 displays the regression results, which are in the expected direction and statistically significant. As expected,

programs with a strict work-ability requirement have DI shares that are around 2 percentage points lower, on average, while those using independent medical evaluations (either automatic or discretionary) also have DI shares that are 3 and 5 percentage points lower, respectively. In the other direction, a 10 percentage-point increase in the replacement rate is associated with a 0.7-percentage-point increase in the DI share; programs that only cover safety workers have DI shares that are 4 percentage points higher on average. The only coefficient without a clear interpretation is the vesting period, which comes in positive but relatively small.

Figure 2. *Correlation between Program Structure and the Percentage of Beneficiaries Receiving DI, 2017*
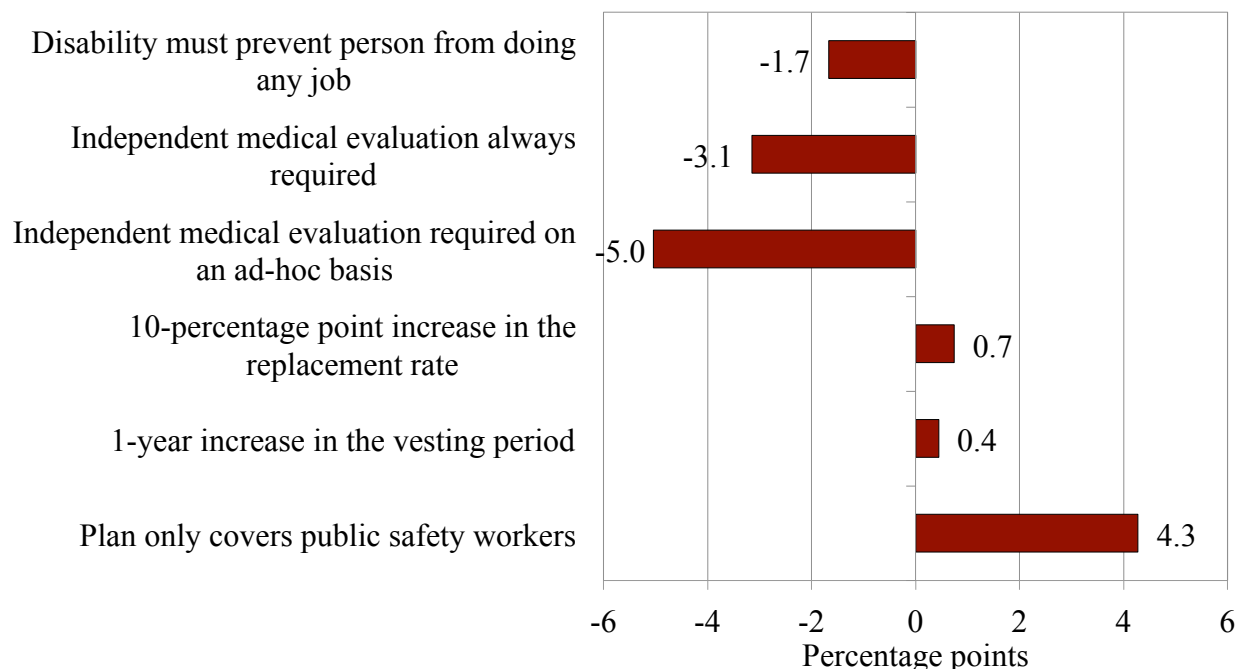
Note: All coefficients are statistically significant at least at the 5-percent level.
Source: Authors' estimates from the *Public Disability Insurance Programs Dataset* (2020 forthcoming).

Although this simple regression undoubtedly paints an incomplete picture, it does suggest that the variation in program design captured by the new DI dataset affects substantive outcomes of interest to policymakers.

Conclusion

A rapid rise in SSDI caseloads from 2000-2010 has trigged interest in policies to keep prospective claimants in the labor force. Yet, the near-universal nature of SSDI makes it hard for

researchers to explore how the program's structure affects claiming. This study investigates whether an examination of DI programs for state and local employees could help fill the gap. It concludes that these programs present a fruitful avenue for research; in particular, future work could link the new DI database created for this study with existing data on retirement benefits to explore the full range of work incentives facing state and local government employees.

