Employee Exodus: The Impact of Government Downsizing on Benefit Access*

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Abstract

The US Social Security Administration (SSA) is responsible for administering retirement, disability, and low-income safety net programs to approximately 64 million people, supported by their network of field offices providing in-person customer service. The importance of staffing levels in the administration of public programs has not been studied because agencies typically staff field offices to reflect local program demand, making it difficult to establish causality. I use employee microdata in the context of a period of exogenous, drastic staffing decreases during the Reagan administration to analyze the impact of staffing levels on enrollment across the various programs that SSA administers. Using a long differences approach, I find that a 10% decrease in field office employees in a county led to a 0.06% decrease in the enrollment of benefits for Old-Age, Retirement and Disability Insurance (OASDI), driven primarily by disability beneficiaries, and a 0.32% decrease in enrollment for Supplemental Security Insurance (SSI). I find no significant impact on traditional retirement benefits suggesting that OASDI has a lower administrative burden or recipients pursue alternative methods of interacting with the agency. I do back-of-the-envelope calculations and find that the downsizing translates to a shortfall of 79,027 people nationally (47,285 OASDI, 31,742 SSI) who counterfactually would have enrolled in benefits by the end of this period. I then propose a new measure of administrative cost per marginal beneficiary to benchmark across welfare programs.

Keywords: Administrative capacity, Administrative Barriers, Government Staffing, Social Security, Disability Insurance, Supplemental Security Income

JEL codes : H11, H53, H55,H61, H83, I38, J45, D61, D73

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1 Introduction

Government agencies are frequently subject to cost-cutting measures, often following public debates about appropriate expense levels. While in the general public the discussion is often framed as agencies "losing money" (for example, Reuters' headline "U.S. Postal Service reports $4.9 billion 2021 net loss"[1]), government service provision is intended to be welfare-maximizing rather than profit-maximizing, raising the complex question of optimal spending levels. Particularly for in-person services the trade-off between cost and access can be difficult to balance; the government must decide how many offices to provide, where to place them, and how much staff each office should have. Many services provided by the government have some component of mandatory or optional in-person administration.

This paper addresses one aspect, staffing, of the administration of public programs, but also a broader question of endogenous state capacity. One of the largest components of administrative spending throughout the federal government is labor costs, yet we know little about optimal levels of staffing in the public sector, especially with regard to public-facing roles. Does the quantity of personnel in front-line positions have downstream impact on citizens' access to services? I will investigate this question in the context of a massive overhaul in the staffing of the Social Security Administration.

The Social Security Administration shed approximately 17,000 employees between 1985 and 1990, equivalent to 21% of its total workforce. This downsizing was initiated by the Office of Personnel Management (OPM) at the directive of the Reagan administration, in an attempt to reign in growing federal budgets. The downsizing was accomplished almost exclusively by employee attrition, waiting for employees to leave voluntarily and then not backfilling those positions, allowing for significant variation in the amount of staff lost. It was unclear at the time if this downsizing would impact agency performance. Despite the major change in public service provision that it entailed, this is the first paper to examine this episode of SSA history. In addition to the contributions this paper makes to the literature, which are outlined below, I attempt to characterize the episode as thoroughly as possible using archival documents, government reports, and news articles.

I use data from employee personnel records for the universe of SSA employees and beneficiary

[1] https://www.reuters.com/business/us-postal-service-reports-49-billion-2021-net-loss-2021-11-10/

enrollment statistics for all SSA programs to analyze the impact of staffing decreases on program enrollment. Using a logarithmic differences approach to measure the impact of a percentage change in field office staffing on benefits enrollment, I find that a 10% decrease in field office employees in a county led to a 0.06% decrease in benefits enrollment in Old-age, Retirement, and Disability Insurance (OASDI), driven by an underlying 0.15% for disability benefits, and 0.32% decrease for overall supplemental security insurance (SSI) enrollment driven by equal magnitude impacts across those eligible by old age and those eligible due to blindness or disability. I then do back-of-the-envelope calculations to translate this effect in the mean office into a total effect size and find that the downsizing translates to approximately 84 fewer beneficiaries per county (50 OASDI, 34 SSI), or 79,027 people nationally (47,285 OASDI, 31,742 SSI), who counterfactually would have enrolled by the end of this downsizing period.

This paper contributes to the literature in three key ways. Firstly, this is the first paper to address the importance of staffing levels within government offices. Previous literature uses discrete openings and closings in SSDI (Deshpande and Li, 2019) and SNAP uptake (Bitler et al., 2023) to show that proximity to an office matters, but in this case the offices did not close, they simply staffed at a lower level. Some may hypothesize that across-the-board staffing decreases have a lesser impact on service provision compared to outright office closures; this project evaluates that hypothesis. This is a difficult question to answer causally, as program staffing is often based on local demand and therefore endogenous. In my context, the choice of the agency to downsize through attrition, leaving the decision with individual employees, avoids this endogeneity in staffing levels based on local program demand.

Secondly, much of the broader literature on administrative burdens is focused on individual programs, making comparisons between programs difficult. For SSDI particularly, previous literature has found that increased wait times for SSDI processing led to decreased applications the following year with differential wait times across geographies (Michaud et al., 2019) as well as negative impacts on labor force participation for those who have applied for SSDI, independent of decision outcomes (Autor et al., 2017). The literature on cross-program administrative costs is newer. Wu and Meyer (2023) use the roll-out of automated systems to measure the impact on initial enrollment and re-certification in Medicaid, SNAP, and TANF; they find a decrease in take-up among all three programs, and additionally that the populations screened-out at initial

enrollment versus re-certification are fundamentally different. However, the three programs have a large overlap in their eligible populations compared to the programs administered by SSA, in which citizens may be eligible for multiple SSA programs but relatively few are. I capture the effects across different programs administered by the same agency, allowing me to compare how one administrative change can have disparate impacts between programs.

Last, my paper gives some further insight into the growing literature of public service provision under technological improvement. In the backdrop of the downsizing, there were two technological initiatives occurring at SSA to modernize automated payment systems and expand phone-based service. The persistent negative impact I find implies that ADP updates and phone services may have partially, but could not completely, substitute for in-person rural outreach services or field office staffing. This is an important finding in light of current transitions to online administration; digitization has an important role to play in outreach and program take-up (Gallegos et al., 2023) but may not fully replace in-person services.

