

Contents lists available at ScienceDirect

# **Explorations in Economic History**

journal homepage: www.elsevier.com/locate/eeh



# Local government and old-age support in the New Deal



Daniel Fetter<sup>1</sup>

Wellesley College and NBER, United States

#### ABSTRACT

A key question in the design of public assistance to the needy is how allocation of responsibility for funding and decision-making across different levels of government influences the level and type of assistance provided. The New Deal era was a period in which this allocation changed significantly in the United States, as provision of public assistance shifted from local governments to states and the federal government, accompanied by a large increase in government transfer payments. Focusing on assistance to the elderly and using variation in state laws governing the division of funding between local and state governments for the Old Age Assistance (OAA) Program, this paper investigates the responsiveness of OAA payments and recipiency to local government funding shares. Payments per elderly resident were significantly lower in states with higher local funding shares, driven largely by reductions in recipiency. The baseline results suggest that had local governments needed to fund half of OAA payments in 1939, on the lower end of local funding shares prior to the New Deal, the share of the elderly receiving OAA would have been 5 percent rather than 22 percent, and perhaps even lower. More speculative results suggest that greater local funding led to lower representation of blacks among OAA recipients relative to their share of the population, particularly in the South.

© 2017 Elsevier Inc. All rights reserved.

# 1. Introduction

A key question in the design of public assistance to the needy is how allocation of responsibility for funding and decision-making across different levels of government influences the level and type of assistance provided. Theoretical work, such as Brown and Oates (1987), has investigated some of the efficiency properties of providing assistance at the state or local level, as opposed to the national level.<sup>2</sup> Economists have explored this question empirically in modern contexts such as the welfare reform of the 1990s, which, Ziliak (2015) suggests, may have contributed to declining levels of cash assistance after the reform by raising the marginal cost to states of providing cash assistance.<sup>3</sup> This question is particularly topical given recent proposals to convert many assistance programs into block grants to states (Ryan, 2014). In this paper, I investigate this question in the context of government assistance to the elderly during the New Deal era.

A large literature has investigated fiscal federalism in the New Deal (see, e.g., Fishback and Wallis, 2012). The New Deal marked not only a dramatic increase in governmental transfers to the elderly, but also a shift from local provision of old-age support to increased federal and state involvement, as part of the broader shift of government expenditures from the local to national level (Wallis, 1984, 1991). Prior to 1933, assistance to the needy elderly, and to poor in general, was almost entirely a local affair in both funding and decision making (Wallis and Oates, 1998). State governments had gradually begun to take on a greater role in the 1920s,

E-mail address: dfetter@wellesley.edu

<sup>&</sup>lt;sup>1</sup> I thank Price Fishback, Eric Hilt, Lee Lockwood, John Wallis, Heidi Williams, and seminar participants at Wellesley for helpful comments, and Emily Moss and Jordan Norris for excellent research assistance. I also gratefully acknowledge financial support from National Science Foundation (NSF) Grant Number 1628860.

<sup>&</sup>lt;sup>2</sup> Oates (1999) discusses this literature more broadly.

<sup>&</sup>lt;sup>3</sup> Specifically, the 1990 s welfare reform shifted welfare from open-ended matching grants for states under Aid to Family with Dependent Children (AFDC) to block grants under Temporary Assistance to Needy Families (TANF). Relevant also is the literature on the flypaper effect, the observation that block grants tend to increase expenditure on their stated purpose more than non-grant income (Inman (2008) provides a relatively recent review). As Moffitt (1984) emphasizes, here it is important to consider the difference between matching grants, whose effects are not due to 'flypaper' effects, and block grants. Recent work, such as Singhal (2008) and Knight (2002), emphasizes the importance of political considerations in the analysis of flypaper effects.

but even in 1934, when 26 states had passed laws providing for some state role in old-age assistance, in only 6 states did counties fund less than a quarter of payments. The role of states changed dramatically after the passage of the Social Security Act, which provided federal matching funds for state old-age support programs through the Old Age Assistance Program (OAA) and encouraged a shift of responsibility from local to state governments. By 1939, four years after the passage of the Social Security Act, all states had passed laws and in more than half of them, the county share of OAA payments was zero percent.

The main empirical analysis investigates what role reduced local funding shares played in the observed increase in the level of oldage support. Facilitating the analysis is the fact that even in 1939, there was considerable variation across states in the degree of local involvement in funding OAA. The main empirical estimates use this cross-state policy variation to investigate the relationship between statutory local funding shares and the amount of OAA provided in 1939. Because state policies were correlated with levels of need, and levels of need also influenced the level of relief provided, the empirical strategy follows Fetter and Lockwood (2016) in focusing on comparisons across state borders in order to control flexibly for differences in aggregate shocks and population characteristics. The estimates indicate an economically and statistically significant negative relationship between local funding shares and OAA payments per person, driven primarily by a reduction in the share of the elderly receiving OAA and, to a much lesser extent, by reductions in payments per OAA recipient. The magnitude of the results is substantial, suggesting that the reduction in local funding was an essential part of the growth of government old-age support. Under the Social Security Act, the national government funded 50 percent of old-age assistance payments (up to a cap), and the remainder was funded by states or localities. The baseline specification suggests that had counties been required to fund the other half of old-age assistance payments, the OAA recipiency rate in 1939 – measured as the share of those 65 and above receiving OAA – would have been 5 percent, rather than the observed level of 22 percent.

Several pieces of evidence support the interpretation of these estimates as the causal effect of local funding shares. Once comparisons are made only across state borders, other observable policy characteristics do not explain the negative relationship between local funding shares and recipiency or payments, and if anything conditioning on observable policy variables tends to magnify the results. Moreover, changes in local funding shares between 1937 and 1939 are associated with changes in recipiency and payments that are nearly identical to those estimated from the 1939 cross-section.

Closely related to the shift away from local funding of old-age assistance was a shift in decision-making from the local level to the state level. I document that the responsiveness of OAA payments to local funding shares was most pronounced in states in which local governments, rather than states, had the final say in determining whether to provide assistance to a given case. The greater responsiveness to local funding requirements in states where localities had more influence on decision-making accords with the interpretation of the main estimates as the effect of local funding. Moreover, allowing this flexibility is important for understanding the effects of changing both local funding requirements and the level at which decisions were made. Allowing this flexibility yields results that suggest that had all decisions been made by local governments that funded 50 percent, the OAA recipiency rate would have been 1 percent rather than 22 percent.

To the extent that local funding reduced OAA recipiency, a natural extension is to ask how it influenced the composition of recipients. I focus on one dimension of this question: how local funding influenced blacks' receipt of OAA. The basic difficulty in answering this question is that there is no large source of microdata from this period that directly measures OAA receipt. However, in a spirit similar to Fetter and Lockwood (2016), I show that the 1940 Census question on receipt of non-wage income can be used to construct a reasonable proxy for OAA recipiency at the county level, using the complete-count Census data for 1940 (Ruggles et al., 2015). After validating this measure, I use it to investigate the relationship between local funding and the representation of blacks among OAA recipients relative to their share in the population. I find suggestive evidence that in the country as a whole, local funding was associated with greater underrepresentation of blacks among OAA recipients relative to their share of the population. While somewhat sensitive to specification, the evidence is also suggestive that this relationship is significantly larger in the South, both economically and statistically. These findings, while necessarily speculative given that they are based not on observation of OAA receipt but rather receipt of any non-wage income, suggest that the shift away from local funding may have improved access of blacks to old-age support.

This paper relates most closely to the literature on fiscal federalism in the New Deal: for example, Wallis (1984), Wallis (1991), and Wallis (2000), in addition to Fishback and Wallis (2012). In large part this literature has focused on explaining the decline of local government expenditures relative to state and national government expenditures by measuring the responses of state and local spending to shifts in national spending.<sup>5</sup> It has not, however, directly measured the responsiveness of spending to changes in the marginal cost to local or state governments of providing assistance, in the spirit of the broader literature on the responsiveness of lower-level governments to changes in intergovernmental matching grants (e.g., Baicker, 2005). One reason this question has been difficult to address is that while most New Deal programs required some state or local funding, in many programs there was no explicit matching formula, or the requirements were enforced unequally across states (Fishback and Wallis, 2012). OAA offers a case amenable to empirical study, as it followed a statutory matching formula for the division of funding across each of the three levels of government. Although some have observed broadly that local funding requirements led to less assistance (e.g., Costa, 1998, 1999), no work has attempted to quantify the aggregate importance of these requirements, and the magnitude of the estimates is striking: the shift away from local provision of support could account for most of the rise in old-age support over the second half of the 1930s, which itself was the major period of increase before the expansion of Social Security in the 1950s.

<sup>&</sup>lt;sup>4</sup> Wallis (1981) provides a model of local relief budgets in his analysis of relief earlier in the New Deal, under the Federal Emergency Relief Administration, and discusses the importance of accounting for which level of government actually makes relief decisions.

<sup>&</sup>lt;sup>5</sup> Other work documents similar shifts in regulatory functions of government over this period: Knittel (2006), for example, discusses the shift of electricity regulation away from local governments to state governments. Fishback and Wallis (2012) note the tendency of regulatory programs during the New Deal to be national programs.

This paper also contributes to the literatures on the politics of race in the New Deal and the role of race in support for transfer payments. A significant body of literature has examined the relationship between race and the public assistance provisions of the Social Security Act in the New Deal Era, stressing that racial discrimination or the goal of keeping agricultural wages low was behind the South's effort to ensure a high degree of state discretion in the administration of OAA (e.g., Quadagno, 1988; Alston and Ferrie, 1999; Lieberman, 2001). It is also the case that prior to the New Deal, cities with more blacks had lower relief levels overall and less public relief in particular (Fox, 2010). Most closely related to the focus of this paper, Quadagno (1988) suggests that local control of relief contributed to exclusion of blacks from OAA in the South, although she does not focus on local funding per se.