Understanding the Local-Level Predictors of Disability Program Receipt, Awards, and Beneficiary Work Activity

Jody Schimmel Hyde and Dara Lee Luca (Mathematica Policy Research),
Paul O'Leary (U.S. Social Security Administration), and
Jonathan Schwabish (Urban Institute)[*]

Introduction

A critical determinant of the decisions made by potential and current disability beneficiaries is the environment in which each beneficiary lives, an idea that is consistent with the social model of disability. Changes in federal policy and strong economic conditions contribute to this environment, but many other factors at the state and local levels might more directly affect beneficiaries' decisions. For example, living in a rural or urban setting can affect access to public transit and the nature of available job opportunities. Areas in which a large share of adults with disabilities are employed might signal either relatively positive social attitudes about individuals with disabilities as productive workers or fewer physical barriers to transportation or employers. Areas with high prevalence of poor health behaviors, such as smoking and obesity, might signal generally poor health in the population. These factors could also affect the rate at which individuals enter disability programs or increase the likelihood that beneficiaries return to work.

Although the U.S. Social Security Administration (SSA) cannot directly affect state policies or local economic conditions, there is value in understanding the extent to which these factors might correlate with application rates, benefit receipt, and beneficiary return-to-work rates. If certain area-level characteristics predict higher-than-average application or award rates, it could signal the need for an increase in early intervention or vocational rehabilitation services for workers at risk of leaving the labor force and applying for federal disability benefits. However, characteristics correlated with lower-than-average disability beneficiary work activity might help to inform policies, such as targeted mailings on incentives, and programs that support a return to work, such as SSA's Ticket to Work program. Areas with higher levels of work activity or successful return-to-work by beneficiaries might also alert policymakers to positive local area characteristics that might be emulated in other areas.

The contribution of this study is two-fold. First, it adds to the body of evidence on the relationship between local-level factors and disability program outcomes. Numerous studies have documented the geographic variation in the prevalence of disability and in the receipt of federal disability benefits; they have also documented factors that might be correlated with the claiming of disability benefits (see, for example, Rupp 2012; Nichols et al. 2017; Sevak and Schmidt 2018; and Gettens et al. 2018). Our study adds to this literature by assessing how these factors predict flows into and out of Social Security Disability Insurance (DI) and Supplemental Security Income (SSI) programs, as well as beneficiary work activity.

The second contribution is that we will release a publicly available repository of local-level predictors and statistics related to DI and SSI receipt, awards, and beneficiary work outcomes for 2001-2018. Our goal in constructing this dataset is to facilitate future research and policy analysis. The dataset may be useful to other researchers who are studying the effects of policy changes on program outcomes but also wish to control for time-varying covariates that influence award and beneficiary work activity. Local area data are available at the level of Public Use Microdata Areas (PUMAs), which are geographic units created by the U.S. Census for statistical purposes. We determined that PUMAs represent a suitable level of aggregation for our analyses and for the public-use file, as they are specific enough to provide action-oriented information and large enough (in population terms) for rates to be estimated with reasonable precision and to minimize the share of cells masked by SSA for privacy reasons.

Data

Identifying Beneficiaries and Their Work Activity

We used the Disability Analysis File (DAF), which includes SSA administrative data on DI and SSI beneficiaries, to develop PUMA-level statistics on DI-only beneficiaries, SSI-only beneficiaries, and concurrent beneficiaries annually from 2001-2018. The DAF includes each beneficiary's zip code, so we rolled up the zip code statistics to the PUMAs by using allocation factors from Geocorr, an application developed by the Missouri Census Data Center. In addition to counts of beneficiaries in each program and year, we developed annual statistics on the number of new beneficiaries, the number with positive earnings reported to the Internal Revenue Service, the number whose DI and/or SSI benefits were suspended or terminated because of

sustained employment, and the number with reduced DI and/or SSI cash benefits because of work.

Demographic and Socioeconomic Characteristics

We derived PUMA-level demographic and socioeconomic characteristics that could potentially influence beneficiary outcomes from the *American Community Survey* (ACS), accessed through IPUMS USA at the University of Minnesota (Ruggles et al. 2020). These factors include the distribution of the population across age and sex, population density, the availability of public transit and average commute times, and factors related to the availability and features of jobs in the area. PUMA information was not available for 2001-2004, so all measures we derived from the ACS are available for 2005-2018 only.

Local variation in health and health behaviors may also be important correlates of benefit receipt but not measurable at the PUMA level while using the ACS. We therefore included two such measures, but at the state or county level: smoking prevalence (the percentage of adults who are current smokers) from the Behavioral Risk Factor Surveillance System (BRFSS) from 2001-2018 and county-level estimates of obesity rates for the adult population from the Centers for Disease Control and Prevention (CDC) from 2005-2016.

