Union Card or Welfare Card? Evidence on the relationship between union membership and net fiscal impact at the individual worker level

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Abstract:

This paper develops the first evidence on the extent to which individuals' union membership is associated with differences in the levels of their taxes paid and public-benefits received. A positive effect of unions on individual wages and employer-provided fringe benefit levels has been well-established, especially at the low-end of the wage distribution. If hours don't fall much, this should raise labor income, though evidence on income effects is thinner. Further, this might have a positive impact on individual net fiscal impact, i.e. taxes paid less the cost of public benefits received. On the other hand, union membership may reduce net fiscal impact by raising receipt of earned income tax credits, unemployment insurance, and workers compensation. We use Current Population Survey data between 1994 and 2013 to study the effect of union membership on net fiscal impact overall and give evidence on which channels matter. Using both pooled cross-sections and first-differences, we document that union members have higher annual private income and pay more in taxes. Some evidence suggests reduced public benefit use as well. This implies a positive effect on net fiscal impact through the channels studied here.

This paper offers the first evidence on whether union members use public benefits less and pay more taxes than observably-similar workers who do not belong to unions. Based on past literature, there is good reason to expect this. Through unionization, many workers raise their labor compensation, both earnings and employer-provided fringe benefits. The positive effect of unionization on labor earnings is especially pronounced for workers who would otherwise have very low earnings. Frandsen (2012) follows workers after close union elections and finds that unionization strongly raises post-election earnings for workers who were below the 25th percentile of the pre-election earnings distribution but has no effect for workers who were at higher percentiles. Very low-earning workers are those most likely to collect public benefits. Focusing on post-election earnings accounts for any reduction in hours induced by higher hourly compensation. He also follows workers even if they leave the establishment and counts earnings as zero if they do not earn from any employer, so this also accounts for any reductions in employment driven by unionization.

Union membership also raises workers' likelihood of having private, employer-provided health insurance and other benefits (Buchmueller, DiNardo, & Valletta, 2002; Freeman, 1984). Employer expenditures on fringe benefits are 2.5 times higher per hour worked for unionized jobs than for nonunion jobs (Budd, 2005). As with earnings, the effects of unions on benefits appear larger in lower-paying establishments.

Through these channels, unionization may have a positive net fiscal impact on public balance sheets by both (1) reducing public-benefit use and (2) increasing tax payments by workers. While this fact has been discussed in the media, it has not received much direct attention from economists or social scientists. Economists have understandably focused most of our attention on the effects of unions on wages, employment and hours, and labor and organizational productivity. These are the first-order, narrowly-economic questions. However, we have devoted surprisingly little attention to closely-connected questions of social, political, and economic import. For instance, what is the impact of unionization on household income? There is some work on labor earnings, the product of wages and hours, but little attention to other kinds of income or on contributions to and dependence on the public coffer.

This paper compares the average net fiscal impact of union members to observably-similar non-member workers using data from the Current Population Survey over 1994 to 2012. We measure individual net fiscal impact (NFI), which is taxes paid (T) less the cost of public benefits received (B): NFI = T – B. Theory tells us that the key mechanism by which individual unionization would affect NFI is through raising private income among low earners. We see evidence strongly consistent with this and provide the first estimates of the magnitude of these relationships.

We start with analysis of the pooled cross-section of employees and estimate how mean NFI differs between union members and other employees conditional on age, education, race, ethnicity, industry, occupation, year, and state. In addition to human-capital

characteristics usually used to estimate union wage premia (Bollinger & Hirsch, 2006), we add also condition on measures of family structure and state-year economic and policy characteristics, as these could also influence both individual tax obligations and public-benefit eligibility.

The main contribution of this paper is to describe and measure union-nonunion differences in individuals' net fiscal impact and to decompose the differences as coming through various channels such as differences in taxes paid, public benefits received, private income earned.

Design
To study the relationship between union membership and net fiscal impact, we draw on data from the Current Population Survey's (CPS) outgoing rotation group (ORG), a nationally-representative, survey of households for the years 1994 to 2013 that includes detailed data on all key variables (King, et al., 2014). This period is the longest over which the necessary variables are all available. As is common in the study of union effects on wages, our primary sample includes only non-student, employed, wage and salary workers age 18 or older.[1] All analysis uses sample weights. All dollar amounts are inflated to 2013 dollars. To reduce attenuation bias from missing union-status data (Bollinger & Hirsch, 2006), we exclude observations with imputed union status from the main analysis.