#### 2. Background on OAA

## 2.1. The federal structure of OAA

Prior to the early 20th century, poor relief in the United States was largely based on the legacy of the English Poor Laws. Support for the destitute, including the poor elderly, was seen first as a responsibility of the family, and second as a responsibility of local government (Maxwell, 1946, p. 114). The first state laws providing for assistance to the elderly were in 1915, and a handful of other states, largely in the West and Midwest, passed laws during the 1920s; as of 1929, seven states had old-age assistance laws in effect. These laws were part of a broader spread of state legislation providing for aid to "special classes" (in addition to the aged, aid to the blind and to widowed mothers of dependent children) with the goals of avoiding the stigma of traditional poor relief and increasing administrative efficiency of the programs through greater state involvement (Geddes, 1937, p. 2–4). As Costa (1998) notes, political pressure for greater state involvement in old-age support had begun to grow in the 1920s, but became significantly stronger after the onset of the Great Depression, as older workers became unemployed at particularly high rates and many private pension plans were discontinued or cut benefits. As a result, many more states passed old-age assistance laws in the early years of the Depression. Nevertheless, prior to the passage of the Social Security Act in 1935, most programs for old-age assistance remained small and had relatively modest state administrative or fiscal involvement. As of 1934, when 28 states had passed old-age assistance laws, in 19 states counties or towns had to supply at least half of assistance funds (Cahn, 1934).

This system of significant local funding was ill-suited to insure against aggregate shocks, since negative shocks would both reduce revenues and increase the level of need. The inability of localities to provide sufficient funds to meet the need for relief became apparent early in the Depression. Although states had begun to provide a greater share of assistance by the early 1930s, state governments themselves faced severe financial difficulties (Federal Works Agency, 1942, p. 2). The initial response at the national level to the fiscal problems of states and localities was the creation of the Federal Emergency Relief Administration (FERA). Between 1933 and 1935, FERA distributed federal funds to states, which then passed funds on to local governments. These funds were used, in part, to support assistance to the needy elderly. However, FERA retained significant discretion in the distribution of federal funds across states, leading to political battles and a compromise in 1935 that created the structure that persisted through the remainder of the New Deal (Wallis, 1991). Part of this compromise, embodied in the OAA provisions of the Social Security Act, was that the federal funds for old-age support would be allocated across states according to a strict matching formula for state OAA programs.

Specifically, under the Social Security Act, federal matching funds were provided for state OAA programs, as well as for two other "categorical" relief programs, Aid to Dependent Children (ADC) and Aid to the Blind (AB), under closed end matching grants. The federal government matched combined state and local spending up to a specified cap per case. The provisions of the Social Security Act encouraged a shift from local to state funding and administration of OAA in addition to providing federal funding. In order to receive federal matching funds, a state OAA program had to involve some state financial participation and to be administered, or at least overseen, by a state-level agency (Lansdale et al., 1939, p. 18). It was also significant, as Wallis (1984) emphasizes, that federal matching funds were transferred to state governments, and not directly to local governments.

It is important that by 1939, the division of fiscal responsibility for OAA payments, up to the federal matching cap, was based on fixed shares for each of the three levels of government. That is, given a determination that a particular case would receive assistance, the percentage of the payment to each case provided by each level of government was specified by the state OAA law. Federal matching funds went to the state, which was responsible for distributing funds to local governments if the state did not disburse assistance to recipients directly (Gordon and Israeli, 1939). For OAA in the late 1930s, which is the period examined here, up to a cap of \$30 per month (roughly \$450 in 2010 dollars) the federal funding share was 50 percent and the remaining 50 percent was divided between the state and local governments. In practice, the breakdown of source of funds for OAA payments could deviate slightly from the statutory percentages (for example, U.S. Social Security Board (1940c) reports the realized shares by state for 1938–39). Such deviations could arise, for example, if payments were made above the federal matching cap, or in cases where states used special emergency funds to increase their contribution. However, these differences were generally quite small.

As a result of the shift towards greater federal and state assumption of relief expenditures, by 1939 the local role in funding relief had diminished considerably. All states had OAA programs in operation, and 27 states had OAA laws specifying a local funding share of zero percent. Fig.1 documents that in the remaining states, statutory local shares varied from 7.5% to 35%; Kansas was the only state with a local share above 25%.<sup>7</sup> These local funding shares are the key variable of interest in the analysis below: it is worth

<sup>&</sup>lt;sup>6</sup> Earlier in the 1930s, some states did not have explicit formulas determining the shares of payments paid by states and localities. As emphasized by Wallis (1981) and Wallis (1984), in cases where this matching was not explicit, the fact that the federal matching money went to the state weakened incentives for local expenditures.

<sup>&</sup>lt;sup>7</sup> All details on OAA programs in this section come from U.S. Social Security Board (1940a).

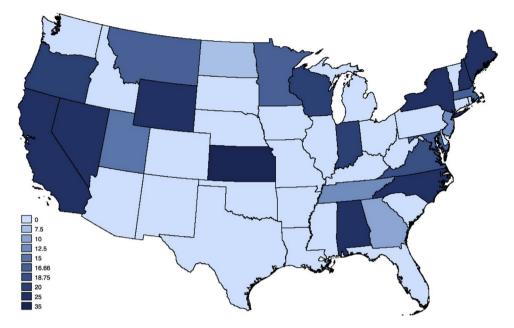


Fig. 1. Statutory local government funding shares. Notes: Figure shows statutory percent of OAA payments funded by local government as of October 1939.

Source: U.S. Social Security Board (1940a).

noting that given the constant federal share, the analysis does not hold the state share constant, but rather estimates the effect of changing the allocation of fiscal responsibility between state and local governments.

Observers at the time noted that the reasons for different division of fiscal responsibility between state and local governments varied from state to state (e.g., Lansdale et al., 1939, p. 18). In general, allocation of fiscal responsibility was made jointly with a decision about allocation of administrative responsibility, with arguments that exclusive state financing would lead to too much control being taken out of the hands of local governments (Lansdale et al., 1939, p. 216). But even states with similar division of administrative responsibility varied in their allocation of fiscal responsibility for OAA.

Despite the shift in financial responsibility away from local governments, it was still noted at the time that in those states requiring local funding, local governments were often unable to make their required payments for OAA (e.g., Lansdale et al., 1939, pp. 220–1). Gordon and Israeli (1939) report that in such cases, some state governments would pay the county share out of state funds, sometimes with provisions for repayment. Other states had special equalization funds that were meant to address shortfalls in localities' ability to pay, or used other already-existing means of addressing fiscal distress of local governments. Provisions of this sort likely smoothed out some differences across counties. Nevertheless, these equalization funds were sometimes suspended, or state funds were not provided to pay the county share, and in these cases payments were cut; Gordon and Israeli (1939) note that local funding remained a constraint on provision of OAA.

At the same time as funding shifted away from the local level to the federal and state levels, assistance to the elderly expanded rapidly. Between 1935 and 1940, the number of recipients of old-age assistance rose from under 400,000 to more than 2 million. By 1940, 22 percent of the population 65 and above received OAA, and received an average annual payment of \$232, about 25 percent of the median wage and salary earnings for 60–64 year old male wage earners in 1939.

An important element in thinking about the impact of changing local funding of OAA is what influence local governments had on decisions regarding OAA eligibility and payments. In nearly all states there was some role for local government: for example, an applicant for relief would submit an application to a local office, and it was often a local agency that would investigate eligibility and need and prepare a recommendation on whether aid should be provided, and in what amount (Lansdale et al., 1939, p. 20). In all states there was also some state supervision. Within these boundaries, however, there was a fair amount of variation in the influence of local government that is difficult to measure precisely. The measure of local influence used in the analysis below is whether the final decision in an OAA case was made by a local official or by a state official. As illustrated by a comparison of Fig. 1 to 2, the latter of which indicates the states where final decisions were made by local officials, local final decisions often, but did not always, coincide with local funding of OAA.

#### 2.2. Other features of OAA

States had considerable leeway within the broad requirements set by the Social Security Act for federal matching grants, and there was a fair amount of variation in the nature of eligibility and payments under different states' laws. As of the end of 1939, which is the focus of the analysis, the common eligibility requirements across states were that a recipient must otherwise have little income (the amount varied across states) and be above some minimum age threshold (65 in most states, 70 in a few). Some also required

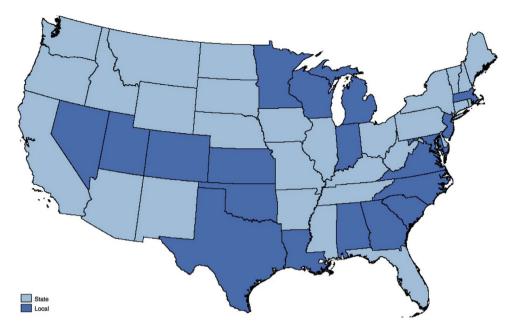


Fig. 2. Level of government making final relief decisions. Notes: Figure indicates states in which local governments made final relief decisions as of October 1939.

Source: Source: U.S. Social Security Board (1940a).

US citizenship or long-term residency, or required that recipient have no legally responsible relatives able to provide support. All required some period of residency in the state before claiming OAA.

Asset tests, such as a dollar value on the amount of property than a recipient could own, were also common, with a subset of these states excluding from consideration the value of a recipient's own home. Although appearing restrictive, these limitations may in fact have been intended to liberalize eligibility by creating more formal eligibility rules, preventing people from being deemed ineligible if they had less than the specified amount of property (U.S. Social Security Board, 1940b, p. 157). Relatedly, some states also included provisions that gave either state or local governments a claim on the recipient's property. Anecdotal evidence suggests, as might be expected, that the presence of such claims reduced take-up among those eligible for OAA, even in states that did not strictly enforce such claims (Lansdale et al., 1939, pp. 94–96). But as Lansdale et al. (1939) note, claims on property, like property limitations, may have sometimes been intended to liberalize eligibility; whereas some relief agencies may have otherwise restricted relief to those without property, these claims may have allowed elderly owning property that was not easily liquidated, such as a home, to borrow against its value.