The remainder of the paper is as follows: Section 2 will establish the institutional context in which the downsizing takes place, section 3 will discuss the data and empirical strategy, section 5 includes the results and places them into context of agency function, and section 5 concludes.

2 Background

2.1 Social Security Funding

Due to the separate funding apparatus, the budgets for the two programs, OASDI and SSI, have different political incentives. To understand why, I will provide some elementary explanation of the funding of Social Security.

OASDI is funded through payroll taxes (FICA& SECA); this money is added to a trust fund that can only be used to fund OASDI and its administration. Although administrative funding for the agency comes directly from the trust fund and is therefore unable to be reallocated outside of the SSA, the agency still must go through the congressional appropriations process to gain approval for their budget each year. The administrative expense ratio for OASDI during our period of interest was approximately 0.5% of yearly expenditures. For all intents and purposes, there are no transfers from the general fund of the US Treasury to OASDI, unlike SSI [2]

[2]The small exception is contributions on behalf of U.S. military members so they receive work credits despite not

SSI was created in 1974, nearly four decades after the original social security program, to fill the gap in the safety net for those who do not qualify for OASDI due to lack of work history, or in some cases those who do qualify for OASDI but still have sufficiently low income. SSI funding comes directly from the general fund of the U.S. Treasury as opposed to payroll taxes like OASDI, however it is then added to its own trust fund. Therefore, the funding already contained within the trust fund is not fungible (except intertemporally), but the amount budgeted to SSI by congress each year is subject to change. SSI was growing rapidly in the lead-up to our period of interest, with SSI blind and disabled claims increasing 80% between 1984 and 1990. [3]

This difference in funding mechanism is important to note in light of legislative budgetary processes; the money is not able to be easily moved between these programs and they do not carry the same degree of political durability.

In the early 1980's the bipartisan National Commission on Social Security Reform (known informally as the Greenspan commission after its leader, economist Alan Greenspan) negotiated for two years over program reforms. The program had been drawing from trust fund reserves and projections indicated that the program would become insolvent if the gap were not closed between projected inlays and outlays. In 1983 the reforms were completed with major benefits changes but minimal administrative changes since administrative spending was trivial compared to the size of the shortfalls. The programmatic changes were largely related to raising the retirement age, eligibility criteria, and allowing benefits to be taxable to bring in additional revenue. These may be relevant for overall enrollment numbers, but should not impact my analysis related to variation in staffing levels since the changes are made at the national level.

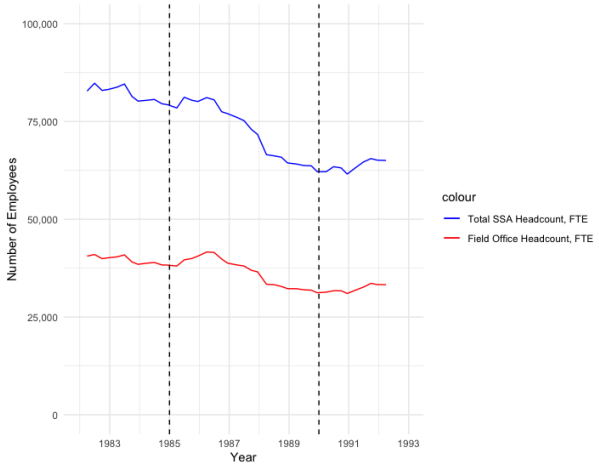
2.2 Downsizing

The restructuring saw downsizes in staffing in field offices, which are the primary interface with the public, and closures of contact stations, which are part-time offices staffed by field office employees on a visiting basis, and located in nursing homes, community centers, and gathering places in rural areas where travel to field offices is costly. 91% of field offices saw a reduction in staff, of which 64% lost at least 20% of their staff. Figure 1 shows the change in staffing level for the agency as a whole and within the field offices during the time period of interest.

paying FICA taxes, as well as payments for costs of benefits to certain uninsured persons who attained age 72 before 1968. This is not a significant source of revenue.

[3]GAO/HUD-91-63 SSA's Performance in Downsizing

Figure 1: SSA Headcount, 1982-1992



Full-time Equivalent Headcount Agency-Wide in blue and restricted to field-office employees only in red. The vertical lines indicate the start and end of the downsizing periods, with the baseline for analysis in 1984 before the start.

The plan did not need congressional approval and was received with mixed reactions from elected officials. There were also concerns that the plan would backfire, "overtime costs would rise, employees would have to be retrained and the number of erroneous benefit payments would increase."[4].

It was equally divisive among bureaucrats:

> *"Robert M. Ball, who served as Commissioner of Social Security from 1962 to 1973, said the plan to cut the staff 'sounds pretty ridiculous to me. The administrative costs of Social Security are financed from the trust fund,' Mr. Ball said. 'People pay for that service through payroll taxes. The levels of service are not entirely satisfactory now. Only 1 1/2 cents of every dollar in total Social Security outlays goes for administrative costs. I would argue that the Government ought to spend a little more on administration for the convenience of people.'"* Source: New York Times

One might be concerned that bureaucrats within the agency at the time may overplay concerns to ensure higher levels of funding or underplay concerns for political ingratiation. The quote from Ball highlights a deeper dilemma: There were fundamentally different opinions on what level of administrative capacity the agency should have. Still, since the budget cuts were limited to staffing, it would not preclude increasing budgets in other areas of administration. Even within staffing, it is not clear that it would be more efficient to have more offices with fewer staff or

[4]https://www.nytimes.com/1985/04/04/us/21-cutback-in-social-security-staff-planned.html

fewer, larger offices.

One obvious option for reallocation of administrative budget is into technological improvement, and in fact that was a major goal of the agency during the 1980's. In 1982, the Social Security Administration rang alarm bells that its systems were "obsolete, difficult to maintain, and vulnerable to failure" and that "if deficiencies were not corrected it would not be able to process much of its workload" [5]. The agency prepared a Systems Modernization Plan (SMP) in 1982 to solve the problem of outdated technology and automated processing nearing collapse. This was one contributing factor to the downsizing, with the agency believing that "with new computer equipment the Social Security agency could deliver a higher level of service with fewer employees."[6]. $479 million was allocated towards the system modernization plan, however, the plan was already significantly behind schedule and over-budget by the time the downsizing was proposed in 1985. The downsizing shifted cost-savings from employee attrition towards funds for the SMP. The SMP included a central systems overhaul to bring current automated data processing capabilities, as well as plans to connect field offices to central systems by introducing computers to field offices. The SMP should have been completed by 1987 however the improvements stretched well into the 1990's. Reports suggest that even for field offices that received computers, it was far from a panacea: it was difficult to reprogram them in response to legislative changes, so employees often ended up manually recalculating benefits [7].