We would ideally have an experiment where some individuals were randomly assigned to be union members and others to be nonunion. In that case, we could credibly interpret any observed union-nonunion differences in outcomes as causal effects of union membership. Unfortunately, randomization is not feasible.[2] Freeman (1984) describes many relevant issues in the study of union effects using CPS data arising from measurement error in the observed union-status variable. In particular, he discusses plausible conditions under which the true effect of union membership is bounded above by the cross-sectional estimator and below by the individual first-difference estimator. Following his lead, we will present both estimates and interpret our results in this framework.

For consistency between the cross-sectional and longitudinal analysis, we restrict attention to the 79,123 individuals linked across 2 waves of the CPS-ORG. For the links, we draw on individual identifiers recently created by the U.S. Census Bureau. Table 1 describes the frequency of union-status transitions in our sample. The sample includes 2,687 individuals moving from union to non-union, 2,804 moving from non-union to

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[1] Non-workers generally cannot belong to unions and plausibly have different unobserved characteristics than workers. If unionization impacts public balance sheets by reducing employment, our primary analysis will miss this channel. We return to this in the robustness section.

[2] A regression discontinuity design (DiNardo & Lee, 2004; Frandsen, 2012; Sojourner, Frandsen, Town, Grabowski, & Chen, 2013) would require the ability to connect the population of individually-identified workers between the establishment where they worked during a NLRB unionization election and later, individually-identified measures of taxes paid and benefits received. That may be possible in the future but is beyond the current scope.

union, 9,538 who are union in both waves, 61,829 who are non-union in both waves, and 270 who are covered non-members in both waves.

The primary outcome of interest is individual *net fiscal impact* (NFI) on public balance sheets, defined as taxes paid less the cost of public benefits received. The sample average (SD) is $10,843 ($15,621) (Table 2), suggesting that the average worker contributes $10,843 more in tax liabilities than he collects in public benefits and tax credits. In the cross-section, union members average $12,794 in NFI and non-union workers average $10,449, implying a raw difference of $2,346 (Appendix Table 4).

To measure *taxes paid* by each individual, we add up reported annual federal and state income tax liabilities before credits, property tax, Social Security, and federal retirement plan payroll deductions. Income from tax credits – Earned Income, Make Work Pay, Child, Child Care, and Stimulus – are also included in this sum but enter with negative sign. The sample mean (SD) is $12,035 ($14,567), with union members paying $1,980 more than non-union workers on average. Table 4 contains summary statistics for each component of taxes paid. Federal income tax and Social Security payroll deductions are the largest components.

To measure the public cost of *public benefits received*, we add up the reported value of benefits received through various programs. We break these into earned and unearned benefits, though this distinction is not sharp. We construct unearned benefits as those that tend to fall as current earnings rise, which we expect would make them more sensitive to union status. Earned benefits include post-secondary educational assistance, Social Security, unemployment insurance, workers compensation, veteran's benefits, and survivor's benefits and average $786 annually. Union members report $153 less earned benefits than non-union workers. Unearned benefits include assistance from friends and relatives [we need to take this out], supplemental Social Security Income, welfare, the private-market value of food stamp, Medicaid, and Medicare benefits, and of school-lunch, housing, and home heating subsidies and average $406 per year.[3] Union members report $221 less in unearned benefits than non-union workers.

In our analysis, private income is the key mechanism by which unionization would affect taxes paid and public benefits received.[4] To measure *private income*, we sum income from alimony, farm income, non-farm business income, child support, dividends, interest, rent, retirement, wage and salary income wages, and income from other sources. For homeowners, we also include the flow value of housing services. The sample average (SD) is $56,645 ($41,225) in private income per year, with union members report $6,605

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[3] Most of these tax and benefit-income variables are reported by the individual respondent about him or herself individually. However, some of the benefits are supplied at the family-level: public housing, Medicare, Medicaid, food stamps, school lunch, and home heating. To match the individual-level sample-selection criteria and unionization measure, we construct an individual-level measure for each of those benefits. We allocate the total family's cost of the benefit equally to all adults in the family.
[4] Unionization may affect public balance sheets through the political economy as well, by encouraging political support for higher tax rates and more expansive public benefit programs. This channel is largely outside the scope of the current analysis. We explore this more fully in the discussion.

more annual income than non-union workers. By far, the largest component is wage and salary income with an average of $51,551.