In most states, OAA resembled an income or consumption floor: a state or local official evaluated the needs and resources of an applicant, and if the applicant was deemed eligible, the excess of needs over resources provided the basis for determining the payment. Maximum allowable payments varied across states, with a range from \$15 to \$45 per month. A handful of states had no legal maximum, but appear to have had administrative norms or rules that kept nearly all payments in line with other states' legal maxima: in the analysis below, I use the 99th percentile payment in a state in fiscal year 1938–39 as a measure of maximum payments. In those states with legal maximum payments, these 99th percentile payments were almost always the same as the legal maxima. Finally, three states specified in addition that the sum of income and OAA payments had to reach some minimum amount: this essentially set a common dollar value of "needs" across all people.

## 3. The effect of local funding on OAA payments and recipiency

## 3.1. Data and empirical specification

Since local governments played some role in the granting of old-age assistance in nearly all states, one would expect that when the cost of additional spending was lower for local governments, the overall level of spending would be higher. Two difficulties arise in an empirical analysis of the degree to which this was true. First, local funding shares may be correlated with population characteristics, including the level of need – if, for example, states with worse local labor market conditions were more likely to shift funding to the state level. Second, local funding shares may be correlated with other aspects of state OAA policies that may themselves have influenced the level of OAA relief provided, separately from the local funding share.

<sup>&</sup>lt;sup>8</sup> The 99th percentile payment is based on summary tables on the distribution of grants to new recipients by state, from U.S. Social Security Board (1939b). The distribution of payments is reported in 5-dollar bins, so I identify the bin containing the 99th percentile payment and use the smaller value of the upper endpoint of the bin or, when it exists, the state's legal maximum payment.

To address the first challenge, the main specifications restrict comparisons to counties on either side of a state border. The spirit of this approach is to make comparisons of areas that follow different policies, but that are similar in terms of underlying need or other characteristics that may lead to greater levels of OAA for a given state policy. This strategy follows Fetter and Lockwood (2016), who show that across states, OAA generosity in 1939 was correlated with underlying trends in labor force participation, but that there is no evidence of differential underlying trends in labor force participation once comparisons are limited to counties on either side of a state border.

Limiting comparisons to state borders does not address the second challenge, however, which is that other aspects of OAA policies beyond local funding shares may also change discontinuously at state borders and may be correlated with local funding shares. To address this second concern, I test the robustness of my estimates to the inclusion of other observable aspects of state OAA policies. My findings on the effects of local funding shares are robust to inclusion of additional policy variables, and in fact are somewhat stronger when these controls are included. Provided that these additional OAA policy variables are representative of the overall set of both observable and unobservable features of OAA policy, this result strengthens the case that the results are not due to unobserved state-level policies.

It is important to note that to the extent that states that intended to provide lower OAA payments did so in part by setting high local funding shares, it does not necessarily change the interpretation of the estimated relationship, which is still the effect of allocating greater fiscal responsibility to localities. What would be a concern is if states set not only local funding shares, but instead multiple features of OAA, to reduce OAA payments, and if these other features were not appropriately controlled for in the regression. Hence assessing robustness to controlling for other features of OAA is an important part of the identification strategy.

To address the additional concern that state policies other than OAA-related policies could also indirectly influence OAA recipiency or payments, I also show that further controls for other aspects of state policy or political preferences, such as limitations on the ability of state governments to take on debt, do not substantively affect the results. Finally, I also present estimates from a panel specification that controls flexibly for any variation in county characteristics or state policy that was constant over the time period of the panel (from 1937 to 1939). This panel specification yields nearly identical results.

The main specifications use county-level data on three measures of payments and recipiency under OAA programs: total OAA payments per person 65 and above, OAA recipients as a share of the population 65 and above, and OAA payments per recipient. The number of recipients and total OAA payments are measured in December 1939, and come from U.S. Social Security Board (1940d). These measures are normalized using the population 65 and above measured in the 1940 Census. A handful of states made some grants jointly to couples and reported the couple as a single recipient; I adjust for joint recipiency using information from U.S. Social Security Board (1941) on the share of recipients with joint grants.

The estimating equation for the main empirical specifications is

$$y_{cb} = \alpha_b + \beta \text{(Local funding share)}_c + \Lambda' \mathbf{X}_c + \varepsilon_{cb}.$$
 (1)

Because some counties lie on more than one state border, the unit of observation is a county-state border pair; c indexes counties and b indexes state border groups (where a border group for a pair of bordering states comprises all counties that touch the border). Here  $\alpha_b$  is a fixed effect for each border group,  $\beta$  is the coefficient of interest, and  $\mathbf{X}_c$  is a vector of controls for other characteristics of OAA policy and/or population characteristics. <sup>11</sup> The OAA policy controls include the 99th percentile monthly payment as a measure of maximum payments, as well as a set of indicator variables for the other aspects of OAA policies described in Section 2.2. Because local funding shares vary at the state level, standard errors are clustered by state.

In interpreting the results it is important to note that the estimated relationship is between the level of OAA provided and the statutory local funding share, rather than a realized local funding share (although the difference between the two, as noted in Section 2, was generally quite small). Using the latter could be problematic in that decisions regarding payments could, in principle, influence the share of payments funded by local governments. However, the statutory local funding share is not directly influenced by local decisions, avoiding problems of reverse causality.

#### 3.2. Main results

Estimates of Eq. (1) provide evidence that county funding was a significant limiting factor on the size of the OAA program. Table 1 reports estimates of Eq. (1) with the county recipiency rate as the dependent variable. Column (1) reports a simple regression in the full sample of counties, with no border-pair fixed effects. This unconditional comparison indicates that a greater local funding share was associated with a significantly lower recipiency rate. Column (2) limits the sample to counties on state borders, and column (3) restricts comparisons to counties across the same state border. The first key result in Table 1 is that the negative relationship in the unconditional comparison is also present in the comparisons that condition on state border fixed effects, suggesting that the

<sup>9</sup> Three states had an eligibility age of 70 in 1939. I normalize these using the 65 and above population, and include a control for having the higher eligibility age.
10 In particular, this publication reports the share of new recipients in fiscal year 1939–40 in each state who were married and the share of these individuals who received a joint grant. I calculate the share who received joint grants and inflate the number of recipients for each country by the corresponding state's share receiving

joint grants. This adjustment makes little difference in the main results and does not qualitatively change any results in the paper, but does affect the magnitude of the results in Section 3.3 that combine 1937 data with the 1939 data.

11 In principle, comparisons can be restricted still further by limiting comparisons only to adjacent counties (as opposed to comparing all counties on either side of a state border). In practice, restricting comparisons to adjacent counties leads for the most part to very similar but less precisely estimated coefficients. I focus on the

a state border). In practice, restricting comparisons to adjacent counties leads for the most part to very similar but less precisely estimated coefficients. I focus on the state border comparisons but present selected county-pair results in the Appendix.

Table 1
Relationship between county recipiency rate and local funding.

	(1)	(2)	(3)	(4)	(5)
Local funding share	-0.310***	-0.215*	-0.221***	-0.413***	-0.403***
	(0.110)	(0.125)	(0.067)	(0.069)	(0.069)
Final decision local				0.036	0.033
				(0.027)	(0.027)
99th percentile OAA				0.008***	0.009***
payment				(0.001)	(0.001)
Any minimum				-0.030	-0.013
income + benefit				(0.020)	(0.023)
Relative responsibility				-0.039**	-0.038*
requirement				(0.019)	(0.020)
Eligibility age of 70				-0.061**	-0.065**
				(0.025)	(0.026)
No citizenship or US				-0.027	-0.032
residency requirement				(0.019)	(0.020)
Any property limitation				0.103***	0.096***
				(0.019)	(0.018)
Property limit and home				-0.044*	-0.036
disregard				(0.026)	(0.026)
Claim on property				0.007	0.008
				(0.016)	(0.017)
Observations	3095	1320	1320	1320	1319
Border fixed effects	3073	1320	X	X	X
Other OAA policy variables			21	X	X
Other county characteristics					X

Dependent variable: county recipiency rate in December 1939, adjusted for joint recipiency. Other OAA policy variables are those included in the table and, except for the 99th percentile payment, are indicators for the specified policy. Other county characteristics are urban population share, nonwhite population share, median years of schooling for men 25+, share of the population below 15 or 65 and above, home ownership rate, share of dwellings not needing major repairs, share of dwellings with running water (all measured in 1940), and the share of dwellings with a radio in 1930. Standard errors (in parentheses) are clustered at the state level.

relationship between local funding shares and county recipiency rates is not driven by a correlation between population characteristics and county funding shares. The second key result in Table 1 is that the magnitude of the relationship between local funding shares and county recipiency rates actually increases when controls for other observable characteristics of state OAA policy are included in the regression. The estimate in column (4), which I regard as the preferred specification since it holds other features of state OAA laws constant, indicates that a 10 percentage point greater county funding share is associated with roughly a 4 percentage point lower recipiency rate, a substantial decrease compared to the overall mean of about 22 percent. Finally, the specification in column (5) includes as covariates a range of other county-level characteristics that could either influence the level of need or capacity to provide relief. It is encouraging that the inclusion of these controls leads to very little change in the key coefficient estimates.<sup>12</sup>

Although not the focus of this analysis, the coefficients on the other policies for the most part have reasonable signs. Higher maximum payments are associated with higher recipiency, likely reflecting either higher take-up or greater eligibility under more generous OAA plans. Older eligibility ages and relatives' responsibility requirements are negatively related to recipiency. The positive (conditional) relationship of property limitations with recipiency is consistent with these limitations in fact serving to liberalize eligibility, as described in Section 2.2, but could perhaps reflect greater formality of eligibility testing in states that are more generous in unobserved ways. In these specifications there is little evidence that claims on recipients' property, citizenship requirements, or minimum amounts for the sum of income and benefits payments influenced recipiency.

The results in Table 2 suggest that greater local funding was also associated with lower payments per person, although the coefficients are somewhat less stable across specifications and the implied magnitudes are small relative to their means. The coefficient

<sup>\*</sup> p < 0.10.

<sup>\*\*</sup> p < 0.05.

<sup>\*\*\*</sup> p < 0.01.

<sup>12</sup> The regression in column (5) has one fewer observation because one county in the sample is missing information on the share of households with a radio in 1930.