Additionally during this time period, the SSA introduced upgraded phone service capabilities. Previously, service calls to the SSA went primarily to the local field office. After this change, phone operations were centralized and toll-free. A call center was established in Falls Church, Virginia, with approximately 2000 employees who could answer questions and initiate applications. There was a very positive response from the public. According to the SSA "between 1987 and 1988,claims filed over the telephone increased from 20 percent to 40 percent"[8]. The drawback of applications initiated outside of an office, either by phone or by mail, is that the applicant would still be required to mail original identification (i.e., drivers license) through the postal service. Applications completed with less assistance from employees may also contain errors that would delay receipt of benefits.

[5] https://www.gao.gov/assets/t-imtec-89-11.pdf
[6] https://www.nytimes.com/1985/04/04/us/21-cutback-in-social-security-staff-planned.html
[7] link
[8] GAO/HUD-91-63 SSA's Performance in Downsizing

Analysis from government oversight bodies is usually limited to first-order, measurable impacts like phone-calls answered. A Government Accountability Office (GAO) report from the conclusion of the downsizing, excerpted and shown in Figure 2, shows mixed results on direct impacts: accuracy and processing rates for social security were stable, while waiting times for administrative hearings, especially related to disability insurance, increased. The stable accuracy rates and decreased pending workloads for retirement benefits may be due to technological improvements in the field offices and central operations. The key conclusion from this chart is actually in what the chart does not show: it does not show any impact on retirement or survivors programs, indicating that enrollment for those populations should not have been negatively impacted during this time. It also does not show any data in levels for accuracy or processing, ignoring second-order demand impacts. Stable accuracy and processing rates against lower total enrollment numbers could be masking impacts if enrollment had remained stable, and worsening timeliness for SSDI claims and hearings could be reducing program demand due to a higher-cost ordeal mechanism. In other words, counterfactual performance could have been worse if one assumes a constant level of demand.

Figure 2: Pending Workloads

	Fiscal Year					
	1984	1985	1986	1987	1988	1989
Accuracy Rates (percent)	Higher is Better					
SSI payment	96.7	96.7	96.1	96.2	96.5	96.6
RSI payment	99.5	99.5	99.6	99.7	99.8	99.8
SSI process	96.7	96.7	98	98.1	missing	missing
RSI process	95.3	97.1	97.1	96.7	missing	missing
DI process	94.9	96.3	96.6	94.3	94.7	94.6
Processing Timeliness (days)	Lower is Better					
RSI claims	24.1	22	21	20	20.2	19.3
DI claims	69.7	70	81	74	73.7	73.7
SSI-aged claims	15.4	12	10	11	11.3	13.5
SSI-blind/disabled claims	71.4	65	78	77	76.8	83.4
Reconsiderations	50.8	53	65	59	55.5	59.1
Hearings	185	167	172	198	216	215
Pending Workloads (thousands)	Lower is Better					
Field Offices:						
RSI claims	151	155	116	107	105	85
DI claims	260	233	277	233	205	214
SSI-aged claims	13	6	5	5	5	5
SSI-blind/disabled claims	169	218	247	216	222	228

Source:GAO/HUD-91-63 SSA's Performance in Downsizing. RSI is retirement and survivor's benefits, SSI is all of Supplemental Security Insurance, and DI is SSDI.

The GAO includes in its report, quite pointedly, that the "SSA does not have work load time standards on which to base its staff needs assessments and cannot compare actual to expected performance. Consequently, SSA cannot accurately determine, at any point in time, what its total staff needs are and cannot perform needed work force planning."[9]

[9]GAO/HUD-91-63 SSA's Performance in Downsizing

3 Empirical Strategy

3.1 Data

There are two main sources of data for this project: the first is federal government employee microdata from the Office of Personnel Management obtained via the Freedom of Information Act by Buzzfeed News. The dataset covers the universe of SSA employees from 1974 onward and provides personnel data for all employees, including their work location. The second source is Social Security beneficiary data at the county-year level, covering both Social Security (OASDI) and Supplemental Security Insurance (SSI), reported by the SSA in annual print reports and recently digitized as part of an NBER RDRC project [10]. Lastly, data from the 1980 and 1990 decennial censuses obtained through IPUMS NHGIS are used for controls (Manson et al.).

I use 1984 as the base year for my analysis to align with SSA's benchmark staffing level [11]. I am primarily concerned with the downsizing in the field offices, which were customer-facing, as opposed to centralized operations. These centralized operations handled higher-level administration such as disability determinations, and while they also experienced significant downsizing during this period that effect should be uniform across geography.

The main source of data for field office staffing levels is employee microdata from the Office of Personnel Management that covers the universe of Social Security Administration employees since 1974. The data is not anonymized and employees have unique identification numbers, as well as information about their age (in five-year buckets), location at the city level, educational attainment, years of service (in five-year buckets), as well as occupation, supervisory status, full-time status, and salary [12]. For robustness I check the total headcount for both number of unique employees and full-time equivalent employees for a divergence indicating variation in attrition, loopholes in the hiring freeze allowing for part-time workers, or things of that nature (see **??**, located in the appendix). The data do not show a divergence so the measures should be proportionate; I continue with a simple headcount for the analysis.

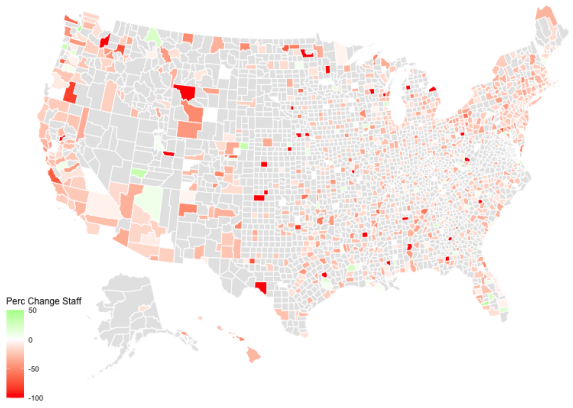
I remove cities that match locations of central operations (e.g. Birmingham, Alabama hosts a disability determination office). The removed cities have staffing levels that are large in both

[10] I am deeply grateful to Timothy Moore for sharing this data.
[11] GAO/HUD-91-63 SSA's Performance in Downsizing
[12] A small number of records have their details masked due to privacy or security concerns, but those are primarily central operations employees and therefore out of sample

absolute terms, compared to field offices, and relative to the population where they are located. After removing the excluded cities, I group employees at the county level in order to match the level of detail of beneficiary data available from the Social Security Administration. I also remove non-US operations (mainly US territories but also a low number of staff in foreign countries, likely located at embassies) as the beneficiary data are only for US states.