The primary predictor of interest is an indicator of union membership. We also include an indicator of working under a union contract without joining the union. This covered non-member status occurs primarily in right-to-work states. The omitted category is non-members working outside a union contract. Union members account for 15.8 percent, covered non-members for 1.5 percent, and non-union workers for the remaining 82.7 percent of the (weighted) sample.

To isolate the relationship between outcomes and union status, we condition on other observable determinants of the outcomes. We start with a standard set of wage determinants: potential experience in quartic form, indicators for educational attainment, marital status, race and ethnicity, foreign-born, part-time work, region, size of metropolitan area, industry, occupation, employment by federal government, by state government, or by local government (private sector omitted), and year, following Bollinger & Hirsch (2006). Tax liability and benefit income also depends closely on family structure. To capture this, in addition to marital status, we condition on the number of adults in family, number of children 0-5 in family, and number of children 6-18 in family. Individuals' tax liabilities and income from public benefits will also depend on states' current policies, economies, politics, and populations. These may also be correlated with the likelihood of union membership. To mitigate these possible sources of omitted-variable bias, for each state-year, we include measures of the level of the binding minimum wage (maximum of state and federal), population level, unemployment rate, gross state product, an indicator that the governor is a Democrat, and the fractions of the state house that is Democratic, and the fraction of the state senate that is Democratic (University of Kentucky Center for Poverty Research). Table 2 presents summary statistics on these variables.

Results
To see whether the mean differences hold up in more homogeneous comparisons, we use regression analysis. We begin with the outcome of NFI. The first specification is a pooled cross-section, regressing NFI on indicators for union membership and covered non-member status, individual demographic covariates (all individual wage determinant and family structure variables), all the state-year characteristics, year fixed effects and region effects. This is the Bollinger & Hirsch specification augmented with family structure and state-year variables. After conditioning on all these predictors, we estimate that union members have an NFI $1,518 more positive than non-union workers, a 35 percent reduction in the difference compared to the $2,346 raw difference in sample means (Table 3). Specification 2 replaces region fixed effects with state fixed effects. The estimated association falls by less than 2 percent to $1,489 though the standard error more than doubles, from $95 in specification 1 to $191 in specification 2. Specification 3 uses state-year fixed effects rather than state effects, year effects, and state-year characteristics. Again, the estimate is very stable at $1,492, though the standard error falls to $116. These cross-sectional estimates appear quite stable and imply a large,

strong positive association. Union members have about $1,500 more positive net fiscal impact than observably-similar non-union workers.

However, it is possible that union workers and non-union workers differ in unobservable ways correlated with unionization status and NFI. To deal with this, we exploit the longitudinal nature of the data to estimate a specification with individual fixed effects. Ideally, this identifies the effect of unionization as the average change in NFI experienced by someone who switches between union and nonunion status, conditional on other observed changes. However, Freeman (1984) points out two relevant facts: (1) there is substantial measurement error in reported union status and (2) this can bias down estimates based on individual fixed effects. He argues that cross-sectional estimates can be interpreted as an upper bound on the causal effect of unionization, due to likely positive omitted-variable bias, and the fixed effect estimate can be interpreted as a lower bound due to attenuation caused by the union-status measurement error.

Specification 4 reports estimates from the individual fixed effect estimator. The estimated effect of unionization on NFI here is $299, significant at 10 percent. In no specification is there a substantial nor a statistically significant difference between covered non-members and non-union workers.

Next, this NFI result is decomposed into differences in taxes paid and benefits received. The logic of the analysis and the specifications used are the same. Only the outcomes differ. Union members pay about $1,150 more in taxes each year, according to the cross-sectional regressions. This result is stable and highly significant statistically across all 3 cross-sectional specifications. The individual fixed effect analysis estimates a positive $279 per year effect of unionization, significant at the 10 percent level. Union members collect $345 less in public benefits than observably-similar nonunion workers. The results are very strong and stable in the cross-section. In the panel, the estimate becomes small and not significant: -$19.97.

Presumably, union members pay more taxes and collect less public benefits because they have higher incomes from private sources. Do we see this hypothesized channel in the data? In the cross-sectional analysis, union members earn about $4,322 more than nonunion workers. In the longitudinal analysis, the union effect on income is +$1,119.