Methods

We used a simple multivariate model to identify factors associated with disability program awards and beneficiary work outcomes. For purposes of the presentation, we focus on the latter. Our regression specification takes the form:

$$y_{jt} = \alpha + \beta_1 DEMOG_{jt} + \beta_2 SES_{jt} + \beta_3 OTHER_{jt} + \delta_t + \eta_j + \varepsilon_{jt} \qquad (1)$$

where y_{jt} is the share of working-age beneficiaries with positive earnings or with cash disability benefits suspended for work. *DEMOG_{jt}, SES_{jt},* and *OTHER_{jt}* are the vectors of demographic, socioeconomic, and other characteristics derived from the ACS, BRFSS, and the CDC. δ_t are time-fixed effects to control for national trends in program participation and beneficiary outcomes. η_j are PUMA fixed effects that capture time-invariant differences across areas. When we include PUMA fixed effects, the coefficients will be based on the relationship between

changes in a variable and changes in the outcome within a PUMA over time. We express both outcomes and explanatory factors in logarithmic terms in order to interpret coefficients as elasticities.

Results

Beneficiary work activity varies considerably across PUMAs. Figure 1 shows the share of DI and SSI working-age beneficiaries who had any earnings during the year. In both figures, it appears that the north-central states in the Midwest (e.g. Minnesota, North Dakota, South Dakota) and some states in the Mountain region (e.g. Colorado, Utah, Wyoming) have higher rates of beneficiary work activity. Beneficiaries in these states may have had low levels of earnings or have had earnings before or after receiving disability benefits; nonetheless, the high rates of positive earnings in certain PUMAs is notable, especially when contrasted with other PUMAs within the same state.

Figure 1. *Percentage of Working-age DI (Left) and SSI (Right) Beneficiaries Who Had Any Positive Earnings, 2017*
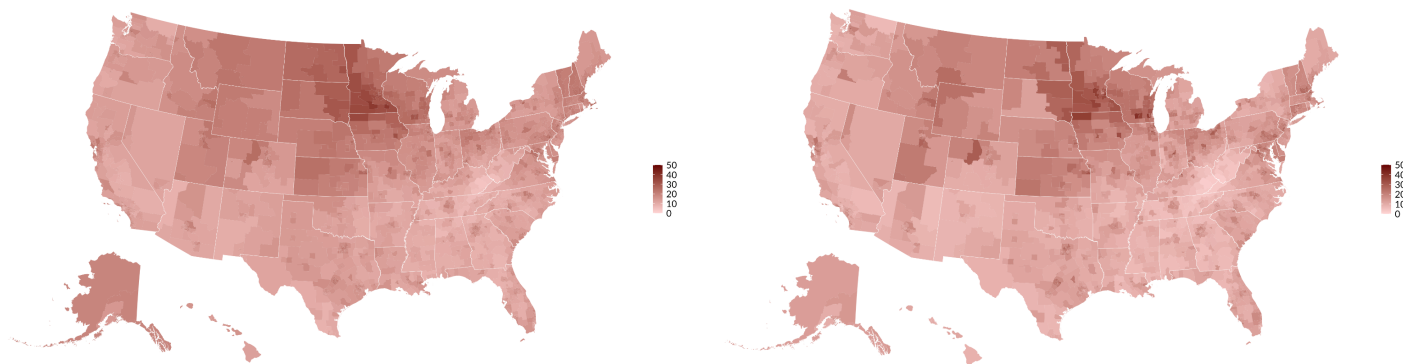
Notes: Beneficiaries include individuals in current payment status or in suspense in the program in at least one month during the year, and who were ages 18-full retirement age on January 1 of the same year. The scale of both maps varies from 0 to 50 percent of beneficiaries with positive earnings (at any point during the calendar year), with lower values in a lighter shade of red.
Source: Authors' calculations using SSA's DAF linked to the Master Earnings File.

Using the regression specification above, we find that beneficiaries are more likely to work if they live in PUMAs that have higher employment among people with disabilities generally and have a larger share of workers who do manual labor. Conversely, the overall unemployment and poverty rates, the prevalence of smoking and obesity, and the receipt of SNAP in the PUMA are negatively correlated with beneficiary work activity. On the one hand,

these results suggest that the availability of work opportunities may increase the likelihood that beneficiaries will return to work. On the other hand, a high prevalence of risky health behaviors, unemployment, and poverty rates may indicate that unfavorable conditions impede the beneficiaries' efforts to find work.