 Table 2

 Relationship between county payment per recipient and local funding.

	(1)	(2)	(3)	(4)	(5)
Local funding share	8.425	5.356	-1.105	-4.030*	-4.439*
	(9.360)	(8.616)	(2.511)	(2.338)	(2.391)
Final decision local				0.908	0.960
				(0.627)	(0.639)
99th percentile OAA				0.267***	0.265***
payment				(0.045)	(0.046)
Any minimum				5.002***	4.448***
income + benefit				(0.802)	(0.833)
Relative responsibility				0.921*	0.784
requirement				(0.475)	(0.474)
Eligibility age of 70				4.501***	4.587***
				(0.648)	(0.672)
No citizenship or US				-1.512**	-1.424**
residency requirement				(0.665)	(0.673)
Any property limitation				3.520***	3.640***
and traction				(0.837)	(0.859)
Parameter limit and have				0.107***	2.200***
Property limit and home				-2.197***	-2.390***
disregard Claim on property				(0.766) 1.284**	(0.777) 1.306**
Claim on property				(0.576)	(0.581)
				(0.5/6)	(0.561)
Observations	3095	1320	1320	1320	1319
Border fixed effects			X	X	X
Other OAA policy variables				X	X
Other county characteristics					X

Dependent variable: county payment per recipient in December 1939, adjusted for joint recipiency. Other OAA policy variables are those included in the table and, except for the 99th percentile payment, are indicators for the specified policy. Other county characteristics are urban population share, nonwhite population share, median years of schooling for men 25+, share of the population below 15 or 65 and above, home ownership rate, share of dwellings not needing major repairs, share of dwellings with running water (all measured in 1940), and the share of dwellings with a radio in 1930. Standard errors (in parentheses) are clustered at the state level.

in column (4), conditioning on state border effects and other features of OAA policies, suggests that local funding shares greater by 10 percentage points had, on average, 40-cent lower payments per recipient per month, relative to a mean of approximately 19 dollars. This could reflect either that local governments chose to lower recipiency rather than payments when required to fund a greater share of payments, or simply that they had less influence over payments than they did over recipiency.

The coefficients on other OAA policies again have reasonable signs. Unsurprisingly, higher maximum payments, or the presence of a true income floor, raised payments per recipient. States with an eligibility age of 70 or citizenship requirements had significantly higher payments, possibly reflecting different choices in a tradeoff between higher payments and higher recipiency. On the other hand, property limitations, which were associated with higher recipiency, were also associated with higher payments. While claims on recipients' property as a condition of assistance were not associated with higher recipiency, they were associated with higher payments, likely reflecting a lower cost of providing assistance when a portion of relief payments could be recovered.

Taken together, the effects on recipiency and payments per person meant that greater county funding shares led to significantly smaller OAA programs relative to the size of the elderly population. Table 3 reports estimates of Eq. (1) using payments per person 65 and above as a summary measure incorporating both potential margins of adjustment. Across all specifications that restrict comparisons to state boundaries there is a statistically significant negative relationship. The estimates in column (4), which control for other state policies, imply that 10 percentage point greater local funding was associated with OAA payments per person lower by about 90 cents, or about one-fifth of the mean of \$4.09.

Fig. 3 displays residual regression plots of OAA recipiency and payments against local funding share, conditional on the controls in column (4) of Tables 1–3. Encouragingly, these graphs illustrate that the estimated coefficients in Tables 1–3 reflect differences in

<sup>\*</sup> p < 0.10.

<sup>\*\*</sup> p < 0.05.

<sup>\*\*\*</sup> p < 0.01.

**Table 3**Relationship between county payment per person 65+ and local funding.

	(1)	(2)	(3)	(4)	(5)
Local funding share	-1.956	-1.579	-4.272**	-8.889***	-8.830***
	(3.669)	(4.046)	(2.054)	(1.788)	(1.799)
Final decision local				1.632***	1.570***
				(0.575)	(0.578)
99th percentile OAA				0.180***	0.182***
payment				(0.026)	(0.026)
Any minimum				1.318*	1.498**
income + benefit				(0.719)	(0.729)
Relative responsibility				0.125	0.077
requirement				(0.493)	(0.492)
Eligibility age of 70				0.063	0.006
				(0.495)	(0.495)
No citizenship or US				-0.764	-0.810*
residency requirement				(0.483)	(0.482)
Any property limitation				2.548***	2.452***
ran, property annual				(0.466)	(0.449)
December 15 of the Advance				1 100	1.056
Property limit and home				-1.122	-1.056
disregard Claim on property				(0.684) 0.052	(0.693) 0.070
Claim on property				(0.403)	(0.407)
				(0.403)	(0.407)
Observations	3095	1320	1320	1320	1319
Border fixed effects			X	X	X
Other OAA policy variables				X	X
Other county characteristics					X

Dependent variable: county payment per person 65+ in December 1939. Other OAA policy variables are those included in the table and, except for the 99th percentile payment, are indicators for the specified policy. Other county characteristics are urban population share, nonwhite population share, median years of schooling for men 25+, share of the population below 15 or 65 and above, home ownership rate, share of dwellings not needing major repairs, share of dwellings with running water (all measured in 1940), and the share of dwellings with a radio in 1930. Standard errors (in parentheses) are clustered at the state level.

OAA payments and recipiency across the full spectrum of local funding shares, rather than being driven by outlier counties or simply by a shift between having some local funding and no local funding.

In the Appendix, I present a range of results to address possible concerns. A first concern is that making comparisons among all counties on either side of a state border does not adequately control for the underlying level of need or other important, unobserved characteristics of counties. Table A1 reports results for all three key outcomes that restrict comparisons only to adjacent counties. The data are at the county by county-pair level, and the regressions include fixed effects for each county pair. In these specifications, following Dube et al. (2010), standard errors are clustered by border group (the group of all counties along the same state border) as well as by state, since the same county will appear in multiple pairs, with pairs overlapping along the state border. Column (4) shows results comparable to the preferred specifications above, which are less precise but very similar to those using the full state border for comparison.

Another possible concern is that the county population characteristics included in column (5) of the tables above do not adequately represent the level of need. Appendix Table A2 reports results with additional controls measuring economic conditions and levels of other forms of relief, but which are available for only a subset of counties and which are potentially endogenous control variables as they may have been affected by levels of OAA: registered unemployment in 1937 as a share of the population from Haines (2010), WPA spending per capita from 1935–39 from Fishback et al. (2003), and log per capita retail sales in 1939 from Fishback et al. (2005). Inclusion of these controls leads to little change in the coefficient on the local funding share. <sup>13</sup>

<sup>\*</sup> p < 0.10.

<sup>\*\*</sup> p < 0.05.

<sup>\*\*\*</sup> p < 0.01.

<sup>&</sup>lt;sup>13</sup> Alternatives, such as using changes in unemployment between 1937 and 1940, including FERA or Civil Works Administration (CWA) spending, or using changes in log retail sales from 1935 to 1939 give very similar results.

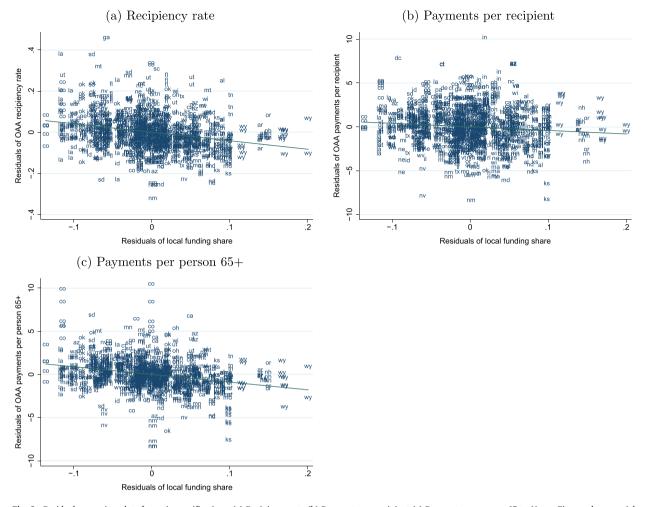


Fig. 3. Residual regression plots for main specifications. (a) Recipiency rate (b) Payments per recipient (c) Payments per person 65+. Notes: Figures show partial regression plot of each measure of OAA against local funding share, based on specification (4) of Tables 1–3. Observation is a county-state border-pair.

Finally, it is also possible that state policies other than OAA were related to OAA payments or recipiency rates and that these policies were correlated with local funding shares, but not adequately controlled for by using other features of OAA programs. One potentially important factor is a state's ability to finance relief spending: as Lansdale et al. (1939) note, by the late 1930s OAA had become a major share of overall state government expenditures in many states. Many states required either a referendum or a constitutional amendment to incur debt, although some states were able to circumvent these restrictions. I use the measure of state debt limitations defined by Gruber and Hungerman (2007), who use this variation as an instrument for New Deal spending; ultimately it is based on information reported in Shawe (1936). Another potentially important factor is a state's political preference towards public assistance, which may not be fully captured through the observable features of its OAA law. Since some of the early social insurance legislation was driven by the Progressive movement, as a rough measure of such preferences I use the share of a state's vote in the 1924 presidential election that went to the Progressive Party (from Carter et al., 2006, Series Eb208-259). Finally, I include county-level religious membership in 1936 (normalized by 1940 population), from Haines (2010), as an additional population control. Results including these controls are presented in Table A3. Again, the estimated relationship between local funding and OAA recipiency is very similar to that in the preferred specification. Including these additional controls leads to slightly larger coefficients on payment per recipient, although the magnitude remains small relative to the mean.

Returning to the preferred specifications, some simple counterfactuals based on the estimated coefficients imply that the shift away from local funding of relief was central to the growth of old-age assistance in the New Deal. In 1934, immediately prior to the introduction of federal matching, most old-age assistance programs – all but 7 of the 28 in place – required localities to fund at least 25 percent of payments, and all but 9 required localities to fund at least half (Cahn, 1934), with the remainder funded by state governments. Table 4 uses the estimated coefficients from column (4) of each of the preceding tables to predict changes in OAA

<sup>&</sup>lt;sup>14</sup> They exclude the District of Columbia, which is not discussed in Shawe (1936).

