The "Poverty Trap" and Living Wage Laws

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Abstract

Advocates of "living wage" laws claim these wage mandates will help families escape poverty by increasing family earnings beyond the poverty level. However, many families living with earnings below the poverty level take advantage of programs specifically designed to help them out of poverty such as Food Stamps, TANF, Section 8 housing and the EITC. We examine the interaction of these programs in addition to state, federal and payroll taxes for a variety of families and the effect a change in pay would have on taxes and benefits. We then apply our tax and benefit model to typical living wage levels in several cities where living wages have been enacted or considered. Using SIPP data, we identify families in these cities who would be eligible for living wages as well as information on what types of benefits they receive.

The living wage appears to be badly targeted and ineffective at raising comprehensive disposable income. We find that phase-out rates of benefit programs are structured so that additional earnings from living wages largely disappear through benefit reduction and increased taxation. Such vanishing benefits reduce the ability of living wage laws to reduce poverty. At the same time, the tax rates are substantially lower than under the unrealistic assumption of 100% take-up of welfare benefits. We also find that nearly 75% of those affected by the living wage were not initially in poverty, and that more than 40% had initial incomes of at least twice the poverty line.

The "Poverty Trap" and Living Wage Laws

1. Introduction

The living wage movement has been successful in lobbying local governments to pass laws setting high minimum wages for companies doing business within their jurisdictions. More than 100 such laws have been passed since Baltimore passed its law in 1994. About two-thirds of these laws apply only to local government contractors. The remainder have a broader scope and cover businesses receiving any form of financial assistance from the local government, including tax abatements and low interest rate loans. More recently, living wage advocates have attempted to widen the applicability of such laws to cover all employers within a geographic area.

In 1998, academic activists Robert Pollin and Stephanie Luce published *The Living Wage: Building a Fair Economy,* which has become a guide for living wage advocates to use in designing and evaluating living wage laws. In their book, Pollin and Luce are skeptical that attempts by local governments to create a business-friendly environment through tax abatements and other pro-business measures have helped poor families. Instead, they advocate imposing high minimum wages usually tied to the official government poverty line for a family of four, or some multiple thereof. This results in wage mandates for all workers who work in covered firms ranging from 150 to 250 percent of the current federal minimum wage, i.e. in the range of about $8.00 to $11.00 an hour. Frequently the laws provide separate wage mandate levels for firms that do or do not pay for health insurance for their workers.

The laws are designed to help the working poor. However, they are controversial because they raise the costs of doing business particularly for contractors and businesses

that receive financial aid. This can lead to layoffs and businesses substituting higher skilled workers for those who have fewer skills. However, the advocates of living wage laws claim that such costs are small, and in any event they are worth it to help the working poor.

This paper takes a fresh look at just how effective such laws can be for the working poor. There is much evidence that working poor families that participate in public assistance and subsidy programs such as cash welfare, Food Stamps, housing assistance, and Earned Income Tax Credits face very high marginal tax rates on additional earned income. These high rates, caused by a combination of payroll taxes and benefit reductions in public programs, operate in the very income ranges where living wage laws have their primary impact, e.g., $10,000 to $20,000. This raises a question about how effective an anti-poverty device living wage laws can be, even if we assume away their possible negative effects on low-skill employment and local economic growth.

In this paper we estimate how high marginal tax rates affect the ability of living wage laws to increase the disposable income of low-income families. We do this by looking at tax and benefit programs in place in seven cities Baltimore, Boston, Chicago, Detroit, Los Angeles, New York and San Francisco, estimating the program participation patterns among low-wage workers in those cities, and linking the programs to estimated marginal tax rates over the relevant wage ranges.

The remainder of this paper is organized into four sections. Section 2 reviews the empirical literature on marginal tax rates and the poor. Section 3 discusses our approach and data sources. Section 4 provides estimates of the impact of high marginal tax rates

on the effectiveness of living wage laws in reducing poverty rates and poverty gaps. Section 5 provides concluding remarks.

2. Observations on the Literature

It is well known that the poor and near poor face high marginal tax rates because of their participation in government assistance programs that phase out their benefits as earnings rise. See Sammartino et al. (2002); Shaviro (1999); Acs et al. (1998); Giannarelli and Steuerle (1995). The consequence of these high marginal tax rates for the ability of wage mandates such as those in minimum wage laws and living wage laws to raise family (after tax) income is less well understood. The focus of the prior literature on marginal tax rates and the low-income population has mostly been on the work incentive and distributional consequences of high marginal tax rates rather than their interaction with wage mandates. An exception is Shaviro (1999), who comments that "a single mother of two, working full time (at the minimum wage) in a state that offers generous public assistance benefits, would retain only $52.42 of the extra earnings" associated with a rise in the minimum wage by one dollar.[1] He contrasts this with the outcome for a single working teenager or childless adult under the age of 25, who would take home approximately $1,554 from that same one dollar rise in the minimum wage. Shaviro comments that because of high marginal tax rates, "arguably, those who need additional income the most receive the smallest "raise," while those who need less get much more."[2]

We know of no empirical estimates of the effect of high marginal tax rates on the ability of living wage laws to move working poor families out of poverty. The prior literature has focused primarily on the welfare population rather than the working poor,

and as indicated above, has mostly ignored the implications of high marginal tax rates for wage mandates. However, the prior literature can provide us with a rough idea of how high marginal tax rates may be for families experiencing the types of wage increases mandated by living wage laws. In Table 2-1 and Table 2-2, we summarize the marginal tax rates found in prior research averaged over an income range between the minimum wage and multiples of the minimum wage, and between the federal poverty line and multiples of the federal poverty line, respectively. We adjusted the reported figures in Sammartino et al. (2002), Giannarelli and Steurle (1995) and Shaviro (1999) to be consistent with an assumption that the employer's share of Social Security taxes was not part of the earnings base.[3]

The results displayed in the tables indicate that the marginal tax rates facing low-income families are quite high, particularly in an income range from the minimum wage up to 1.5 times the minimum wage, or from the poverty line to 1.5 times the poverty line (in some instances greater than 100 percent). The rates are particularly high when families participate in multiple transfer or tax subsidy programs. Thus, the prior literature suggests that such high marginal tax rates can certainly impair the effectiveness of living wage mandates to improve family economic well-being. This is so, even under the most favorable assumption that there is no employment displacement or reductions in hours as a consequence of the living wage law. Our analysis in this paper will build on this literature to examine more specifically the consequences of high marginal tax rates for the effectiveness of living wage laws considering the mix of families likely to be affected by such laws, and their participation in public transfer and tax subsidy programs.