Conclusion

Two conclusions emerge from our findings. First, beneficiary work activity varies from one geographic region to the next. Second, and consistent with the literature on the receipt of disability benefits, the availability of and access to economic opportunity for people with disabilities may be important factors in explaining both their entry into the DI and SSI programs as well as their subsequent work activity.

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The Prevalence of COLA Adjustments in Public Sector Retirement Plans

Maria D. Fitzpatrick (Cornell University and NBER) and
Gopi Shah Goda (Stanford University and NBER)[*]

Summary

Approximately 13.8 percent of the U.S. workforce is comprised of state and local employees who are eligible for retirement benefits from one of 299 state-administered or 5,977 locally-administered plans. These plans collectively have $4.3 trillion in assets, 14.5 million active members and support 10.3 million retirees with over $280 billion in benefit distributions every year.[1] Each of these plans differ in their benefit design, funding model, and investment policy and are subject to accounting standards set by the Governmental Accounting Standards Board (GASB).

Many of these programs have long faced a funding gap, with plan liabilities much larger than plan assets in aggregate. The aging of the population combined with market downturns, insufficient contributions, and increased benefit levels has resulted in a decline in the average aggregate funding level. In 2001, the actuarial funded ratio for state and local pensions was 101.9 percent, while in 2019, this ratio had declined to 71.9 percent. Recent market losses and increased budget pressures related to the COVID-19 pandemic are likely to reduce the funding levels for state and local pension plans even further.

Due to legal restrictions, many state governments are unable to take steps to limit their liabilities by increasing retirement eligibility ages or reducing the generosity of benefit formulas for current employees. This is because, in many of the states with statewide pension systems, the pension promises to public employees are written into the state constitution. They are therefore considered a component of the compensation package agreed upon at hire and cannot be reduced. Therefore, any increases in retirement eligibility ages or reductions in pension benefits can apply only to new hires after the time the new rules are adopted. This means that such changes to pension systems can only lower liabilities slowly, since the time to retirement of these

new employees is far enough into the horizon that it represents only a small part of current liabilities.

As such, to reduce the liabilities of their pension funds, many states have reduced their cost-of-living adjustments (COLAs). Some states have eliminated any COLAs for the foreseeable future and some have restricted future COLA increases. Given that decreases to COLAs compound each year, the effect of these adjustments on a retiree's lifetime benefits can be large. For example, based on a standard simple model, moving from a 3-percent annual COLA to no COLA decreases the present value of lifetime pension benefits by 25 percent (Munnell et al. 2014). Although many of these changes to COLAs have been challenged in state courts, to date most of those challenges have been unsuccessful. This has served to make reducing COLAs an effective way to limit current liabilities because the reductions take effect immediately for both current retirees and employees once they begin collecting benefits.

For employees close to retirement, this reduction in the present value of pension benefits could change labor supply and Social Security claiming for several reasons. Those with positive returns to continued work may delay retirement from their public sector employer in order to increase the size of their pension benefit. Alternatively, they may seek work or increase their labor supply outside of the public pension system, since doing so can provide extra income and may increase the size of their Social Security benefit. Finally, the reduction in the value of employees' public pension benefits may lead them to delay Social Security claiming, either because they are still working or because delayed claiming increases the present discounted value of Social Security benefits. Public sector employees already collecting pension benefits may find it beneficial to increase their lifetime income by finding work outside of the public sector or delaying Social Security claiming.

Understanding how public sector labor supply and Social Security claiming shift with reductions in pension benefits is important in determining whether the underfunding of state and local pension plans has spillover effects on Social Security, including on the solvency of the Social Security system. To date, some studies have leveraged administrative data from a specific state that experienced a change in retirement or health care benefits and examined its effect on public sector employment (Brown 2013, Fitzpatrick 2014, Leiserson 2013, Ni and Podgursky 2016, Salinas 2017, Quinby and Wettstein 2019). A wider literature has examined how differences in pension plan and retiree health insurance generosity relate to retirement timing

using survey data (e.g., Slavov and Shoven 2014; Morrill and Westall 2019) and recent work examines the effects of pension freezes in the private sector (Patki 2020). None of these studies have focused on COLA adjustments, which, because they happen frequently and commonly, may affect benefits differently than the types of infrequent one-time comprehensive shifts to benefit plan generosity that are often the subject of the prior research.