**Table 4**Predicted changes in OAA payments and recipiency using base specification.

	Recipiency rate (actual=0.216)	Payment per recipient (actual=18.970)	Payment per person (actual=4.092)
0% local funding	0.041	0.350	0.879
25% local funding	-0.062	-0.657	-1.344
50% local funding	-0.166	-1.665	-3.566

*Notes*: For each combination of local funding and level of decision making, table shows change in OAA recipiency rates, payment per recipient, and payment per person 65 and above implied by coefficients reported in column (4) of Tables 1–3.

Table 5
Results in base specification are robust to using 1937–1939 changes in funding.

	(1)	(2)	(3)	(4)	(5)	(6)	
	Recipiency ra	Recipiency rate		Payment per recipient		Payment per person	
County funding share	-0.458***	-0.422***	-8.172*	-4.749	-8.806***	-8.213***	
	(0.101)	(0.096)	(4.141)	(4.346)	(1.975)	(1.753)	
Observations	2531	2531	2531	2531	2531	2531	
County fixed effects	X	X	X	X	X	X	
Border-year fixed effects	X	X	X	X	X	X	
Other OAA policy variables		X		X		X	

Dependent variables: payment per person 65 +, recipiency rate, payment per recipient (latter two are adjusted for joint recipiency). Standard errors (in parentheses) are clustered at the state level. \*\* p < 0.05.

recipiency, payments per recipient, and payments per person 65 and above if all states in 1939 had shifted to no local funding, 25 percent local funding, or 50 percent local funding, holding all else constant. A shift to 25 percent local funding for all states would have led to a reduction in recipiency of roughly 6 percentage points, off of a base of 22 percent, and a reduction in per-capita OAA payments of \$1.34, off of a base of \$4.09. The coefficients suggest that had local funding of 50 percent been required, OAA payments per person would have been roughly ten percent of its actual size, largely through reductions in recipiency. It is worth noting that these counterfactuals hold the federal share constant at 50 percent, and hence reflect the effects of shifting the burden of the other half of payments between local and state governments. It is not obvious how old-age assistance may have developed in the absence of the federal matching provisions of the Social Security Act (or how state programs would have developed as they matured). Despite these caveats, the results provide some indication that the shift away from local funding was quantitatively quite significant.

## 3.3. Robustness: policy changes from 1937-1939

A potential threat to a causal interpretation of the estimates above is that states with unobserved policies leading to higher recipiency may also have had lower local funding shares. Although the fact that the relationship between local funding and OAA recipiency becomes stronger when conditioning on observable policy characteristics weighs against this interpretation, to provide further support I estimate panel specifications that control flexibly for fixed characteristics of counties.

In particular, county-level data on OAA payments and recipients is available for December 1937 from U.S. Social Security Board (1938b), and information on state laws as of the same month is compiled in U.S. Social Security Board (1938a). I construct a two-period panel of counties using these sources. Observations of four states in 1937 are excluded from the sample: Tennessee did not report county-level figures in 1937, Virginia had no OAA program in 1937, and Maine had virtually no program – only 42 recipients total, for a recipiency rate below 0.1 percent. Washington had an OAA program but no formal rule governing local funding shares. I use the 1940 population 65 and above to calculate recipiency rates and OAA payments per person in 1937, and adjust for joint recipiency using the share of recipients receiving joint grants in fiscal year 1937–38 U.S. Social Security Board (1939a). Of the states remaining in the sample, four changed local funding shares between 1937 and 1939. One of these changes was modest – Oregon reduced the local funding share from 25 percent to 20 percent – but the others were quite significant, with New Hampshire reducing the local share from 45 percent to 25 percent, North Dakota from 25 percent to 7.5 percent, and Louisiana from 25 percent to zero percent. The small number of changes makes the panel specification less natural as a baseline specification, but as we will see the resulting estimates do provide support for my preferred interpretation of the main estimates.

Following the spirit of the main specifications, I limit comparisons to state borders and estimate the following equation:

$$y_{cbt} = \alpha_{bt} + \gamma_c + \beta \text{(Local funding share)}_{ct} + \Lambda' \mathbf{X}_{ct} + \varepsilon_{cbt}$$
 (2)

where  $\alpha_{bt}$  is a state-border by year fixed effect,  $\gamma_c$  a county fixed effect, and  $\beta$  is estimated using within-county variation in local funding shares over time. Table 5 reports estimates of Eq. (2). Encouragingly, the coefficients are all very close in magnitude to the corresponding estimates from Tables 1–3. Focusing on columns (2), (4), and (6), which control for changes in other policies between 1937 and 1939, the coefficients suggest that a 10 percentage point increase in the local funding share should lead to a 4.2 percentage point reduction in recipiency (compared to 4.1 percentage points in Table 1), a 47-cent reduction in payments per person (compared

<sup>\*</sup> p < 0.10.

<sup>\*\*\*</sup> p < 0.01.

**Table 6**Interacting local funding and decision-making.

	(1)	(2)	(3)	(4)	(5)	(6)
	Recipiency rate		Payment per recipient		Payment per person	
Local funding share	-0.042	-0.227**	6.542	1.270	0.345	-3.643***
	(0.097)	(0.087)	(3.932)	(2.728)	(2.186)	(1.258)
Local funding share	-0.602***	-0.346**	-17.574***	-9.852*	-16.506***	-9.751**
×final decision local	(0.155)	(0.170)	(6.062)	(5.303)	(4.559)	(3.865)
Final decision local	0.135***	0.063*	2.971***	1.679**	3.845***	2.396***
	(0.037)	(0.033)	(1.078)	(0.818)	(1.004)	(0.743)
Observations	1320	1320	1320	1320	1320	1320
Border fixed effects	X	X	X	X	X	X
Other OAA policy variables		X		X		X

Dependent variables: recipiency rate, payment per recipient, payment per person 65 and above. Other OAA policy variables are as in Tables 1–3. Standard errors (in parentheses) are clustered at the state level.

to 40 cents in Table 2), and an 82-cent reduction in payments per person 65 and above (compared to 89 cents in Table 3). The close similarity between the panel specification and the main, cross-sectional comparisons support interpretation of the latter as the effect of local funding shares.

#### 3.4. Heterogeneity by level of control

As emphasized in Section 2, in nearly all states both local and state governments had some influence over decisions in OAA cases, but the division of authority between state and local governments varied significantly, with local influence and local funding tending to be positively correlated. Although it would be difficult to measure this division exactly, one useful measure of the division of authority is whether state or local officials made final decisions on individual cases. OAA should be more sensitive to the locality's marginal cost of funding additional OAA grants when localities themselves make final decisions, and OAA may be unusually generous when localities make final relief decisions without sharing in the cost (as they did in a handful of states). Testing for differences in the effect of local funding shares by the local government's degree of control is interesting in its own right, and to the extent that localities are more sensitive to the local cost of providing OAA, it also helps to support the interpretation of the main specifications as being a causal effect of increasing local funding shares.

The results suggest that recipiency declined with the local funding share even in those states where state governments made the final relief decisions, but that when localities made the final decision on a relief case, recipiency and payments were significantly more sensitive to local funding shares. Table 6 reports specifications that document the relationship between the size of OAA programs and local funding and decision making, where local funding is interacted with the mutually exclusive categories of local and state-level final decisions. All specifications include border fixed effects and columns (2), (4), and (6) control for the other policies included in Tables 1–3.

Focusing on specifications that control for other state policies, the results suggest that when localities made final decisions, a 10 percentage-point greater local funding share was associated with a 5.7 percentage point reduction in recipiency, an 86-cent reduction in payments per person, and a reduction of \$1.34 in payments per elderly person. By comparison, in states where state governments made final relief decisions, estimated changes in recipiency and payments as a result of greater local funding are more sensitive to inclusion of other policy controls, but always smaller than in states where localities made final relief decisions. Specifications that control for other policies suggest that a 10 percentage point greater local funding share was associated with a 2.3 percentage point reduction in payments, a 13-cent higher average payment (although not statistically significant), and a 36-cent reduction in payments per elderly person. In all specifications, the coefficient on local funding shares is significantly different in the two types of states at the 10 percent level or lower. Finally, the coefficient on the indicator for final decisions resting at the local level shows that when localities made final decisions and the local funding share was zero – as was the case in a handful of states – recipiency and payments were substantially higher.<sup>15</sup>

To complement the counterfactuals shown in Table 4, Table 7 shows counterfactuals that allow for both the level of local funding and the level of decision making to change. This may be the most relevant set of counterfactuals for understanding the shift away from local funding, since decision making moved from the local to the state level at the same time as funding did. The results lead

<sup>\*</sup> p < 0.10.

<sup>\*\*</sup> p < 0.05.

<sup>\*\*\*</sup> *p* < 0.01.

<sup>&</sup>lt;sup>15</sup> A caveat in interpreting these results is that the difference in slopes between the two types of states is not statistically significant in a panel specification following Eq. (2), perhaps because it is difficult to pick up this difference with only a small number of policy changes between 1937 and 1939. Interpreted at face value, the point estimates from the panel specification suggest that recipiency responded similarly negatively to local funding shares in both types of states.

**Table 7**Predicted changes in OAA payments and recipiency using interacted specification.

Panel A. Recipiency rate	(actual=0.216)		
	Local decision	State decision	Actual decision
0% local funding	0.081	0.018	0.048
25% local funding	-0.062	-0.039	-0.050
50% local funding	-0.206	-0.096	-0.149
Actual local funding	0.024	-0.005	0
Panel B. Payment per re	cipient (actual=18.970)		
	Local decision	State decision	Actual decision
0% local funding	1.348	-0.332	0.484
25% local funding	-0.798	-0.014	-0.394
50% local funding	-2.943	0.304	-1.273
Actual local funding	0.602	-0.221	0
Panel C. Payment per pe	rson (actual=4.092)		
	Local decision	State decision	Actual decision
0% local funding	2.324	-0.072	1.083
25% local funding	-1.025	-0.983	-1.003
50% local funding	-4.373	-1.894	-3.089
Actual local funding	1.000	-0.432	0

Notes: For each combination of local funding and level of decision making, table shows change in OAA recipiency rates, payment per recipient, and payment per person 65 and above implied by coefficients reported in columns (2), (4), and (6) of Table 6.

to even stronger conclusions than those shown in Table 4, suggesting that had localities funded 50 percent of relief grants and made final relief decisions, only 1 percent of the elderly would have received OAA.