Social Security beneficiary data is at the county-year level, reported by the Social Security Administration in yearly reports and digitized through an SSA/NBER partnership [13]. The number of active beneficiaries is broken down by program and recipient connection, where applicable (i.e., worker, spouse, or children). Data is available for Old Age, Survivors, Disability, and Supplemental Security Insurance allowing for complete coverage of program disbursements from the SSA. Due to the way the data was recorded in the beneficiary data the boroughs of New York City are combined into one observation for all data used in this paper. I further remove 4 counties from the sample, all in Alaska, which had no benefit recipients recorded in the base period; these are believed to be missing data and cannot be interpreted as true or near-zeroes.

Figure 3: Log Change in FTE Employees



Map of the log change in full-time equivalent employees between 1984 and 1990. There were a total of 13 office closures during this time period due to geographically reallocated or no staff, belonging to the counties showing 100% decrease.

Lastly, data used for the controls, outlined in greater detail below, are from the 1980 and 1990 decennial censuses obtained through IPUMS NHGIS (Manson et al.).

[13] I am deeply grateful to Timothy Moore for sharing this data

3.2 Model

I use a log differences approach to capture the overall change between the pre-downsizing base period and the end of the hiring freeze in 1990 (discussion of the time periods chosen for start and end continues in section 4.4). This method is beneficial because it accommodates cumulative changes over the period and bypasses a data limitation of 1986 beneficiary data as a 10% sample as opposed to a full population like other years.

The full-specification includes controls and state fixed effects as follows:

$$\Delta Enrollment_{pi(s)}^{1990-1984} = \alpha_0 + \alpha_1 \Delta SSAEmployment_{i(s)}^{1990-1984} + \alpha_2 W_i + \psi_s + \epsilon_{pi(s)}$$

- $\Delta\ Enrollment_{pi(s)}$: Log change in number beneficiaries for program p in county i, 1984-1990
- $\Delta\ SSAEmployment_{i(s)}$: Log change in SSA Employment in county i, in total headcount, 1984-1990
- W_i is a vector of controls in county i (change in unemployment rate, log change in county population, log change in number of citizens age 65 or over)
- ψ_s are state fixed-effects

The main threat to identification is endogeneity introduced by local economic conditions which could affect both benefits enrollment decisions of residents and labor market decisions of staff. The literature shows evidence of counter-cyclicality regarding disability insurance applications (Autor and Duggan, 2003) and under specific circumstances SSI applications (Nichols et al., 2017), in addition to evidence that recessions prompt an increase in early retirement (Fichtner et al., 2012). The latter would only represent inter-temporal shifting in enrollment rather than a real change unlike the former. National economic trends are not an issue for identification, but diverging local economic conditions could be. In order to help control for this variation in local economic conditions, I include a measure for the raw change in unemployment rate in each county, to capture varying economic trends. [14]

Other controls include log change in population and log change in population over age 65 in order to remove effects from overall growth trends. During this period most counties were experiencing growth in population levels which would imply an increase in the number of beneficiaries. The separate age x population component is to control for variation in demographics within this

[14] A previous attempt at circumventing this endogeneity using the age composition of field office employees as an instrument for downsizing failed due to a weak first stage.

baseline population growth (decline). In particular, nearly 97% of Americans aged 60 or older currently receive or will receive social security retirement benefits [15]. Therefore we would expect different levels of demand for a college town and a retirement community growing at similar rates.

4 Results

I begin by limiting the sample to counties with at least one SSA employee in the base period; the sample represents about 30% of the counties in the US. One limitation with this approach is that counties with no employees could still have contact stations, where an employee from the nearest field office provides limited service in a community center or nursing home on a visiting basis, and those would be excluded from the sample even if the county was affected. The employee would still be listed as belonging to the city of the field office they are based out of and reports from the time period have not been able to provide a list of the contact stations so there is too much uncertainty to comfortably include these counties in the sample. If this situation occurred, where a field office employee that staffed resident stations in neighboring counties with no permanent employees departed during the downsizing, it would slightly overstate the staffing reduction in the field office county, thus understating the impact of the downsizing on benefits enrollment, and understate the overall impact as the impacted county is out of sample. Therefore, excluding counties with no permanent employees simply provides a more conservative estimate of the impacts.

Counties in this sample are more likely to be population-dense urban or suburban counties, with those out-of-sample disproportionately rural. This is visible through the corridor from Montana down to central Texas and the Idaho/Utah/Nevada tri-state, where only a select few counties aligning with metropolitan areas are in-sample. Beyond population density, there does not appear to be any regional patterns indicating other unobserved influences- the variation seems well-dispersed across the country. Agency reports indicate that downsizing was attrition-based and therefore should not face endogeneity from local program demand where offices downsize because of a decrease in demand for services. Nonetheless I verify the exogeneity of the attrition by regressing change in 1984-1990 office staff on 1980-1983 enrollment trends, to see if staff in offices with decreasing enrollment trends before the downsizing faced systemically higher pressure

[15] https://www.ssa.gov/policy/docs/population-profiles/never-beneficiaries.html

to leave, and results indicate that this is not the case (see table 4 in appendix). For counties that have zero employees in the end period, these are treated as true zeros and transformed using a standard log(x+1) approach. Tests for robustness using other transformation functions can be found in the appendix.

I run three different model specifications for the topline (OASDI & SSI) programs: one with no controls or fixed effects, one with the controls outlined above but without fixed effects, and one with the full specification outlined in the model. In the basic specification, I measure only the association between staffing changes and enrollment changes. By adding in demographic controls and controlling for change in unemployment rate any bias coming from changes in underlying population or local economic conditions should be removed from the estimate. Finally, by adding state fixed effects, variation from unobserved state-level factors is removed, such as other state-level policies affecting the targeted population (other program funding, other social services), the employees (state minimum wage changes or unemployment insurance variation), or simply state characteristics that I have not separately controlled for like population density that could imply heterogeneous treatment or spillover effects.