In this paper, we aim to push forward our understanding of how COLA changes affect retirement behavior. We describe an intensive data collection process during which our research team gathered data on COLAs across 43 state and local pension plans between 2005 and 2018 across 25 states, covering 45 percent of state and local employees. Collection plans are still underway, so we report preliminary results on the COLA changes across these plans in the sample we have completed to date. We then merge our COLA data with population-level data on state and local workers from the *American Community Survey* from 2005 to 2018. This allows us to calculate information on the number of Americans subject to COLA changes by their public employer to get a sense of the scope of the issue. We then use our COLA data to simulate the possible effects on labor supply and Social Security claiming using elasticities from other work.

We find that changes in COLAs are common among the plans in our database. Each year during the 2005-2018 period, between one-third and one-half of public sector workers covered by one of these plans experiences a change in the COLA. The direction of the change varies over time, with more positive changes during the earlier years of our data, and more negative changes in more recent years (see Figure 1). On average over this time period, approximately 43 percent of workers in our sample experience a change in any one year, representing more than 52 million workers over the 14-year horizon. More than half of these workers (28 million) experience a negative change, and 23 percent (or 12 million) are in the 55-64-year-old age group.

Our analysis of stylized workers suggests that COLA changes could have substantial changes on retirement wealth and retirement timing. For a public sector worker who starts work at age 22 and continues for 30 years with average mortality for the 1950 birth cohort and a 3-percent discount rate, we estimate that eliminating a 3-percent COLA would reduce her retirement wealth by approximately 35 percent. When we apply elasticities of retirement probabilities with respect to retirement wealth from previous studies, this reduction translates to a delay in retirement of approximately 4.5 months. We explore the sensitivity of this result to

changes in various assumptions, including mortality, discount rates, years of service, the elasticity used, and the COLA adjustment examined.

Figure 1. *Fraction of Public Sector Pension Plans with COLA Rate Changes, 2005-2018*
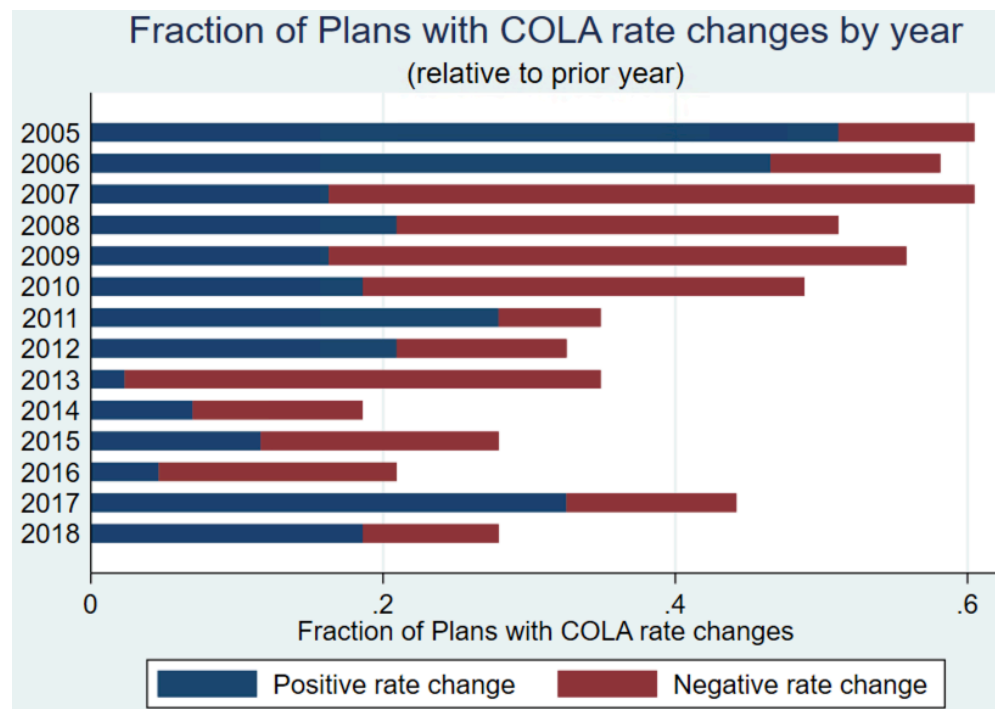
Note: Based on authors' calculations using the sample of 43 pension plans in our COLA database for 2005-2018.

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