### 4. Effects on composition of relief

#### 4.1. Measuring differences in OAA receipt using the 1940 census

Having documented evidence that local funding reduced OAA recipiency, a natural extension is to ask whether specific groups were disproportionately affected by the shift to state funding. A particularly important dimension of this question is how the shift away from local provision of aid affected racial disparities in access to old-age support. For example, Alesina and Glaeser (2004) document that welfare benefits have been less generous in states with higher minority population shares, and Luttmer (2001) finds that support for welfare spending falls as the share of local recipients from one's own racial group falls. Given these findings, and the possibly greater salience of the racial composition of local assistance recipients relative to state assistance recipients, it is possible that the degree to which OAA payments were funded locally may have mattered for the racial composition of relief recipients.

A basic difficulty in understanding how policies differentially affected OAA receipt of different groups is that OAA receipt is unobserved in the 1940 Census, and no comprehensive data are available at the county level on characteristics of OAA recipients in this period. The Census did, however, ask whether an individual received more than \$50 in non-wage income in 1939. Non-wage income includes various other forms of income in addition to OAA, but it is possible to use differences across counties in nonwage income to proxy for differences in OAA receipt. <sup>16</sup> In particular, restricting comparisons to state borders controls flexibly for differences in baseline levels of receipt of non-wage income that are spatially correlated. Conditioning on comparisons across state borders, the analysis then tests whether greater local funding shares are associated with differential over- or underrepresentation of blacks, relative to their share of the population. Note that if, for example, blacks are underrepresented among OAA recipients relative to their share of the elderly population but to a similar degree across states, this analysis will not find evidence that local funding leads to greater underrepresentation.

As should be expected, county-level measures of non-wage income receipt for individuals 65 and above are strongly correlated with actual OAA recipiency rates. Using complete-count Census data from 1940 from Ruggles et al. (2015), Fig. 4 plots, for each county, the share of the population 65 and above receiving non-wage income in 1939 against actual recipiency rates in December 1939. In most counties the share of the population reporting non-wage income is higher than the share receiving OAA, as would be expected, but the important result in the figure is that higher recipiency rates are strongly associated with higher shares of the

<sup>&</sup>lt;sup>16</sup> The instructions to enumerators indicated that non-wage income included, among other things, income from business profits or professional fees, income from roomers or boarders, cash relief payments, regular contributions from family members not in the same household, in-kind income, and commodities consumed from the individual's own business. In part the approach I take here follows the spirit of Fetter and Lockwood (2016), which documents that receipt of non-wage income increases discretely at age 65, and more so in states with larger OAA programs.

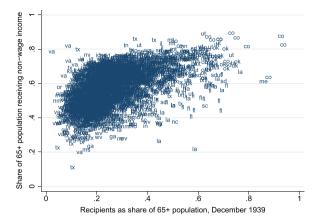


Fig. 4. Validation of non-wage income measure of recipiency. Notes: Figure plots share of individuals 65 and above receiving non-wage income in 1939 against actual county OAA recipiency rates in December 1939. For sources and notes, see text.

Table 8
Validation of non-wage income measure of recipiency.

	(1)	(2)
Recipiency rate	0.426***	0.354***
	(0.014)	(0.022)
Constant	0.464***	
	(0.004)	
Observations	3068	1310
Sample	full	border
Border fixed effects		X

Dependent variable: Share of population 65 and above reporting non-wage income in 1939. Eicker-Huber-White standard errors in parentheses. \* p < 0.10, \*\* p < 0.05.

population reporting non-wage income, and hence that differences in receipt of non-wage income may provide a reasonable measure of differences in recipiency rates across counties.

Table 8 reports regression results formalizing the relationship documented in Fig. 4.<sup>17</sup> The first column reports a simple regression of the share of the county population receiving non-wage income on the county recipiency rate and a constant term. The slope coefficient implies that a one percentage point greater recipiency rate is associated with a 0.426 percentage point rise in the share reporting non-wage income. This result continues to hold in the state-border design, as shown in column (2): here a one percentage point rise in recipiency rates is associated with a share reporting non-wage income that is greater by 0.354.

# 4.2. Effects of local funding by race

I apply the non-wage income data constructed and validated in Section 4.1 to investigate the impact of local funding requirements on the composition of OAA recipients, and in particular whether these requirements influenced the racial composition of recipients. I examine the share of non-wage income recipients 65 and above who are black relative to the black share of the population 65 and above, to measure differential over- or underrepresentation of blacks in areas where localities played a greater role in funding. Similar to the analysis in Section 3, the identifying assumption is that in the absence of OAA policies that differentially affect representation of blacks among OAA recipients, the difference between representation of blacks among those who receive non-wage income and the representation of blacks in the overall population 65 and above would be constant across state borders. Note that it is not a concern, for example, if whites were more likely than blacks to own income-producing assets, so long as that relative likelihood was constant across state borders.

The summary statistics reported in Table 9 indicate that in the United States as a whole, and especially in the South, blacks were underrepresented among non-wage income recipients. In the average county with any blacks 65 and above, 50 percent of blacks had non-wage income; about 59 percent of whites did. In the South, about 45 percent of blacks in the average county, and about 55

<sup>&</sup>lt;sup>17</sup> In a handful of relatively small counties, information on non-wage income is coded as missing for all individuals 65 and older, explaining the slightly smaller number of observations when non-wage income is used rather than county recipiency rates.

**Table 9**Summary statistics on share of 65+ population with non-wage income who are black.

Panel A. All counties				
	Mean	Median		
Share of blacks 65+ with nonwage income	0.500	0.488	2273	
Share of whites 65+ with nonwage income	0.591	0.600	3068	
Share black of total 65+ population	0.100	0.010	3068	
Share black of 65+ with nonwage income	0.089	0.008	3068	
Share black of 65+ with NWI - share black of 65+	-0.011	-0.0003	3068	
Panel B. Southern counties				
	Mean	Median	N	
Share of blacks 65+ with nonwage income	0.445	0.441	1306	
Share of whites 65 + with nonwage income	0.549	0.545	1398	
Share black of total 65+ population	0.211	0.151	1398	
Share black of 65+ with nonwage income	0.186	0.121	1398	
Share black of 65+ with NWI - share black of 65+	-0.025	-0.013	1398	

Table reports summary statistics at the county level (unweighted). Southern counties are those in the Census South. Only counties with non-wage income nonmissing for any individuals 65 and above are included.

percent of whites, had non-wage income. These differences in rates of receipt of non-wage income translated into differences between the black share of the population receiving non-wage income and the black share of the total population of about 0.011 in the country as a whole, and 0.025 in the South.

The key question I wish to investigate is whether this underrepresentation was differentially greater in states in which localities funded a greater share of OAA payments. This question is addressed in Table 10, which reports regressions of the share of non-wage income recipients 65 and above who are black on the local funding share, controlling for the share of the overall population 65 and above who are black, and restricting comparisons to counties on either side of a state border. In the country as a whole, a 10 percentage point increase in the local funding share is associated with a reduction in the share of blacks among non-wage income recipients of 0.17 percentage points. In the South the reduction is considerably larger, at 0.6 percentage points; in the non-South, there is a statistically significant but much smaller negative relationship. Controlling for other policies yields estimates of slightly greater magnitude: the implied effects would be 0.24 percentage points in the country as a whole, and 0.75 percentage points in the South. Compared to the means reported in Table 9, the implied effects of local funding appear to be quantitatively significant: a reduction of 0.0075 is 30 percent of the mean "underrepresentation" of blacks among non-wage income recipients in the South.

Several caveats should be noted about these results. First, the results for the South are more sensitive to reasonable alternative specifications than are the main results of the paper (those for the non-South remain small but statistically significant). Appendix Table A4 reports similar specifications to those in Table 10, but restricting comparisons to pairs of adjacent counties rather than allowing comparisons across full state borders. The point estimates are broadly similar but are somewhat smaller in magnitude: a ten percentage point higher local funding share in the South is associated with a reduction of 0.4 to 0.5 percentage points in the share of blacks among non-wage income recipients rather than 0.6 to 0.75, and with controls the coefficient estimate is not statistically significant at conventional levels. Moreover, controlling for state debt limitations and political preferences by including the Gruber and Hungerman (2007) measure of state debt constraints and the 1924 Progressive vote share as controls to the specification reported in column (5) of Table 10 yields a coefficient for the South of 0.021 (with a standard error of 0.039) rather than -0.075.

Finally, the fact that actual receipt of OAA is not observed further complicates the interpretation of these estimates. At least two issues arise. The first is that given that a significant number of the elderly received non-wage income other than OAA, the quantitative implications for OAA receipt are difficult to assess even if these results provide an indication as to the existence and direction of an effect. The second is that if whites were more likely than blacks to receive sources of non-wage income other than OAA, in principle any factor that reduces OAA recipiency, even if it does not change the share of OAA recipients who are black, could reduce the share of non-wage income recipients who are black. Without observing OAA receipt by race, this concern is difficult to address directly. Yet the results weigh against such an interpretation, at least in the South. In particular, maximum payments (as measured by 99th percentile payments) show a significant relationship with overall recipiency in Table 1, and if the differences in the share of non-wage income recipients who were black were explained by race-neutral reductions in OAA recipiency, it is likely that lower maximum payments would also be associated with differential underrepresentation of blacks among non-wage income recipients. However, in column (5) of Table 10, the maximum OAA payment is not statistically significant at any conventional level, and its magnitude, relative to the coefficient on the local funding share, is considerably lower than in the main results.

Table 10
Local funding reduces share black of 65+ non-wage income relative to population share.