4.1 OASDI & SSI

Table 1: Topline Program Results

	OASDI	OASDI	OASDI	SSI	SSI	SSI
Log Change Employees	0.041***	0.008**	0.006**	0.053***	0.033**	0.032***
	(0.008)	(0.003)	(0.003)	(0.018)	(0.015)	(0.011)
Num.Obs.	941	941	941	948	948	948
R2	0.031	0.815	0.864	0.014	0.188	0.585
Controls	No	Yes	Yes	No	Yes	Yes
State FE	No	No	Yes	No	No	Yes

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Results of log-differences regression for OASDI (specifications 1-3) and SSI (specifications 4-6). Controls for demographics and change in unemployement rate are excluded in specifications 1 & 3. State fixed effects are included in specifications 3 & 6. The difference in number of observations is driven by the underlying beneficiary data.

In all specifications, the coefficient estimates are positive indicating that a decrease in SSA employees in a given county is associated with a decrease in beneficiaries in that county.

Specifications (1) and (4) show larger magnitudes which then moderate with the inclusion of population and demographic characteristics, suggesting that part of the decrease in enrollees may

be due to a decrease in eligible residents or improving job market conditions decreasing demand. Since our downsizing is attrition-based and therefore entirely employee-driven, this is unlikely to indicate reverse causality in which offices downsize because of the decrease in benefits-eligible residents.

Although the marginal effects are small, recall that more than half of all offices lost at least 20% of their staff during this period. At the county level, the mean county lost approximately 31% of their full-time equivalent staff which translates into a 0.126% reduction in OASDI beneficiaries and 0.471% reduction in SSI beneficiaries that is not explained by population or demographic trends. The real impacts will be further contextualized in the Cost Estimates subsection below.

The effect size for the enrollment of SSI is five times that of OASDI. There are a variety of possible mechanisms that could be driving this disparity, notably differences in the targeted population, differences in potential benefit amounts, salience of the programs, differences in administrative requirements, or any combination therein.

It may be that administration that occurs within the field office is more cumbersome for SSI than OASDI. SSI customers may require more assistance with their forms, may include higher quantity or more complex paperwork than OASDI, or require specialized institutional knowledge or skills among the office staff. If SSI processing entails more work, or is more prone to error, then the larger effect could be driven by aspects of the program administration itself rather than the characteristics of the applicants.

Benefits amounts varied between the programs. If being understaffed led to increased wait times in offices, then SSI hopefuls may be more sensitive to the additional ordeal mechanism than OASDI due to differing benefits levels. In 1987 the monthly benefit for SSI for an individual was $340 (2023$930) compared to up to $1,056 (2023$3,021) for OASDI retirement benefits if retiring at age 70 with maximum contributions.

Internal documents indicate that one of the major cutbacks required with the loss of staff was outreach[16]: OASDI, being an older program with wide applicability and high salience, may not suffer from loss in marketing and outreach. SSI on the other hand, while nationally increasing enrollments over this time period, was barely a decade old and applicable to substantially fewer people.

Lastly, SSI hopefuls may be fundamentally different from OASDI hopefuls in a way that is

[16]link from archive, post on website

impacted by the downsizing. At minimum, we know that the composition of these programs is different even though at surface they both target aged and disabled residents (and their dependents). In 1984 aged recipients made up 42% of the SSI recipients on average compared to 58% of OASDI recipients at the county level. Aged residents may have more patience to wait than disabled residents or better ability to substitute towards phone-based service.

In all likelihood the effects are due to a combination of these mechanisms; however, I am not aware of the existence of data from this time period that would help untangle them.

Restricting the sample to counties with offices provides a conservative estimate of the impacts of the downsizing by ignoring spillovers and is therefore the preferred specification, despite the fact that the sample encompasses only about a third of US counties. The largest spillover effects would be felt by exurban and rural counties that do not have an office, but in which the residents travel to nearby counties to visit their Social Security offices. In order to expand the generalizability of the analysis, I run the same regression with an expanded sample to include all counties regardless of the presence of employees in the base period. I use a distance-weighted nearest-neighbor approach, assigning each county with zero employees the value of employees of its nearest non-zero-employee neighbor. I set the maximum distance of 100 miles as a plausible ceiling on travel, which excludes only 13 counties, and then gradually decrease the distance in increments. The results for this expanded sample are shown in Table 2 together with the results of the original sample from Table 1 reiterated for ease of comparison.

Table 2: Topline Results by Distance

	100 Miles	75 Miles	50 Miles	25 Miles	10 Miles	In-County Only
			OASDI			
Log Staff Change	0.001	0.000	−0.002	0.003	0.006**	0.006**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Num.Obs.	3053	3004	2802	1821	959	941
R2	0.764	0.771	0.784	0.813	0.845	0.864
			SSI			
Log Staff Change	0.008	0.004	0.006	−0.018*	0.033***	0.032***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.011)	(0.011)
Num.Obs.	3058	3009	2808	1827	966	948
R2	0.353	0.353	0.393	0.476	0.577	0.585

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Results of log-differences regression for OASDI and SSI with variable distance limits. Controls for demographics and change in unemployement rate as well as state fixed effects are included in all specifications. The difference in number of observations between OASDI and SSI is driven by the underlying beneficiary data.

For both OASDI and SSI the magnitudes are moderated as the sample expands, which implies

lower effect sizes for counties that did not have an office to begin with. The original results are consistent for counties within 10 miles; however, beyond that distance, the results are no longer significant at the 5% level. This matches the intuition that the effects in the farther counties would be muted either because they were not receiving substantial outreach prior to the downsizing or because residents were already accustomed to interacting with the agency by alternative methods.