3. Objectives and Approach

In this paper, we will investigate the significance of marginal tax rates for the impacts living wage laws may have on the economic well-being of households affected by such laws. First, we estimate schedules showing the relationship between household earnings and comprehensive disposable income (i.e., income after accounting for taxes and transfers, including welfare benefits, earned income tax credits and child tax credits) for various types of households in seven U.S. cities: Baltimore, Boston, Chicago, Detroit, Los Angeles, New York and San Francisco. These cities were selected because they either have living wage laws, or in the case of New York City, have been targets of minimum wage campaigns. The income schedules for households will differ by whether the household participates in public transfer and tax subsidy programs because such programs typically alter the relationship between gross before-tax earnings and net disposable income for the household. In computing the schedules, we consider the following transfer, tax, and tax subsidy programs for the selected cities: federal, state and local income taxes, FICA taxes, tax credit programs (federal and state earned income tax credits, and the federal child tax credit),[4] Temporary Aid for Needy Families (TANF), Food Stamps, and Section 8 Housing Assistance.[5]

For our living wage impact analysis, we drew a sample of individuals for 1999 using the 1996 panel of the Survey of Income and Program Participation (SIPP) (see Appendix A for a description of the SIPP, including sample size information). In that sample, we identified a number of households in the seven cities who might be affected[6] by universal coverage living wage laws mandating a wage rate of at least $8.83.[7]

We assigned each of the remaining households in the sample to particular schedules associating the change in comprehensive disposable income (CDI) with the change in gross earnings (GE) with and without the living wage intervention.[8] Household gross earnings without the wage mandate were the reported household earnings. Household gross earnings with the wage mandate were the sum of the earnings for affected workers[9] in the household (i.e., the reported hours of work times $8.83) plus the reported earnings for the unaffected workers. Comprehensive disposable income (both with and without the wage mandate) was computed using household earnings, state and federal tax liability rules[10], and transfer program benefit determination rules.

We computed an (average) marginal tax rate (MTR) in 1999 for each sample household by the formula:

MTR = 1 – (change in CDI)/ change in GE)

where the changes are measured between the household's observed baseline GE and CDI, and the GE and CDI associated with the living wage intervention. The MTR measures the fraction of the living wage-induced change in earnings that is kept by the household after taxes and benefits are considered. In Section 4, the computed MTRs are reported for different groups of households for each of the seven cities examined.

We then conducted an analysis of the impact of the MTRs on the effectiveness of living wage laws in reducing the amount and degree of poverty in the seven cities. We did this by using two different measures of poverty: one, based on gross earnings only, and the other based on comprehensive disposable income. We computed poverty for both income concepts using the federal poverty line (FPL) and 200% of the FPL. Poverty rates for our sample (with and without the living wage intervention) are computed by

using the ratio of the number of households with income (GE or CDI) falling below the household's own applicable poverty standard (FPL or 200% FPL). We also examine the rate at which poor households leave poverty with and without the living wage intervention. We also measure the extent of poverty (or the "poverty gap") by examining the distance (in amount and percent) between household income and the applicable poverty line, with and without the living wage intervention. The analysis based on gross earnings essentially ignores the MTRs, while the analysis based on comprehensive disposable income shows the effect of the MTRs in limiting the anti-poverty effectiveness of living wage laws.

4. Analysis of the Living Wage Using the SIPP

4.1 Characteristics of Families with Low Wages from the SIPP

To assess the importance of high cumulative marginal tax rates resulting from multiple program participation, we examine microdata from the Survey of Income and Program Participation (SIPP). As discussed in the appendix, we construct a sample of non-elderly households that are followed for the calendar years 1996 to 1999. Overall, we follow 2,711 households, of whom 44.7% are married with children, 16.3% are single parent families, and 39.0% are childless. To maintain consistency with the analysis in the other sections, we take households who were initially living in Boston, Chicago, Detroit, Los Angeles, New York City, San Francisco, and Baltimore.

We examine overall program participation in Table 4.1 for all households, including non-earners. We present the tabulations both for the 1996-1999 period as a whole, and for each year separately because there were major downward trends in

program participation over this period because of implementation of PRWORA and the improving economy. We define welfare participation on an annual basis in these tables, and find that across the entire sample, approximately 79 percent of households do not participate in Medicaid, AFDC/TANF, public housing, or Food Stamps. The entire sample does not condition on low income or low wages, so participation is fairly low. Interestingly, even with the improving economy and welfare reform, participation in no welfare programs remains fairly stable from 1996 to 1999. The next nine rows of Table 4.2 break out participation in different kinds of welfare programs. The single largest category for welfare participation is participating in Medicaid alone. Unlike other welfare programs such as AFDC/TANF or Food Stamps that were being scaled back during this period, Medicaid was expanding because of the phasing-in of Medicaid expansions from the late 1980s and early 1990s, and because of the implementation of the SCHIP (State Child's Health Insurance Program) in the late 1990s. Overall, 18.8% of households participated in Medicaid (either alone or in conjunction with another program). The percentage of families in these MSAs that participated in Medicaid alone increased from 6.6% to 8.9%. As the remaining columns show, however, for the sample as a whole, multiple program participation is quite common. With the exception of Medicaid (which currently has very generous income limits), less than 1% of households participate only in AFDC/TANF, Food Stamps, or public housing.