			* *			
	(1)	(2)	(3)	(4)	(5)	(6)
Local funding share	-0.0165**	-0.0601**	-0.0039***	-0.0238***	-0.0749***	-0.0037***
	(0.0074)	(0.0224)	(0.0006)	(0.0071)	(0.0236)	(0.0010)
Share black of total 65+	0.9446***	0.9395***	1.0078***	0.9434***	0.9364***	1.0078***
population	(0.0220)	(0.0235)	(0.0094)	(0.0219)	(0.0239)	(0.0093)
Final decision local				0.0022	0.0092*	0.0001
				(0.0029)	(0.0046)	(0.0002)
99th percentile OAA				0.0005**	0.0002	0.0000
payment OAA				(0.0003)	(0.0004)	(0.0000)
Any minimum				-0.0028	(0.0004)	-0.0004
income + benefit				(0.0018)		(0.0005)
Relative responsibility				0.0009	0.0077	-0.0003**
requirement				(0.0016)	(0.0053)	(0.0001)
Eligibility age of 70				0.0041*		-0.0001
				(0.0022)		(0.0003)
No citizenship or US				-0.0007	-0.0041	-0.0002
residency requirement				(0.0016)	(0.0043)	(0.0002)
Any property limitation				0.0077***	0.0225**	-0.0000
				(0.0029)	(0.0085)	(0.0002)
Property limit and home				-0.0048	-0.0144	0.0002
disregard				(0.0032)	(0.0093)	(0.0002)
Claim on property				0.0065***	0.0009	-0.0006
				(0.0014)	(0.0035)	(0.0005)
Observations	1310	559	751	1310	559	751
Region	All	South	Non-South	All	South	Non-South
Border fixed effects	X	X	X	X	X	X
Other OAA policy variables				X	X	X
One One policy variables				Λ	Λ	

Dependent variable: share of 65 + receiving non-wage income who are black. No Southern states had a minimum income + benefit or an eligibility age of 70. Standard errors (in parentheses) are clustered at the state level.

Given the data constraints, these results are necessarily speculative. Yet they may suggest that when counties in the South bore more of the cost of funding relief, blacks were differentially adversely affected. It may be, then, that the shift to state administration of old-age relief was beneficial to blacks, even in the South.

### 5. Conclusion

A fundamental feature of relief in the New Deal was the shift away from local provision of transfer payments to state and federal provision. Using variation in the division of OAA funding between local and state governments, I find that the shift from local to state funding was critical for the growth of old-age support in the New Deal. The regression estimates suggest that had localities needed to fund half of old-age payments in 1939 – which was not uncommon as of 1934 – the OAA recipiency rate would have been 5 percent rather than 22 percent, and perhaps even lower. More speculatively, given the constraints imposed by data availability, there is some evidence that the shift away from local provision of relief benefitted blacks, particularly in the South.

Although not investigated here, it is also possible that the shift from local to state decision-making reduced scope for corruption in public assistance. While the corruption of local relief officials was proverbial before the New Deal, Wallis et al. (2006) point out that by the end of the 1930s relief was viewed as bureaucratic, but not corrupt. They argue that the federal government did not gain from local corruption, and hence reduced corruption in the programs in which it had greater control (such as the Works Progress

<sup>\*</sup> p < 0.10.

<sup>\*\*</sup> p < 0.05.

<sup>\*\*\*</sup> p < 0.01.

<sup>&</sup>lt;sup>18</sup> It is worth noting that to the extent that local funding did differentially reduce OAA receipt among blacks, these results have little to say on the mechanism behind this relationship. One possibility is that the relationship is driven by OAA officials explicitly denying benefits to blacks who applied, but other factors may have been important as well - for example, potential applicants may have responded to the expectation of discrimination by not applying.

Administration). Yet it may be something of a puzzle that complaints of corruption fell for the assistance programs even though the federal government had little power over their administration. It may be that, like the federal government, state government officials also saw little benefit from local corruption, and hence reduced corruption as they took on a greater role in relief spending. It may also be, as Troesken (2006) argues, that any type of regime change may disrupt existing relationships and thereby be conducive to reducing corruption.

## Appendix A

**Table A1**Robustness of main results to restricting comparison to adjacent counties.

Panel A. Recipiency rate					
	(1)	(2)	(3)	(4)	(5)
Local funding share	-0.220* (0.117)	-0.222* (0.122)	-0.225*** (0.083)	-0.402*** (0.092)	-0.394*** (0.096)
Observations	1130	2397	2397	2397	2395
Pair fixed effects			X	X	X
Other OAA policy variables				X	X
Other county characteristics					X
Panel B. Payment per recipi	ent				
	(1)	(2)	(3)	(4)	(5)
Local funding share	4.913	5.256	-0.977	-3.626	-3.738
v	(8.536)	(8.464)	(3.133)	(2.911)	(2.970)
Observations	1130	2397	2397	2397	2395
Pair fixed effects			X	X	X
Other OAA policy variables				X	X
Other county characteristics					X
Panel C. Payment per person	1 65 +				
	(1)	(2)	(3)	(4)	(5)
* 10 1: 1	1 500	1 (15	4.405*	0.681***	0.505***
Local funding share	-1.709	-1.615	-4.407*	-8.671***	-8.597***
	(3.889)	(3.934)	(2.587)	(2.395)	(2.431)
Observations	1130	2397	2397	2397	2395
Pair fixed effects			X	X	X
Other OAA policy variables				X	X
Other county characteristics					X

Dependent variables: recipiency rate, payment per recipient, payment per person 65 and above. All columns include only counties on state borders. Unit of observation in Column (1) is a county and in Columns (2)–(5) is a county by county-pair. Other OAA policy variables and other county characteristics are as in Tables 1–3. Standard errors (in parentheses) are clustered by state and by state border group. \*\* p < 0.05.

Table A2
Robustness to controls for economic conditions.

	(1)	(2)	(3)	(4)	(5)
Local funding share	-0.289*** (0.102)	-0.207* (0.122)	-0.220*** (0.067)	-0.414*** (0.069)	-0.351*** (0.072)
Observations	3042	1305	1305	1305	1304
Border fixed effects			X	X	X
Other OAA policy variables				X	X
Other county characteristics					X

(continued on next page)

<sup>\*</sup> *p* < 0.10.
\*\*\* *p* < 0.01.

Table A2 (continued)

Panel B. Payment per recipient								
	(1)	(2)	(3)	(4)	(5)			
Local funding share	8.849 (9.361)	5.973 (8.635)	-0.888 (2.557)	-3.691 (2.293)	-3.925* (2.249)			
Observations Border fixed effects Other OAA policy variables Other county characteristics	3042	1305	1305 X	1305 X X	1304 X X X			
Panel C. Payment per person 65+								
Local funding share	-1.547 (3.644)	-1.376 (4.037)	-4.260** (2.075)	-8.845*** (1.795)	-7.946*** (1.649)			
Observations Border fixed effects Other OAA policy variables Other county characteristics	3042	1305	1305 X	1305 X X	1304 X X X			

Dependent variables: recipiency rate, payment per recipient, payment per person 65 and above. Other OAA policy variables are as in Tables 1–3. Other county characteristics include those in Tables 1-3 as well as unemployment-to-population in 1937 from Haines (2010), WPA spending per capita from 1935–39 from Fishback et al. (2003), and log per capita retail sales in 1939 from Fishback et al. (2005). Sample comprises counties for which these variables are available. Standard errors (in parentheses) are clustered at the state level.

Table A3 Robustness to controls for other state policies and preferences.

Panel A. Recipiency rate					
	(1)	(2)	(3)	(4)	(5)
Local funding share	-0.311***	-0.217*	-0.222***	-0.426***	-0.418***
	(0.110)	(0.125)	(0.067)	(0.072)	(0.072)
Observations	3094	1318	1318	1318	1317
Border fixed effects			X	X	X
Other policy variables				X	X
Other county characteristics					X
Panel B. Payment per recipi	ent				
	(1)	(2)	(3)	(4)	(5)
Local funding share	8.450	5.469	-0.909	-5.289*	-5.833**
-	(9.364)	(8.627)	(2.540)	(2.666)	(2.683)
Observations	3094	1318	1318	1318	1317
Border fixed effects			X	X	X
Other policy variables				X	X
Other county characteristics					X
Panel C. Payment per person	n 65+				
	(1)	(2)	(3)	(4)	(5)
Local funding share	-1.961	-1.607	-4.271**	-10.031***	-10.011*
5	(3.670)	(4.052)	(2.063)	(2.042)	(2.054)
				(continu	ed on next p

<sup>\*</sup> p < 0.10.

<sup>\*\*</sup> p < 0.05.
\*\*\* p < 0.01.

Table A3 (continued)

Observations	3094	1318	1318	1318	1317
Border fixed effects			X	X	X
Other policy variables				X	X
Other county characteristics					X

Dependent variables: recipiency rate, payment per recipient, payment per person 65 and above. Other policy variables include the OAA policy variables in Tables 1-3 as well as an indicator for the state facing debt constraints and the vote share for the Progressive Party presidential candidate in 1924. Other county characteristics include those in Tables 1-3 as well as religious membership in 1936 from Haines (2010). Sample comprises counties for which these variables are available. Standard errors (in parentheses) are clustered at the state level.

Table A4 Robustness of non-wage income results restricting to adjacent counties.