Discussion
The cross-sectional results are very clear and stable. At the employee level, union membership has a large, positive conditional association with net fiscal impact. Union members pay about $1,150 more every year in federal, state, and local taxes than similar non-members do, connected to the fact that union members have about $4,300 more in annual income on average. Consistent with their higher incomes, union members use public benefits less, about $345 less each year in public benefits. Aggregating across NFI components and measuring NFI at the individual level, we observe that union members contributed on average $1,135 more per year to the public balance sheet than similar non-union employees.

This comparison ignores many other channels by which union membership might affect NFI. Nailing down the exact magnitude of the effects through these other channels is beyond the scope of this paper. However, we describe some potentially important channels and draw on available evidence to approximate the magnitude where possible.

To achieve a full accounting of the net fiscal impact of unionization, we must understand from where the higher, private compensation of union members derives. Unionization may cause some *ceteris paribus* boost to labor productivity (Freeman & Medoff, 1984; Sojourner, Frandsen, Town, Grabowski, & Chen, 2013). To this extent, the net fiscal impact is clear, as it derives from newly-created value.

However, part of the higher compensation derives from changes in the distribution of value between various stakeholders. Organizations are assemblages of workers and capital aimed at producing value. After consumer surplus is deducted and suppliers are paid, the enterprise's surplus must be divided among workers, managers, and investors as residual claimants. Investors hire managers to represent their collective interests in economic and political affairs. Similarly, workers sometimes join together into unions to increase their bargaining power by building their capacity to engage in coordinated economic and political action.

For a given level of productivity, unions shift the distribution of an organization's surplus towards low-earning workers and away from investors (TBA Mas & Lee) and likely also away from managers, though evidence on managers' compensation is slim. Here, the net fiscal impact we estimate must be scaled down somewhat to account for the fact that each extra dollar in union members' earnings comes from reduced earnings by executives and shareholders.

The question becomes what is the difference between the net fiscal impact of the marginal dollar in a workers' pocket compared to the net fiscal impact of the marginal dollar in a manager or investors' pocket. For executives, the net fiscal impact will likely not entail any reduction in public-benefit use. It may entail reduced tax payments. The combined marginal tax rate for managers' income is TBA. For investors, the marginal dollar might be taxed as interest, dividends, or capital gains. The shares are TBA. The marginal rates are TBA. Therefore, the average marginal tax payment is TBA. How does this compare to the marginal tax payment of the average worker?

Unionization also changes the distribution of earnings among workers. It tends to compress the wage and earnings distribution within an organization. Frandsen (2012) develops a theoretical model of why pro-union, worker-majority coalitions tend to favor low-earners' interests over high-earners' interests, basically because these coalitions can be assembled at least cost to the organization, and his empirical findings are very consistent with this model. Our analysis, which measures the average difference in net fiscal impact between union and nonunion workers at all pay levels, accounts for this channel.

Second, unionization may *ceteris paribus* reduce productivity. This would generate real economic cost with negative fiscal impact through many channels. Reductions in on-the-job productivity are partly reflected in the analysis and partly missed. If unionized organizations are less productive, the pie is smaller. That puts downward pressure on labor compensation, accounted for here, and downward pressure on capital earnings, not accounted for here. To get some handle on this, we can use estimates from Mas & Lee. They show that unionization leads to a TBA reduction in profits. These missing profits are taxes at an average marginal rate of TBA.

It could also increase unemployment by raising compensation costs. Our analysis does not account for this channel directly. Any workers who lose their jobs (or fail to get a job) due to unionization are excluded from the employee-only sample. Moving a worker from employment to unemployment or out of the labor force could have quite a large negative net fiscal impact. The worker may go from paying taxes on private earnings to depending largely on public benefits.

For instance, unionization may raise the cost of employing each worker through higher wages and fringes and, in response, an employer may reduce head count. The comparison we make, between NFI of employees in unions and NFI of employees not in unions, would miss the fact that unionization caused some workers to go from employed to unemployed. Our primary analysis does not include the NFI of these unemployed as a negative effect of unionization, though this should be accounted for. Also, if unions increase workers bargaining power

Thus far, we have considered channels involving labor-management bargaining that changes the creation and distribution of value within organizations. Unionization seems to have fiscal impacts through policy channels as well. For instance, organized labor often advocates for larger public budgets and more generous social safety nets (TBA: cite).