The remaining rows show breakdowns by the head's and spouse's hourly wage rate, by poverty status, and by the distribution of family structures. Wage rates were computed by dividing annual earnings by annual hours of work. In approximately 25% of the households, the head had no reported earnings or hours in a given year, so it was

not possible to compute his or her hourly wage rate. Approximately 21% of the household heads had an imputed hourly wage rate less than $10 per hour, and 54% had wage rates greater than $10 per hour. Almost 40% of the sample is unmarried, and nearly 20% had a non-working spouse. Working spouses who earned less than $10 per hour comprised 14% of the sample, while working spouse who earned more than $10 per hour comprised 29% of the sample. In our sample, approximately 9% live in poverty in a given year (based on gross income), and another 14% have family income under 200% of the poverty line.

In Table 4.2, we break out welfare participation by family income, by showing participation rates for the "near poor" with incomes less than 200% of poverty. Clearly, the patterns of program participation are much more dramatic. More than half of poor and near-poor families participate in welfare. Of those who participate, about one-third only participate in Medicaid, and most of the remaining participate in multiple programs. More than 13% of poor and near-poor households participate in Medicaid, AFDC/TANF, and Food Stamps, and more than 7% participate in Medicaid, AFDC/TANF, Food Stamps, and public housing. It is important to note that there are often long queues to enter public housing, so presumably some households who are not participating would participate if they could get in. Again, with the exception of Medicaid, participation in only one welfare program is not very common. Briefly examining the other rows, as one would suspect, the labor force participation rate is much lower for poor households, and conditional on work, the wage distribution is much lower. About 45% of poor households have a head with no earnings, and about 45% have a head who earns less than

$10 per hour. Thus, this group is very likely to be affected by living wage laws, and has high participation rates in multiple welfare programs.

4.2 Simulating the Effects of the Living Wage: Preliminaries

This section reports on simulations of the effect of a living wage increase to $8.83 per hour, the median for living wage localities through 1999. A living wage of this level equates to annual earnings of $17,660 for a full-time, full-year worker. For each city where the SIPP data are examined, we included observations that met the following criteria: a) the data are from 1999 only, b) either the head (or spouse) initially has a wage rate between the minimum wage and the new living wage, and c) families that reported receipt of a welfare program that were deemed statutorily ineligible by our imputation were excluded. The second and third screens reduce the sample from 2,711 households to 420 households. Our simulation therefore includes families who may not be in poverty (since only one of the two earners need be affected). If both the head and spouse are affected, both wage rates are increased to $8.83 per hour.

The analysis is focused on each earner's total annual wages and the family's tax status (head of household, single, or married).[11] Program benefits for Food Stamps, TANF, Section 8 were calculated, as well as federal, state, and local taxes, and employment taxes (like Social Security and Medicare). All families' earnings, income, and marginal tax rates were modeled on their reported program participation and estimated welfare benefits. We assume that all households file a tax return and claim the standard deduction.

Although few families receive all welfare benefits, as Section 4.1 suggests, many participate in one program or another during a given year. The cumulative marginal tax rate for each household was determined by adding the marginal tax rates for the programs in which the household participated. In all of the analysis that follows, we rely on a "no-behavioral response" assumption. In particular, we assume that hours worked and labor force participation are unaffected by the change in the wage rate. If the living wage has disemployment effects, the analysis below would overestimate the impact on moving out of poverty.

4.3 The Impact of the Living Wage on Poverty Rates

The first general question is does the living wage reduce poverty? In general, we use two different income bases for determining poverty rates: one base relies solely on the head's and spouse's earnings, and the second relies on CDI. CDI adds earnings, the EITC, and welfare benefits, and subtracts taxes. In-kind benefits are assumed to be worth the same as cash. An analysis that focuses only on earnings and ignores the tax rates from the tax and transfer system is akin to an analysis that assumes a 0% tax rate.

Figures 4-1 and 4-2 and Table 4-3 examine the effects of the living wage on poverty rates using the SIPP (in the remaining sections, household weights are used). Focusing on the figures, it is clear that the living wage is not well targeted on the poor – the overwhelming majority (72%) who benefit were not poor before the simulation. Of the 28% of households who were initially poor before the simulation, approximately one-third leave poverty.

It could be argued that even though most who were affected by the living wage were not poor, the total expenditure disproportionately benefits those below the poverty line. For example, if most of the non-poor in Figure 4-1 had earners concentrated just below the $8.83 living wage, while most of the poor had earners concentrated near the minimum wage, then the bulk of the expenditure would be, in fact, well targeted. Figure 4-2 shows that this is not the case – the non-poor receive a nearly identical amount (74%) of the expenditure. Although the initial non-poor likely have higher wage rates (which reduces the impact of the living wage), they also have higher annual hours of work (which increases the impact). Overall, the only striking difference between Figures 4-1 and 4-2 is that those who leave poverty receive a slightly higher proportion of the total expenditure, which suggests they work more hours than those who remain poor. Table 4.3 shows several additional calculations. The reduction in poverty rates is 8.7 percentage points when tax rates from the tax-and-transfer system are ignored. As the third and fourth rows show, both the initial level and the reduction are smaller once these taxes are accounted for. The initial poverty rate, 17.6%, is almost 40% lower using CDI, and the reduction in poverty is 6.4 percentage points, only about three-quarters the impact that ignored tax rates.