I conduct a placebo test using SNAP data to ensure that this is not reflecting general trends in welfare program enrollment. SNAP enrollment data at the county level is not available prior to 1989, so instead I substitute SNAP program expenditures which is available from the U.S. Bureau of Economic Analaysis (BEA) Regional Economic Accounts. Results from this test can be seen in Table 4. Nationally, SNAP enrollments remained flat during this time period while expenditures rose [17]. Using only the restricted sample the relationship between SSA staffing changes and SNAP expenditures is negative but not significantly different than zero, and this pattern holds up until the sample includes counties up to 50 miles away from the nearest county with an office when the estimates flip signs and become statistically significant at the 5% level. Counties that lost more SSA staff simultaneously saw increases in SNAP expenditures (though not significantly so); if the previous results were due to general trends in welfare then we would expect the estimate to be similar- positive and significant. Interpreting the results for the expanded samples is challenging: counties far away from SSA offices that lost more staff also saw larger decreases in SNAP expenditures. This could possibly be due to complementarities in welfare support systems, for example SSA outreach also provided information on other available programs, but that would only yield these results if there were something unique about this rural outreach relative to the closer-distance outreach.

4.2 Program Components

Breaking down the programs into their sub-populations is helpful for trying to understand the heterogeneous impact of the downsizing. OASDI is composed of Old-Age, Survivors', and Disability (SSDI) components. Old Age benefits are available starting at 62 for early retirement through age 70 for delayed retirement, with 67 being the standard full retirement age for anyone born after 1960. All three components under OASDI require work credits, earned through the payment of FICA payroll taxes. SSI is composed of Old-Age, Blind, and Disability components, but unlike

[17] Source: National Level Annual Summary Participation and Costs, 1969-2024, accessed via USDA website

OASDI, SSI does not require any earned work credits, only income and asset qualifications. Importantly, the physical standards for eligibility for disability benefits are the same across OASDI and SSI. Therefore, we do not expect these populations to vary in severity of disability, though they may differ in other respects.

Table 3 shows the preferred specification outlined in the model section, but with log change in beneficiaries within each program as outcomes in separate regressions. It is again shown for both the restricted and fully-expanded sample. Starting with OASDI, the magnitude of the point estimate for SSDI is several times larger than that for retirement benefits, and both retirement and survivors' coefficients are not precisely estimated in the restricted sample. In the case of survivors' benefits I attribute this to policy size, it is a small program with less variation in enrollment. Retirement benefits, the largest program SSA administers, has nearly perfect take-up (estimated at approx. 98%). The results for the restricted sample are not precisely estimated, however the expanded sample retains a similar magnitude. It is unlikely that retirees forego benefits entirely, however it is possible that administrative challenges lead them to delay enrollment.

SSI point estimates are identical between the old age population and the blind & disabled population in both samples. Compared to OASDI, SSI does not seem to face intra-program variation in effect based on the target population. The estimates for both SSI populations are also larger than the SSDI estimate, suggesting SSI faces overall higher barriers to enrollment when short-staffed, even among similarly-disabled constituents.

Table 3: Program Breakdown Results

	OASDI			SSI	
	Retirement	Disability	Survivors	Old Age	Blind & Disabled
In-County Office					
Log Staff Change	0.004	0.015**	0.004	0.025*	0.025**
	(0.003)	(0.008)	(0.004)	(0.014)	(0.011)
Num.Obs.	941	941	941	948	948
R2	0.882	0.552	0.767	0.495	0.458
Up to 50 Miles					
Log Staff Change	−0.002	−0.010	0.006	0.009	0.002
	(0.003)	(0.010)	(0.004)	(0.014)	(0.011)
Num.Obs.	2802	2802	2802	2808	2808
R2	0.799	0.168	0.481	0.261	0.250

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Results of log-differences regression for OASDI sub-populations and SSI sub-populations. Controls for demographics and change in unemployement rate as well as state fixed effects are included in all specifications. The difference in number of observations is driven by the underlying beneficiary data.

Citizens may choose to visit offices other than their closest during this time period if, for example, they hear through word of mouth that waiting times for service are high. In that case the results would be underestimated as spillovers of service provision to neighboring counties occur; enrollment would be less responsive to change in staff than if residents were bound to an office in their county.

Permanent sorting by residents, as in relocating to neighboring cities or counties, in response to the downsizing is not a major concern. Firstly, a lack of news articles from the time period mentioning the downsizing or impacts of it implies that this may not have been salient to the general public. Secondly, visits to the office are not routine so no matter how unpleasant the process, it would be unlikely for the differential ordeal between counties to be high enough to justify relocation. Lastly, since the downsizings are exogenous and gradual, even a citizen who is aware of the downsizing and has sufficiently low cost to relocate would be unlikely to predict whether the downsizing in alternate locations is higher, lower, or on par with their current residence.

Results are robust to adjusting the time period both earlier and later. There are concerns that some downsizing had already occurred prior to the implementation of this plan, approximately 2,532 staff had been cut over 2 years [18] but it is not clear if this through attrition or reductions in force, nor how these cutbacks were distributed between the field offices and central operations. Adjusting the base period to 1980 and 1982, results remain largely the same.

Similarly, there could be concerns that ending the period in 1990 may be too early. One possibility is that citizens who were otherwise eligible for benefits chose to delay enrollment due to administrative challenges (or presumed challenges by word of mouth). In this case we would expect to see an increase in enrollment in the years following 1990 leading to an overestimated effect in the primary results. Alternatively, there could be a lag in the time it takes for effects of the downsizing to be felt. Since this policy was in place until 1990 there could be impacts on enrollment that are not felt until the following years as the cumulative impact and delays have time to unfold. In this case we would expect the primary results to be underestimated. Since the results are robust to a later ending period, we can conclude that either these forces are immaterial, or that they offset.

Immediately after the hiring freeze ended in 1990 compensatory hiring began. The total field office headcount rebounded by approximately 2,500 employees by 1993 then remained fairly steady

[18] https://www.nytimes.com/1985/04/04/us/21-cutback-in-social-security-staff-planned.html

in the following decades. It is impossible to accurately capture long-term persistence due to this rebound hiring, as it was fully endogenous.

Another factor that may moderate the results is the crowd-in of non-governmental organizations expanding services to fill the void left by SSA's downsized footprint. This may take the form of additional outreach or services by non-profits to assist residents in applying for benefits, coordinating transportation to field offices, or providing support that would lessen incentives to apply for benefits (e.g. someone who may be eligible for disability benefits receives enough support from non-governmental organizations that applying for DI benefits is outweighed by the burden).

4.3 Shortfall Estimates

Results overall indicate that the marginal effects of downsizing staff have a modest impact on enrollment, but these effects can be large in aggregate. To better understand the results in the context of a national change, I will proceed with some back-of-the-envelope calculations to interpret the effect of downsizing within field offices.