Tables

Table 1: Union status transition frequency for longitudinally-linked sample

	Status in year t+1		
Status in year t	Union member	Covered non-member	Non-union
Union member	9,538	268	2,687
Covered non-member	295	270	708
Non-union	2,804	724	61,829

Table 2: Summary statistics for longitudinally-linked sample

	Mean	SD	Min	Max
Outcomes				
Net fiscal impact	10,843.55	15,621.61	-36,169.82	82,104.95
Taxes paid	12,034.79	14,856.67	-8775.536	82104.95
Earned benefits received	785.62	3,155.08	0	20,292.49
Unearned benefits received	405.63	1,627.21	0	10,475.44
Private income	56,645.11	41225.05	-21,626.17	236,405.8
"Treatment"				
1(union member)	.158		0	1
1(covered non-member)	.015		0	1
*Selected demographics**				
Number adults in family	2.09	.89	1	10
Number of children 0-5	.24	.56	0	6
Number of children 6-18	.57	.91	0	9
Potential experience, years	23.4	12.1	0	84
State-year characteristics				
Minimum wage	5.92	1.13	4.25	9.04
Population	12366049	9947426	469033	37999878
Unemployment rate	5.93	2.06	2.3	13.8
Gross State Product	522932	480552	13027	2125717
1(Governor is Democrat)	.445	.497	0	1
Democrat share state house	.529	.136	0	1
Democrat share state senate	.504	.143	0	.97

Note: set of demographic controls also includes indicators of educational attainment (16 categories), marital status (6), gender (2), race-ethnicity (4), foreign-born, part-time, metropolitan size (7), industry (13), occupation (7), working for federal government, working for state government, and working for local

government. Sample includes 158,246 observations of 79,123 employed individuals over 2 consecutive years each without missing variables or imputed union status.

Table 3: Estimates of union-membership effects on four outcomes using longitudinally-matched observations

Specification:	1	2	3	4
Outcome: net fiscal impact				
1(union member)	1517.59*** (94.65)	1489.20*** (190.78)	1492.26*** (115.84)	299.30* (170.19)
1(covered nonmember)	166.10 (312.68)	192.77 (469.29)	231.35 (337.11)	-56.05 (289.02)
Adj. R^2	0.244	0.247	0.251	0.009
Outcome: taxes paid				
1(union member)	1184.04*** (92.16)	1143.66*** (199.37)	1147.09*** (113.19)	279.33* (161.90)
1(covered nonmember)	118.54 (310.45)	144.14 (457.50)	173.57 (329.35)	44.00 (270.96)
Adj. R^2	0.251	0.254	0.258	0.008
Outcome: public benefits received				
1(union member)	-333.55*** (38.38)	-345.55*** (30.47)	-345.17*** (28.78)	-19.97 (53.93)
1(covered nonmember)	-47.55 (80.89)	-48.63 (120.83)	-57.78 (84.72)	100.05 (101.34)
Adj. R^2	0.160	0.161	0.166	0.006
Outcome: private income earned				
1(union member)	4413.79*** (326.02)	4336.57*** (443.19)	4321.90*** (271.92)	1119.56** (475.77)
1(covered nonmember)	923.05 (732.88)	932.11 (979.38)	952.46 (767.89)	124.98 (812.16)
Adj. R^2	0.410	0.412	0.416	0.015
Demographics	Yes	Yes	Yes	Yes
State-year characteristics	Yes	Yes		
Year FE	Yes	Yes		Yes

Region FE	Yes			
State FE		Yes		
State-year FE			Yes	
Individual FE				Yes

Note: Coefficient (within-individual, correlation-corrected SE). Significant at: *10 **5 ***1 percent level. 158,246 observations of 79,123 individuals over 2 consecutive years each. Coefficient estimates on 1(union member) and 1(covered non-member) and adj-R^2 are presented for each {outcome}x{specification} regression model. For compactness, estimated coefficients for control variables and fixed effects are not displayed.