The second set of rows examines an alternative measure – whether the family was "near-poor," having income under 200% of the poverty line. Strikingly, 41% of the sample was not "near-poor" even before the living wage increase, and our tabulations show that this group received 39% of the total expenditure from the living wage increase. When we use CDI, a smaller proportion was above 200% of the poverty line, because most households are ineligible for welfare benefits around that level, and the taxes reduce

a family's gross income to under this threshold. In both cases – using earnings alone (and assuming a 0% tax rate) or CDI (and assuming a realistic tax rate) – the reduction in "near-poor" poverty is around 6-7 percentage points. This suggests that the focus on marginal tax rates is less relevant for higher income thresholds, though important differences emerge around the poverty line.

4.4 The Impact of the Living Wage on Income

Table 4-4 breaks out the analysis by region and demographics, and illustrates the differences in income changes and tax rates for these groups. Overall, the median earnings for the 420 households affected by the living wage was $19,752, while median comprehensive income was approximately $1,000 higher. Moving down the table, as expected, there are enormous differences in median earnings for welfare and non-welfare recipients (approximately $17,000). The difference in comprehensive income is much smaller (approximately $5,000), showing the importance of accounting for the tax-and-transfer system. Large income differences emerge based on full-time work status, though the gap is again closed when examining comprehensive income levels.

The table also shows that families with children have higher earnings (reflecting, in part, higher marriage rates and higher ages of the head). These differences do not narrow with comprehensive income, reflecting the fact that many subsidies (welfare and EITC) are largely targeted toward families with children.

Finally, there are large differences in earnings across metropolitan areas (though the sample sizes for some regions are relatively small, so the medians may be imprecisely estimated). Interestingly, the inter-region differences shrink considerably when CDI is examined.

Table 4-4 also shows *changes* in median earnings and median CDI, as well as median (average) marginal tax rates. Note that the median marginal tax rates do not exactly correspond to 1 minus the ratio of change in median CDI to change in median earnings, because MTRs are calculated for each individual, and then the median MTR is taken. In general, there is more variability in the comprehensive income change than the earnings change. The earnings change ranges from $1,572 to $3,349 (with most changes around $2,000), while the income change ranges from $806 to $3,296. There are several noteworthy differences in MTRs. Overall, the MTR for those affected by the living wage is 30.2%. Those on welfare face substantially higher MTRs (53% versus 30%). This finding itself is unsurprising, because Food Stamps and housing each have MTRs of 30%, and TANF can potentially have an MTR of 100%. Low takeup rates of some of the program combinations by the median household keeps the MTR as low as it actually is (as well as subsidies from the EITC). This is reinforced by examining the last column – which assumes 100% program participation among eligible households. In this case, the MTR is 80%, but our analysis show that such a 100% takeup assumption is far from the truth.

MTRs neither vary much by full-time work status, nor by the presence of children. This can be explained for full-time work by the fact that many full-time workers are in the EITC phaseout range (with a tax rate of 21%), while part-time workers are often in the subsidy range (with a 40% subsidy) which offsets the high MTRs of welfare programs. Similarly, although families with children have higher participation in welfare programs (which adds to the cumulative MTR), they often get the EITC, which may reduce the MTR. Finally, the analysis shows that the median MTRs by metropolitan

area do not vary much, but if 100% program takeup is assumed, there is considerably more variation.

The lack of regional variation is perhaps surprising, given the diversity of metropolitan areas in terms of their social safety net and state/local tax system. Table 4-5 explores these differences further, with the first column replicating the MTRs from Table 4-4. The second column shows participation rates in any welfare program (TANF, Food Stamps, or public housing), and it is apparent that the lack of variation in the overall sample hides the fact that there is large variation in takeup rates and marginal tax rates conditional on takeup. The takeup rate is as low as 7% in Chicago, and as high as 25% in San Francisco. When MTRs are examined by takeup in any program versus no takeup, MTRs vary by as much as 18 percentage points for welfare participants, but less than 7 percentage points for non-participants. Similar tabulations are done by metropolitan area for families with and without children, and by full-time status. The variation in MTRs by children is again, largely driven by differences in takeup of welfare benefits, while there is not much variation in MTRs by full-time status.

4.5 The Impact of the Living Wage on the Poverty Gap

The final three tables (Tables 4-6, 4-7, and 4-8) combine the focus of changes in poverty rates and changes in income. The poverty ratio, defined in Table 4-6 as the ratio of earnings and CDI to the family's poverty level, was approximately 1.6 before simulating the effects of the living wage. This means that a typical family in our sample had earnings nearly 60% higher than the poverty level before a wage increase. A number below 1.00 indicates that the median family in the sample was in poverty, such as those who received some welfare benefit.

It is expected that when giving all families a substantial wage increase (and ignoring disemployment effects) will yield substantial changes in earnings and CDI. Comparing the third and sixth columns of Table 4-6 shows there is a substantial difference when considering how typical families fare when considering the "Total Earnings Poverty Ratio" to the "Total Income Poverty Ratio." Although the initial levels are very similar for all families, the change is three times larger for earnings than CDI. This again emphasizes the importance of the MTRs from the tax and transfer system. Moving down the columns, one can observe that in almost all scenarios, the "true" change in well-being is overstated by ignoring MTRs. One might expect that for those on welfare (the third row) to have essentially zero change in their well being for CDI, but a large change for earnings. As it turns out, the change for earnings is about the same as non-welfare recipients, while the change in comprehensive income is indeed very small. The reason that earnings do not change very much in column (3) is the small number of hours worked.