	(1)	(2)	(3)	(4)	(5)	(6)
Local funding share	-0.0131* (0.0076)	-0.0423* (0.0251)	-0.0035*** (0.0008)	-0.0161 (0.0110)	-0.0497 (0.0386)	-0.0029** (0.0013)
Share black of total 65+ population Final decision local	0.9952*** (0.0403)	0.9963*** (0.0447)	0.9934*** (0.0176)	0.9901*** (0.0385) 0.0017 (0.0031)	0.9799*** (0.0406) 0.0068 (0.0060)	0.9939*** (0.0170) -0.0001 (0.0004)
Approx 99th percentile OAA payment Minimum income + benefit				0.0004 (0.0002) -0.0037 (0.0024)	0.0001 (0.0006)	-0.0000 (0.0000) -0.0005 (0.0008)
Relative responsibility requirement Eligibility age of 70				0.0005 (0.0026) 0.0044 (0.0030)	0.0058 (0.0077)	-0.0004* (0.0002) -0.0003 (0.0004)
No citizenship or US residency requirement Any property limitation				-0.0015 (0.0023) 0.0076*** (0.0029)	-0.0065 (0.0051) 0.0211** (0.0084)	-0.0003 (0.0002) -0.0000 (0.0003)
Property limit and home disregard Claim on property				-0.0038 (0.0037) 0.0048** (0.0022)	-0.0110 (0.0099) 0.0009 (0.0055)	0.0001 (0.0002) -0.0007 (0.0006)
Observations Region Pair fixed effects Other OAA policy variables	2375 All X	1015 South X	1360 Non-South X	2375 All X X	1015 South X X	1360 Non-South X X

Dependent variable: share of 65+ receiving non-wage income who are black. No Southern states had a minimum income + benefit or an eligibility age of 70. In all columns, unit of observation is a county by county-pair. Standard errors (in parentheses) are clustered by state and state border group.

<sup>\*</sup> p < 0.10.

p < 0.10.

\*\* p < 0.05.

\*\*\* p < 0.01.

<sup>\*</sup> *p* < 0.10.
\*\* *p* < 0.05.

<sup>\*\*\*</sup> p < 0.01.

#### References

Alesina, Alberto, Glaeser, Edward Ludwig, 2004. Fighting Poverty in the US and Europe: A World of Difference. Oxford University Press, Oxford.

Alston, Lee J., Ferrie, Joseph P., 1999. Southern Paternalism and the American Welfare State: Economics, Politics, and Institutions in the South. Cambridge University Press, UK, New York, NY, USA, pp. 1865–1965.

Baicker, Katherine, 2005. Extensive or intensive generosity? The price and income effects of federal grants. The Review of Economics and Statistics 87 (2), 371–384. Brown, Charles C., Oates, Wallace E., 1987. Assistance to the poor in a federal system. Journal of Public Economics 32 (3), 307–330.

Cahn, Frances, 1934. Relief to the Needy Aged: a Summary of Assistance Laws in the United States and Abroad. Legislative Problems. Bureau of Public Administration, University of California, Berkeley (No.9).

Carter, Susan B., Gartner, Scott Sigmund, Haines, Michael R., Olmstead, Alan L., Sutch, Richard, Wright, Gavin, Fishback, Price V., Thomasson, Melissa A., 2006. Historical Statistics of the United States Millennial Edition Online. Cambridge University Press, New York.

Costa, Dora L., 1998. The Evolution of Retirement. National Bureau of Economic Research Books. University of Chicago Press, Chicago.

Costa, Dora L., 1999. A house of her own: old age assistance and the living arrangements of older nonmarried women. Journal of Public Economics 72 (1), 39–59. Dube, Arindrajit, Lester, T. William, Reich, Michael, 2010. Minimum wage effects across state borders: estimates using contiguous counties. The Review of Economics and Statistics 92 (4), 945–964.

Federal Works Agency, 1942. Final Statistical Report of the Federal Emergency Relief Administration. USGPO, Washington, DC.

Fetter, Daniel, Lockwood, Lee M., 2016. Government Old-Age Support and Labor Supply: Evidence from the Old Age Assistance Program. National Bureau of Economic Research, Inc., NBER Working Papers 22132.

Fishback, Price V., Wallis, John J., 2012. What Was New About the New Deal? National Bureau of Economic Research, Inc., NBER Working Papers 18271.

Fishback, Price V., Kantor, Shawn, Wallis, John J., 2003. Can the new deal's three Rs be rehabilitated? A program-by-program, county-by-county analysis. Explorations in Economic History 40 (3), 278–307.

Fishback, Price V., Horrace, William C., Kantor, Shawn, 2005. Did new deal grant programs stimulate local economies? A study of federal grants and retail sales during the great depression. The Journal of Economic History 65 (1), 36–71.

Fox, Cybelle, 2010. Three worlds of relief: race, immigration, and public and private social welfare spending in american cities, 1929. American Journal of Sociology 116 (2), 453–502.

Geddes, Anne E., 1937. Trends in Relief Expenditures, 1910–1935. Washington, D.C.:USGPO. Works Progress Administration Research Monograph X.

Gordon, Joel, Israeli, Olivia J., 1939. Distribution of public-assistance funds within states. Social Security Bulletin 2, 12.

Gruber, Jonathan, Hungerman, Daniel M., 2007. Faith-based charity and crowd-out during the great depression. Journal of Public Economics 91 (5-6), 1043-1069.

Haines, Michael, R., 2010. Historical, Demographic, Economic, and Social Data: The United States, 1790–2002. Ann Arbor, MI: Inter-university Consortium for Political and Social Research, http://dx.doi.org/10.3886/ICPSR02896.

Inman, Robert P., 2008. The Flypaper Effect. National Bureau of Economic Research, Inc., NBER Working Papers 14579.

Knight, Brian, 2002. Endogenous federal grants and crowd-out of state government spending: theory and evidence from the federal highway aid program. American Economic Review 92 (1), 71–92.

Knittel, Christopher R., 2006. The adoption of state electricity regulation: the role of interest groups. Journal of Industrial Economics 54 (2), 201-222.

Lansdale, Robert T., Long, Elizabeth, Leisy, Agnes, Hipple, Byron T., 1939. The administration of old age assistance. Committee on Public Administration of the Social Science Research Council 6.

Lieberman, Robert C., 2001. Shifting the Color Line: Race and the American Welfare State. Harvard University Press, Cambridge, MA.

Luttmer, Erzo F.P., 2001. Group loyalty and the taste for redistribution. Journal of Political Economy 109 (3), 500-528.

Maxwell, James A., 1946. The Fiscal Impact of Federalism in the United States. Harvard University Press, Cambridge, Massachusetts.

Moffitt, Robert A., 1984. The effects of grants-in-aid on state and local expenditures: the case of AFDC. Journal of Public Economics 23 (3), 279–305.

Oates, Wallace E., 1999. An essay on fiscal federalism. Journal of Economic Literature 37 (3), 1120-1149.

Quadagno, Jill, 1988. The Transformation of Old Age Security: Class and Politics in the American Welfare State. University of Chicago Press, Chicago.

Ruggles, Steven, Genadek, Katie, Goeken, Ronald, Grover, Josiah, Sobek, Matthew, 2015. Integrated Public Use Microdata Series: version 6.0 [Machine-readable database]. University of Minnesota, Minneapolis.

Ryan, Paul, 2014. Expanding Opportunity in America: A Discussion Draft from the House Budget Committee. (http://budget.house.gov/uploadedfiles/expanding\_opportunity\_in\_america.pdf),(Accessed 11 October 2016).

Shawe, Earle, K., 1936. An Analysis of the Legal Lim itations on the Borrowing Power of the State Governments. Monthly Report of the Federal Emergency Relief Administration, pp. 121-133.

Singhal, Monica, 2008. Special interest groups and the allocation of public funds. Journal of Public Economics 92 (3-4), 548-564.

Troesken, Werner, 2006. Regime change and corruption. A history of public utility regulation. In: Glaeser, Edward L., Goldin, Claudia (Eds.), Corruption and Reform: Lessons from America's Economic History. University of Chicago Press, Chicago.

U.S. Social Security Board, 1938a. Characteristics of state plans for old-age assistance. USGPO.

U.S. Social Security Board, 1938b. Tabular Summary of Statistics of Public Assistance Under the Social Security Act for the Calendar Year 1937. Bureau of Research and Statistics Report No. 1.

U.S. Social Security Board, 1939a. Social Data on Recipients of Public Assistance Accepted in 1937–1938. Bureau of Research and Statistics Memorandum No. 34.

U.S. Social Security Board, 1939b. Social Data on Recipients of Public Assistance Accepted in 1938-1939. Bureau of Research and Statistics Memorandum No. 42.

U.S. Social Security Board, 1940a. Characteristics of state plans for old-age assistance. USGPO. Revised October 1, 1939.

U.S. Social Security Board, 1940b. Social Security Yearbook for the Calendar Year 1939.

U.S. Social Security Board, 1940c. Sources of Funds Expended for the Special Types of Public Assistance and General Relief in 1938–39. Social Security Bulletin, 3(1).

U.S. Social Security Board, 1940d. Trends in Public Assistance, 1933–1939. Bureau of Research and Statistics Report No. 8.

U.S. Social Security Board, 1941. Social Data on Recipients of Public Assistance Accepted in 1939–1940. Bureau of Public Assistance Research Memorandum No. 1.

Wallis, John J. 1981. Work Relief and Unemployment in the 1930s. Ph.D. diss. University of Washington.

Wallis, John J., 1984. The birth of the old federalism: financing the new deal, 1932–1940. The Journal of Economic History 44 (01), 139–159.

Wallis, John J., 1991. The political economy of new deal fiscal federalism. Economic Inquiry 29 (3), 510–524.

Wallis, John J., Oates, Wallace, 1998. The impact of the new deal on American Federalism. In: Burdo, Michael D., Goldin, Claudia, Eugene N., White (Eds.), The Defining Moment: The Great Depression and the American Economy in the Twentieth Century. University of Chicago Press, Chicago, pp. 155–180.

Wallis, John Joseph, 2000. American government finance in the long run: 1790 to 1990. Journal of Economic Perspectives 14 (1), 61-82.

Wallis, John J., Fishback, Price V., Kantor, Shawn E., 2006. Politics, Relief, and Reform. Roosevelt's Efforts to Control Corruption and Political Manipulation during the New Deal. In: Glaeser, Edward L., Goldin, Claudia (Eds.), Corruption and Reform: Lessons from America's Economic History. University of Chicago Press, pp. 343–372.

Ziliak, James P., 2015. Temporary assistance for needy families. In: Moffitt, Robert A. (Ed.), Economics of Means-Tested Transfer Programs in the United States, vol. 1. University of Chicago Press, Chicago.