I will now interpret the coefficient results in context of the real effect size for a mean county in the restricted sample (counties with an office in the base period).

(mean Δ $SSAEmployment_{i(s)}$)*(α_1 estimate)= mean treatment effect (MTE) (1.1)

(mean enrollment in 1990)*(1 + MTE)= counterfactual mean enrollment (1.2)

(counterfactual mean enrollment)-(actual mean enrollment)= enrollment shortfall/ county (1.3)

(enrollment shortfall/ county) * # counties in sample= total shortfall (1.4)

Using mean 26 log point staff loss, the mean treatment effect is -0.16% for OASDI enrollment and -0.83% enrollment for SSI (eq. 1.1). The sample mean for total OASDI enrollment in 1990 is 32,161 people, and for SSI is 3,991 people. Translating the mean treatment effect predicts a 83.7 person (50.2 OASDI, 33.5 SSI) decrease per county in enrollment (eq. 1.3), which multiplied by the number of counties in sample would have been 47,285 beneficiaries lower for OASDI and 31,742 beneficiaries lower for SSI than the counterfactual estimate (eq. 1.4), combined for a total national shortfall for affected counties of 79,027 beneficiaries. I interpret this as the enrollment "shortfall" due to the impact of field office downsizing.

There are key points to consider when interpreting these results in light of the objective of an

optimal level of administrative staffing. Focusing on SSI, any decrease in take-up is based on an administrative margin rather than a labor force margin. That is, we know that this population has few or no work credits as they would otherwise earn enough from OASDI to no longer be eligible for SSI. Therefore, we can assume that few or none of these marginal beneficiaries would join the labor force in the absence of SSI benefits, especially for those who are categorically eligible due to old age. In that light, the downsizing mechanically increased poverty for some thirty thousand extremely low-income citizens (excluding consideration of crowd-out from other public programs or nongovernmental sources).

However, the total shortfall of 79,027 beneficiaries against the loss of approximately 9,200 staff (59% decrease over the base period), which equals 8.6 beneficiaries per employee, can provide a benchmark against which to compare other methods of administrative support and targeting.

As a further exercise, I provide upper and lower bounds on the estimated cost of administrative support for the shortfall of enrollees. For the lower bound I use the salary information from the OPM personnel data. OPM salary data only includes base salary but excludes overtime, bonuses, and non-salary costs like health insurance or pension contributions. First, I sum the total yearly salary expense by quarter. To smooth quarterly variation I average over each calendar year. Then I subtract from the base period of March 1984. The cumulative salary savings through 1990 using this method is $400.8M, dividing out by the enrollment shortfall of 79,027 yields $5,072 (1990) per marginal beneficiary in administrative support costs.

As an upper bound, I take the reported costs savings from the GAO report debriefing the downsizing in 1991 [19]. GAO places the total personnel cost-savings at $1.8B (1990), which includes both field office and central operations staff but does not specify which non-salary components are included. Field office staff made up 59% of the total staff loss but also have lower salaries and lower GS-scale ranking on average than central operations, so conservatively I allocated 50% of the savings to field office staff. Then following the same steps as for the lower bound, I divide $950M by the shortfall which yields $12,021 (1990) per marginal beneficiary.

Adjusting the bounds for inflation, I estimate that each marginal beneficiary costs between $12,042 and $28,540 in 2025 dollars to enroll or maintain enrollment by field office staff. These estimates do not represent the worthiness of beneficiaries or statements of marginal costs versus benefits; their purpose is only to benchmark against the costs of alternative measures of adminis-

[19] GAO/HUD-91-63 SSA's Performance in Downsizing

trative support. For example, the salary of a social worker for the federal government (Department of Veterans Affairs) is approximately $75,000 per year [20]. Therefore, when comparing field office staff to hiring a social worker, maintaining field office staff would be the less efficient option if a social worker could engage at least 2.63-6.23 beneficiaries. If a social worker could not, then the field office staff would be more efficient by reducing the administrative burden; this may be through outreach, trainings, reduced wait times, workload allocation, or other barriers discussed previously.

Traditionally, welfare programs have calculated administrative cost ratios as cents per dollar of benefits paid out (see (Isaacs and Andrews) for a valuable overview). There are valid reasons to do so, most importantly that both numbers are easily attainable and do not rely on estimates of which participants are marginal. However, they are highly skewed by the fact that welfare programs vary widely in benefits amounts, and those benefits do not necessarily scale with the administrative burden on applicants or staff. Within SSA retirement benefits are the most routine enrollment processes, yet pay both higher benefit amounts and to more beneficiaries than SSI.

I propose that, when possible, the field move towards this measure of administrative cost per marginal beneficiary as it more accurately reflects the location on the marginal cost curve; it does not imply equal administrative costs among all recipients and is more accurate when comparing marginal levels (in this case staffing, but also applies broadly) of administration against other methods of reaching the same beneficiaries.

5 Conclusion

In order to evaluate the impact that the decrease in front-line staff had on program enrollment, I use rich employee microdata and enrollment statistics to measure the impacts across OASDI and SSI programs administered by the SSA. The greatest impacts were to social security disability insurance and supplemental security income, particularly the disabled and elderly. Retirement benefits were not strongly affected, nor were there strong spillovers to less populous counties.

Although the marginal effects of a percent change in staffing are modest, this downsizing was substantial and it is important to place the estimates in context of the size of hiring impacts and the size of these programs. The estimated shortfall of approximately 79,000 beneficiaries is a

[20] obtained from open listings on USAJOBS on Feb 26, 2025

moderately large effect when considering that this analysis focuses solely on field office staff with no consideration of attrition in central operations.

Technological improvements and call centers, which were meant to improve efficiency and client service, may have had an impact in improving enrollment across the board akin to a rising tide lifting all boats. However, the improvements were insufficient to fully mitigate the impacts of sudden downsizing in terms of substitution for labor, since there is still variation in enrollment based on local office staffing levels. This is not to say, in any generalized way, that labor and capital are unequal substitutes; however, it highlights the importance of timing in smoothing operational capabilities during major transitions. Since the attrition policy was implemented prior to the completion of the system modernization, delays in the implementation, as well as administrative needs that were not substitutable to technology, left gaps in service.