As illustrated in Figure 4-1 and Table 4-3, the living wage largely benefits those who are not initially poor. It is still useful, perhaps, to see whether conditional on being in poverty (or near poverty), does the living wage have much impact. The analysis in Tables 4-7 and 4-8 examines the "poverty gap" and the "near poverty gap." The poverty gap is defined for a family as the difference between their poverty line and actual earnings or income (and would be zero for families above poverty line). The sample in Table 4-7 consists of those who were in poverty (based on earnings or comprehensive) before the living wage increase, while Table 4-8 expands the sample to those who were under 200% of poverty. For poor families in Table 4-7, annual household earnings were

$9,519, or $5,494 below the poverty line, on average. CDI was substantially higher, $14,030, with a much smaller poverty gap of $2,221. Note that the composition of families is different across the columns (based on the definition of poverty), so the actual poverty line varies by column.

As the fourth and sixth columns show, the general conclusions about the effectiveness of the living wage depend critically on accounting for the tax-and-transfer system. The *change* in the poverty gap based on earnings is fairly substantial ($1,700) but is much smaller based on CDI ($750). These differences emerge by work status, family structure, and region. The robust finding from Table 4-7 is that the impact of the living wage on true well-being is quite small for those in poverty. Finally, Table 4-8 recalculates these numbers for the "near-poverty" gap. The same kinds of conclusions emerge here. The "near-poverty" gap falls by $2,600 for all families based on earnings, but only $300 based on CDI. Again, the impact of the living wage on well-being appears to be quite modest for those who are worst off.

5. Conclusion

This paper has explored the consequences of implementing a living wage law on the economic status of affected households. Absent in the usual discussion about the impact of such living wage laws are the high cumulative marginal tax rates present in means-tested programs such as AFDC/TANF, Food Stamps, and public housing (and through the phase out of the EITC). These welfare programs disproportionately affect single parent households, but some programs are also available for married households with children and childless households.

The cumulative marginal tax rate, once these programs are included, is very high and over some income ranges exceeds 100%, which implies that the implementation of "living wage" laws may not improve the well being of the household. The analysis here focuses on several large metropolitan areas, most of which could be considered high cost of living. The results of living wage laws that apply to these MSAs are likely to apply to lower cost of living areas, too. AFDC/TANF is a state-level program, Food Stamps is national, while the income limits for public housing are almost always in the relevant range for the currently proposed living wage laws. We show that for many families, especially those who have low annual incomes or low hourly wage rates, welfare participation is quite common and multiple program participation is the rule, not the exception.

Although beyond the scope of the current study, there are several other relevant transfers that could be considered. We did not include Supplemental Security Income (SSI), which offers assistances to poor households with disabled adults or children. We also excluded energy assistance, which is means-tested and tends to vary at the local level. We also ignore child-care subsidies, school breakfast and lunch programs, and Head Start. All of these are means-tested as well, and for at least some of the families in the sample would increase the tax rates even more. Finally, it was beyond our scope to incorporate Medicaid (since it currently has income limits for many families that are well beyond those of proposed living wage laws). Over some parts of the budget constraint, the loss of Medicaid would produce an exorbitant marginal tax rate. See Yelowitz (1995); Yelowitz (2000).

Proponents of living wage laws seem to be aware that the high tax rates make it difficult for such wage mandates to significantly increase family income. However, they argue that having a higher paying job leads to improvements in workers' self-esteem, and even productivity. However, such psychological benefits would seem to be a kind of psychic illusion, with the worker being blind to the regulatory manipulation of market wages. However, this illusion, if it exists, is not innocuous because workers may be led away from socially beneficial investments in education and training, and even geographic mobility, by their belief that their wages may remain high even without the additional human capital investment. Also, workers may learn to their dismay that they are trapped in living wage jobs that pay wages well above their next best alternatives outside the jurisdiction of the living wage laws. If society wants to improve the economic status of low-income families, it seems to us that the best way to do this is through targeted tax credits that go to families most in need, and do not trigger either additional taxes or losses in benefits from public programs.[12]

Our study suggests several directions for future research. First, our simulations suggest that the impact of living wage laws on family income should be very modest. Given the phase-in of living wage laws from 1994 onward, it is possible to use panel data to assess the empirical impact on these laws on total income, and welfare income. Second, eligibility, taxes, and benefits for welfare programs are most often determined monthly, while federal income taxes are determined annually. This opens up the possibility of "bunching" earnings into several months of the year and "bunching" welfare benefits into other months of the year. By doing so, a strategic household could avoid some of the high marginal tax rates because the earnings would be zero during the

months the household was on welfare. Finally, our analysis suggests the incidence of the living wage should vary by family structure. Childless households tend to benefit the most from living wage laws because they are ineligible for most welfare benefits, while single parent households tend to benefit the least. Using the actual implementation of the laws, one can explore whether these predictions actually hold up.

Appendix A. Survey of Income and Program Participation Data Analysis

The SIPP analysis uses information from the 1996 panel, which follows a cohort of households from late 1995 through early 2000.

The SIPP contains basic demographic and social characteristics data for each member of the household. These include age, sex, race, ethnic origin, martial status, household relationship, education, and veteran status. Core questions, which are repeated each interview, cover labor force activity, types and amounts of income, and participation in various cash and noncash benefit programs for each month of the four-month reference period. Data for employed persons include number of hours and weeks worked, earnings, and weeks without a job. Core data also cover post-secondary school attendance, public or subsidized rental housing, low-income energy assistance, and school breakfast and lunch participation.

The sample in each wave consists of 4 rotation groups, each interviewed in a difference month. For Wave 1, the interview months are from February to May 1996. For each group, the reference period for reporting labor force activity and income is the four calendar months preceding the interview month. Thus, the information for a household starts anywhere between October 1995 and January 1996.

The SIPP is a longitudinal survey where each sampled household and each descendent household is reinterviewed at 4-month intervals for 12 interview or "waves." Unique codes are included on each record to allow linking together the same persons from the preceding and subsequent waves.