Appendix

Table 4: Summary statistics for variables and components

Sample:	All	Union	Non-union
Net fiscal impact	10843.5	12794.9	10448.6
	(15621.6)	(14078.5)	(15875.7)
Taxes paid	12034.8	13680.6	11699.8
	(14856.7)	(13585.4)	(15063.4)
Federal income tax liability before credits	6452.4	6876.6	6359.5
	(14137.5)	(11974.1)	(14516.8)
State income tax liability before credits	1849.6	2171.8	1787.0
	(4520.9)	(4133.9)	(4596.1)
Annual property taxes	1345.4	1614.7	1293.1
	(2695.7)	(2900.9)	(2660.1)
Social security retirement payroll deduction	3357.3	3486.0	3337.7
	(2524.8)	(2347.9)	(2556.7)
Federal retirement payroll deduction	151.8	315.0	112.4
	(1148.2)	(1374.9)	(1026.0)
Earned income tax credit	176.4	99.36	192.7
	(759.0)	(556.5)	(794.3)
Additional child tax credit	34.48	21.35	37.44
	(259.8)	(212.0)	(269.6)
Child tax credit	134.7	150.3	131.9
	(516.9)	(548.6)	(510.8)
Credit received from making work pay	43.23	40.54	43.88
	(166.3)	(163.7)	(167.0)
Federal stimulus payment	36.66	37.69	36.53
	(215.0)	(222.1)	(213.9)
Income from Earned Benefits	785.6	657.3	810.2
	(3155.1)	(2792.7)	(3218.2)
Educational assistance (beyond HS)	101.8	77.48	105.9
	(1133.8)	(912.3)	(1167.9)
Social security	427.8	211.0	471.0
	(2679.0)	(1905.7)	(2807.2)
Unemployment benefits	132.7	153.5	129.7
	(1323.1)	(1207.9)	(1350.2)
Worker's compensation	40.48	95.87	29.84
	(760.6)	(1209.6)	(642.1)
Veteran's benefits	77.01	74.84	75.48
	(1421.6)	(1253.4)	(1439.7)
Disability benefits	22.68	23.75	22.67

	(851.7)	(836.1)	(858.5)
Survivor's benefits	101.3	134.3	94.24
	(2455.0)	(2971.8)	(2331.4)
Income from Unearned Benefits	405.6	228.5	441.0
	(1627.2)	(1197.7)	(1698.3)
Assistance from friends/relatives not in HH	25.03	17.06	26.47
	(713.8)	(526.2)	(739.1)
Supplemental Security Income (SSI)	17.20	7.566	19.28
	(410.2)	(264.0)	(435.5)
Welfare (public assistance)	13.32	6.982	14.54
	(313.1)	(207.4)	(329.8)
Person market value of Medicare	157.3	83.22	171.9
	(1187.7)	(880.1)	(1238.8)
Person market value of Medicaid	132.8	75.71	144.2
	(1037.6)	(834.4)	(1074.7)
Person value of food stamps	55.39	22.90	62.15
	(472.6)	(282.7)	(503.3)
Person value of housing subsidy	2.053	1.412	2.188
	(21.24)	(16.73)	(22.10)
Person value of school-lunch subsidy	53.27	41.53	55.60
	(187.4)	(152.9)	(193.6)
Person value of energy subsidy	2.926	1.910	3.155
	(46.71)	(32.93)	(49.22)
Private Income	56645.1	62130.6	55525.1
	(41225.0)	(33307.7)	(42531.6)
Alimony	26.52	17.12	27.77
	(915.1)	(516.3)	(945.4)
Non-farm business income	209.6	155.2	219.0
	(4286.2)	(3069.5)	(4485.6)
Child support	168.9	159.1	169.7
	(1468.9)	(1601.9)	(1431.6)
Dividends	544.5	514.9	547.1
	(3673.3)	(3536.1)	(3681.4)
Farm	61.38	71.97	59.22
	(3623.8)	(4077.7)	(3552.2)
Interest	865.8	917.3	852.6
	(4652.8)	(4719.1)	(4634.5)
Income from other source not specified'	26.21	28.83	25.46
	(813.4)	(694.4)	(833.4)
Rent	264.8	347.0	247.7
	(3817.3)	(4697.8)	(3617.6)
Retirement	497.8	357.9	520.5
	(4399.6)	(3725.1)	(4488.0)
Wage and salary income	51550.9	55008.2	50855.3
	(51166.5)	(35745.8)	(53677.1)

Implied value of owner-occupied housing	4449.4	5308.9	4270.5
	(5498.6)	(5915.8)	(5388.6)
Observations	158,246	25,130	130,581