References

D. H. Autor and M. G. Duggan. The Rise in the Disability Rolls and the Decline in Unemployment*. *The Quarterly Journal of Economics*, 118(1):157–206, Feb. 2003. ISSN 0033-5533. doi: 10.1162/00335530360535171. URL https://doi.org/10.1162/00335530360535171.

D. H. Autor, N. Maestas, K. J. Mullen, and A. Strand. Does Delay Cause Decay? The Effect of Administrative Decision Time on the Labor Force Participation and Earnings of Disability Applicants. *NBER Working Paper No. 20840*, 2017.

M. Bitler, J. Cook, and S. R. Porter. How Place and Need Intersect: How Lack of Retail and Enrollment Offices Deters Nutrition Assistance Take-Up, 2023. URL https://rawcdn.githack.com/jasoncookecon/SNAP_Distance/683454d05ed0a10bf9b5158d070786f141729a7e/SNAP_Distance_Bitler_Cook_Porter.html#1. Work In Progress.

M. Deshpande and Y. Li. Who Is Screened Out? Application Costs and the Targeting of Disability Programs. *American Economic Journal: Economic Policy*, 11(4):213–248, Nov. 2019. ISSN 1945-7731. doi: 10.1257/pol.20180076. URL https://www.aeaweb.org/articles?id=10.1257/pol.20180076.

J. J. Fichtner, J. W. Phillips, and B. A. Smith. Retirement Behavior and the Global Financial Crisis. In *Reshaping Retirement Security: Lessons from the Global Financial Crisis*. Oxford University Press, 2012.

S. Gallegos, B. Roseth, A. Cuesta, and M. Sánchez. Increasing the take-up of public health services: An at-scale experiment on digital government. *Journal of Public Economics*, 227: 104975, Nov. 2023. ISSN 0047-2727. doi: 10.1016/j.jpubeco.2023.104975. URL https://www.sciencedirect.com/science/article/pii/S0047272723001573.

J. Isaacs and M. Andrews. The Costs of Benefit Delivery in the Food Stamp Program: Lessons From a Cross-Program Analysis.

S. Manson, D. Van Riper, K. Knowles, T. Kugler, F. Roberts, and Ruggles. IPUMS National Historical Geographic Information System.

A. Michaud, T. J. Moore, and D. Wiczer. The Relationship between Social Security Disability Insurance Wait Times and Applications. *NBER Working Paper DRC NB18-Q5*, Sept.

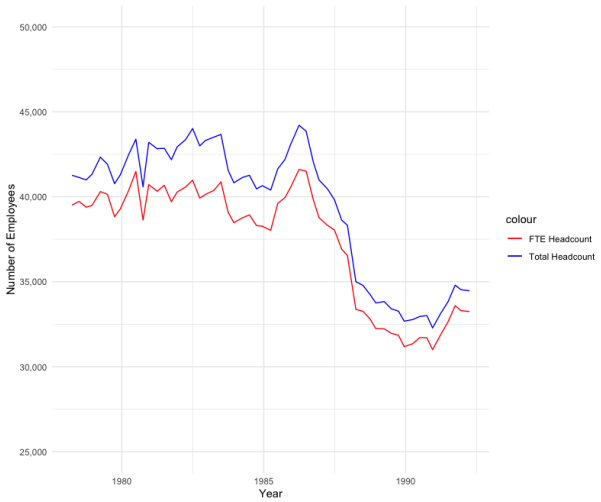
2019. URL https://www.nber.org/sites/default/files/2020-05/dNB18-Q5%20Michaud%20Moore%20Wiczer%20-%20REVISED.pdf.

A. Nichols, L. Schmidt, and P. Sevak. Economic Conditions and Supplemental Security Income Application. *Social Security Bulletin*, 77(4), 2017.

D. Wu and B. Meyer. Certification and Recertification in Welfare Programs: What Happens When Automation Goes Wrong?, July 2023. URL https://papers.ssrn.com/abstract=4503050.

6 Appendix

Figure 4: Comparison of Unique Employees and Full-Time Equivalent Employees



Comparison of the number of unique employees with the same adjusted for part-time employees adjusted in half. The bump in

Table 4: Exogeneity of Staff Attrition

	OASDI	SSI
Pretrend OASDI enrollment	−0.206	
	(0.338)	
Pretrend SSI Enrollment		0.052
		(0.187)
Num.Obs.	941	948
R2	0.102	0.102

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Changes in Employment from 1984-1990 regressed on enrollment trends prior to the downsizing, 1980-1983. This confirms that offices facing downward enrollment trends (controlling for population, population over age 65, and local economic conditions) did not see different levels of employee attrition. If these results had been statistically significant, it would raise questions of whether employees were influenced by enrollment levels in their attrition decisions.

Table 5: Alternative Transformations

	Original (Log(X+1))	Log (X+1)	Percent Change		Inverse Hyperbolic Sin		DHS Growth Rate	
OASDI- Total	0.006**	0.004	0.004	0.003	0.008*	0.005	0.008**	0.004
OASDI-Old Age	0.004	0.002	0.005	0.005	0.007*	0.004	0.006**	0.002
OASDI- Disability	0.015**	0.018	0.017*	0.007	0.026**	0.021	0.019**	0.019*
OASDI- Survivors	0.004	0.001	0.003	0.005	0.003	0.003	0.003	-0.001
SSI- Total	0.032***	0.080***	0.018	0.045*	0.034**	0.086***	0.026***	0.074***
SSI- Old Age	0.025*	0.110***	0.011	0.061**	0.017	0.111***	0.011	0.098***
SSI- Blind / Disabled	0.025**	0.060***	0.017	0.036	0.031*	0.067**	0.022**	0.054***
Population Weights	No	Yes	No	Yes	No	Yes	No	Yes

* p < 0.1, ** p < 0.05, *** p < 0.01

Each cell represents an individual regression, with the change in enrollment by program or sub-program indicated on the left and the transformation, indicated by column, without and with population weights. Population weights are from 1990 decennial census. column 1, log change without weights, is the summary of original results from Table 1 and Table 3

Table 6: Change in SNAP Expenditures

	Restricted Sample
Staff Change	−0.010
	(0.020)
Num.Obs.	944
R2	0.611

* p < 0.1, ** p < 0.05, *** p < 0.01

Log change in SNAP Expenditures 1990-1984 regressed against log change in SSA employment over the same time, at the county level. Restricted sample is defined as counties with at least one employee in the base period