The SIPP's geographic coverage is the United States, and codes are included for 41 individual states and the District of Columbia although the sample was not designed to

produce State-representative estimates. Areas of the SIPP sample in nine other states are identified in groups for confidentiality reasons. The file identifies a subsample of metropolitan residents, along with codes for selected metropolitan statistical areas (MSAs) and consolidated metropolitan statistical areas (CMSAs).

The Survey of Income and Program Participation (SIPP) can shed light on living wage and marginal tax rate issues. The SIPP collects the source and amount of income, labor force information, program participation and eligibility data, and general demographic characteristics to measure the effectiveness of existing federal, state, and local programs. It samples the U.S. civilian noninstitutionalized population. The SIPP content is built around a "core" of labor force, program participation, and income questions designed to measure the economic situation of persons in the United States. It interviews households every four months, asks retrospective questions on a monthly basis, and follows households for up to 48 months. A new cohort is introduced each year, forming a new “panel.” In this study, the 1996 SIPP panel is used. The 1996 panel consisted of 40,000 households who were interviewed twelve times between April 1996 and March 2000.

From the 1996 panel, all "person-months" were obtained from all 12 waves. We then applied a number of screens. First, we defined the household head's age, MSA, and family structure in the December 1999 interview month. This is done because our analysis examines living wage changes in 1999, and the federal tax code defines a family unit as of December 31 of each year. One quarter of the SIPP sample had their last interview in November 1999, so the age, MSA, and family structure variables were taken from that month for them.

The sample initially consisted of 3,897,232 "person-months" on 44,047 households. We kept observations only from "living wage" MSAs (and our 'control' MSA). We therefore selected household heads who were initially living in Boston, Chicago, Detroit, Los Angeles, San Francisco, Baltimore, and New York City. We eliminated households that were not living in one of these MSAs as of December 1999, which reduces the sample to 3,851 households. Next, we kept households who had a head aged 15 to 64 (inclusive), which reduces the sample to 2,711 households (this screen largely eliminates households with elderly heads). Next, restricted the data to the calendar years 1996 to 1999, and kept observations on household head. The final sample consists of 129,791 “person-months” on 2,711 households.

Some of our tables divide the 2,711 households by the head’s (and spouse’s) hourly wage rate or hours of work. In our data, we imputed an hourly wage rate for each person as follows. For each calendar year, we aggregated earnings and hours from the month to annual level, and then divided annual earnings by annual hours.

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[1] See Shaviro (1999) at page 5.

[2] Ibid.

[3] This adjustment was made by multiplying the average marginal tax rate by 1.0765 (to change the earnings base) and subtracting 0.0765 (to remove the employer's share of payroll taxes). It was not necessary to adjust the estimated marginal tax rates in Acs et al.(1998) because they do not consider the employer's share of payroll taxes as part of the earnings base and do not count the employer tax in computing marginal tax rates. Tax incidence theory suggests that employees pay the employer's share of the tax, and therefore it should be included in gross income. However, when an employee's wage increases because of a wage mandate, it will generally not be possible for the employer to shift the employer's share of Social Security taxes to the employee by lowering his wage. While the employer may find other ways to adjust to the higher labor costs such as cutting employment and reducing hours, we are not considering such adjustments in this paper.

[4] Federal and state taxation rates, schedules, deductions, and credits were obtained from individual state and federal tax forms and instructions for 1999. For all federal and state tax calculations, standard deductions were used and included Child Tax Credits, Earned Income Credits (both federal and state where applicable) and Household Credits (as in the case of New York State where families can receive both credits from the state and New York City). Not included in calculations were deductions for Child and Dependent Care, which are separate from Child Tax Credits and are linked to expenditures on child or dependent care.

[5] The rules for TANF were obtained from state welfare offices and websites. The Food Stamp rules were taken chiefly from the USDA website http://www.fns.usda.gov/fsp/applicant_recipients/fs_Res_Ben_Elig.htm and 1999 benefit schedules and eligibility were obtained from http://www.dss.cahwnet.gov/getinfo/acl99/99-71.PDF . We assumed that the shelter allowance was equal to HUD's fair market rent for the applicable area for the minimum size suggested by HUD. By these standards a single adult would not need any more than a single room, and families with children would live in homes with one bedroom for every two children, and one bedroom for parents (see the *Housing Choice Voucher Program Guidebook* at http://www.hud.gov/offices/pih/programs/hcv/forms/guidebook.cfm). The fair market rents for Section 8 were obtained from Housing and Urban Development at http://www.huduser.org/datasets/il/fmr99/incfy1999.xls**.**

[6] We limit the sample to individuals who in 1999 earn between the maximum of the federal or state minimum wage and the living wage standard of $8.83, and we exclude persons who report public benefits (TANF, Food Stamps or Section 8 Housing Assistance) but who appear to be statutorily ineligible. These screens reduce the SIPP sample to 420 households.

[7] The wage of $8.83 is the median living wage standard from approximately 40 local jurisdictions that had passed such laws by the end of 1999. Our analysis will simulate the effect of a universal law that covers all workers within a particular MSA. This is a fair test of whether a living wage ordinance can affect poverty in a local area. The actual laws are generally thought to have too narrow coverage to have any significant effect on poverty. Moreover, examining a law based on universal coverage allows us to analyze effects for the cities in our sample that already had living wage laws in effect in 1999 (all but New York City) because our simulations greatly expand the coverage of such actual laws.

[8] As household gross earnings increases, CDI changes by the amount of the earnings increase less the amount of additional taxes and less the amount of transfers lost. The slope of the schedule is the marginal tax rate, and the average slope over a particular range of earnings is the average marginal tax rate.

[9] An affected worker is one whose reported wage was between the applicable state minimum wage and $8.83. An unaffected worker was one whose reported wage fell outside this range, or who reported no earnings.

[10] We used federal and state tax schedules for 1999, assuming that all filers took the standard deduction.. Married couples were assumed to file jointly. Unmarried household heads with children under 18 were assumed to file as heads of households. All others were assumed to file as singles.

[11] Ibid.

[12] Two of us have argued elsewhere that a locally administered EITC is a more efficient way to raise the incomes of the working poor than a wage mandate. See Richard S. Toikka and Andre R. Neveu. 2002. "A Local Earned Income Tax Credit: A Better Anti-Poverty Policy than Wage Mandates." 8(1) *The Georgetown Public Policy Review*, 29-49.

Figure 4-1: Change in Household Poverty Status Induced by Living Wage (Earnings Only)

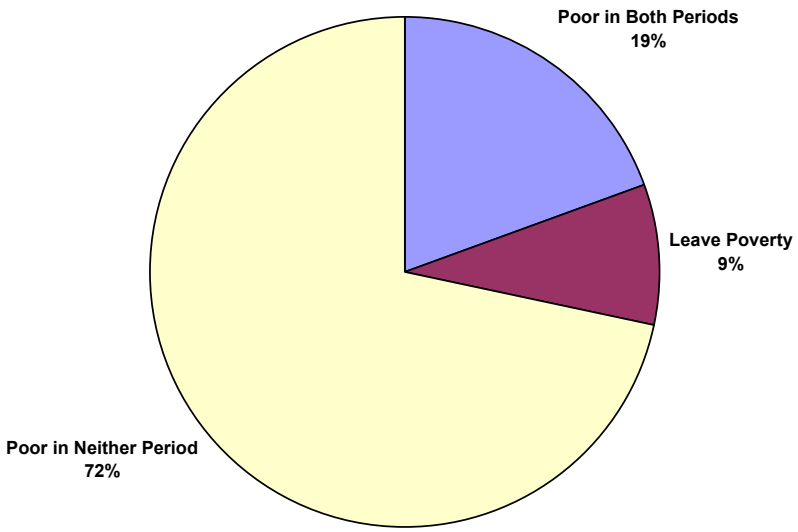

Figure 4-2: Fraction of Increased Wages Received by Household Poverty Status

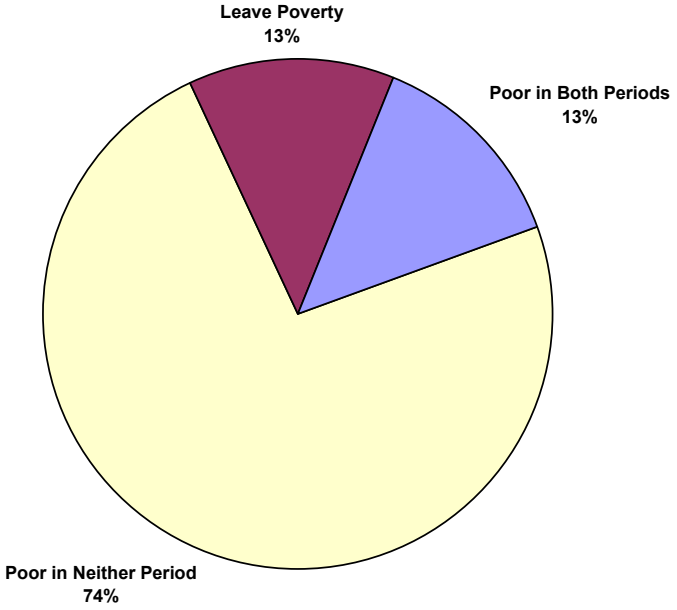

Table 2-1: Average Marginal Tax Rates
Income Increments Based On Multiples of the Minimum Wage

STUDY	MW to 150%MW	MW to 175%MW	150%MW to 200%MW
Giannarelli and Steurle (1995)	80%		80%
Acs et al. (1998)(w/o Housing Allowance)		79%	
Acs et al. (1998)(with Housing Allowance)		91%	
Shaviro (1999) (low TANF benefit, no Housing Allowance)	88%		71%
Shaviro (1999) (high TANF benefit, no Housing Allowance)	138%		71%
Shaviro (1999) (low TANF benefit, with Housing Allowance)	118%		101%
Shaviro (1999) (high TANF benefit, with Housing Allowance)	166%		101%

Giannarelli and Steurle (1995) used program and tax data for 1991. Their simulations were limited to families initially receiving benefits under Aid to Families with Dependent Children (AFDC). They examined interactions between AFDC, Supplemental Security Income (SSI), Food Stamps, Medicaid and Housing Subsidies based on a predicted participation function, and also included Social Security taxes and state and local income taxes (including EITC under projected 1996 rules). The program participation function was aligned such that the size and characteristics of each program's case load was similar to the actual program statistics. The simulation results shown are for all AFDC families.

Acs et al. (1998) used data from 12 states for 1997 for single parent families with two children. The authors' simulations included TANF, Housing assistance, Food Stamps, Social Security taxes, and state and local taxes (including EITC). They assumed that all eligible families participated in the specified transfer and tax subsidy programs.

Shaviro (1999) extended the Acs et al. analysis for 1998 and considered a few more public programs, including Medicaid, and state and local excise taxes. As with the Acs. et al. analysis, he assumed that all eligible families participate in the specified transfer and tax subsidy programs.

Table 2-2 : Average Marginal Tax Rates
Income Increments Based On Multiples of the Federal Poverty Level

STUDY	FPL to 150%FPL	FPL to 200%FPL	150%FPL to 200%FPL
Sammartino et al. (2002)	81%	55%	34%
Shaviro (1999) (low TANF benefit, no Housing Allowance)	99%		52%
Shaviro (1999) (high TANF benefit, no Housing Allowance)	99%		52%
Shaviro (1999) (low TANF benefit, with Housing Allowance)	129%		82%
Shaviro (1999) (high TANF benefit, with Housing Allowance)	129%		82%

Sammartino et al. (2002) document provisions of the tax code that are aimed at low-income families and trace their history and recent changes. They use a tax simulation model to examine how 1998 post-tax, post-transfer income changes as wages increase for two types of Pennsylvania families, a single parent with two children and a married couple with two children. The analysis considers only federal taxes (including EITC, Child Tax Credit, Child and Dependent Care Credit), TANF and Food Stamps.

Table 4-1: Summary Statistics across all MSAs, and over time

	All years	1996	1997	1998	1999
No welfare participation	0.790	0.794	0.785	0.790	0.790
Medicaid participation only	0.079	0.066	0.076	0.084	0.089
Medicaid, AFDC/TANF, Food Stamp participation	0.036	0.041	0.041	0.033	0.027
Medicaid and Food Stamp participation	0.022	0.025	0.024	0.019	0.021
Medicaid, AFDC/TANF, Food Stamp, and public housing participation	0.019	0.020	0.021	0.018	0.016
Medicaid and public housing participation	0.012	0.012	0.010	0.013	0.015
Medicaid, Food Stamp, and public housing participation	0.012	0.012	0.013	0.012	0.013
Food Stamp participation only	0.008	0.009	0.008	0.006	0.008
Medicaid and AFDC/TANF participation	0.008	0.009	0.008	0.010	0.007
All other combinations of welfare program participation	0.014	0.014	0.014	0.014	0.015
Head did not work	0.243	0.245	0.244	0.239	0.243
Head's hourly wage between $0 & $6	0.071	0.078	0.080	0.069	0.056
Head's hourly wage between $6 & $8	0.071	0.073	0.077	0.072	0.063
Head's hourly wage between $8 & $10	0.070	0.078	0.068	0.064	0.070
Head's hourly wage greater than $10	0.545	0.526	0.531	0.556	0.567
Head's annual hours of work between 1 and 1000	0.097	0.105	0.095	0.093	0.093
Head's annual hours of work between 1000 and 1500	0.086	0.091	0.076	0.085	0.091
Head's annual hours of work greater than 1500	0.818	0.804	0.829	0.822	0.816
No Spouse	0.393	0.397	0.395	0.392	0.389
Spouse did not work	0.182	0.175	0.179	0.189	0.184
Spouse's hourly wage between $0 & $6	0.050	0.055	0.057	0.049	0.038
Spouse's hourly wage between $6 & $8	0.044	0.052	0.045	0.040	0.037
Spouse's hourly wage between $8 & $10	0.046	0.046	0.043	0.047	0.047
Spouse's hourly wage greater than $10	0.286	0.274	0.281	0.284	0.304
Spouse's annual hours of work between 1 and 1000	0.144	0.173	0.140	0.134	0.130
Spouse's annual hours of work between 1000 and 1500	0.116	0.126	0.117	0.107	0.114
Spouse's annual hours of work greater than 1500	0.740	0.701	0.743	0.759	0.756
Household income less than 100% of poverty	0.096	0.107	0.096	0.091	0.090
Household income 100%-200% of poverty	0.134	0.139	0.148	0.132	0.119
Household income greater than 200% of poverty	0.770	0.754	0.756	0.777	0.791
Household married with children	0.439	0.447	0.442	0.437	0.432
Household single with children	0.171	0.162	0.169	0.173	0.180
Households without children	0.390	0.391	0.389	0.390	0.388
Number of observations	11007	2690	2751	2777	2789

Notes: Data taken from the 1996 SIPP. All data is unweighted. The welfare participation variables are aggregated from monthly to annual participation (meaning that a member of that household participated was in the program at some point during the year). The head's and spouse's hourly wage variable is constructed on an annual basis, and is based on SIPP questions referring to monthly gross wage and usual hours of work. The number of observations varies across year because some households that were formed in December 1999 (when the sample selection screens are applied) were not present in earlier years. Several households had unrelated families, and are treated as separate observations above.

Table 4-.2: Summary Statistics for poor & near poor households (under 200% of poverty line) for all years, and over time

	All years	1996	1997	1998	1999
No welfare participation	0.431	0.435	0.425	0.441	0.424
Medicaid participation only	0.140	0.121	0.128	0.142	0.172
Medicaid, AFDC/TANF, Food Stamp participation	0.133	0.144	0.149	0.126	0.111
Medicaid and Food Stamp participation	0.068	0.074	0.069	0.063	0.067
Medicaid, AFDC/TANF, Food Stamp, and public housing participation	0.077	0.077	0.083	0.074	0.074
Medicaid and public housing participation	0.042	0.039	0.037	0.044	0.050
Medicaid, Food Stamp, and public housing participation	0.047	0.045	0.045	0.048	0.050
Food Stamp participation only	0.014	0.018	0.015	0.011	0.012
Medicaid and AFDC/TANF participation	0.011	0.012	0.013	0.016	0.003
All other combinations of welfare program participation	0.036	0.035	0.036	0.034	0.038
Head did not work	0.449	0.453	0.455	0.446	0.443
Head's hourly wage between $0 & $6	0.199	0.213	0.204	0.204	0.172
Head's hourly wage between $6 & $8	0.152	0.159	0.149	0.150	0.151
Head's hourly wage between $8 & $10	0.092	0.082	0.085	0.092	0.110
Head's hourly wage greater than $10	0.108	0.094	0.107	0.108	0.125
Head's annual hours of work between 1 and 1000	0.246	0.283	0.255	0.220	0.224
Head's annual hours of work between 1000 and 1500	0.135	0.149	0.117	0.129	0.145
Head's annual hours of work greater than 1500	0.619	0.568	0.629	0.651	0.630
No Spouse	0.577	0.585	0.578	0.553	0.592
Spouse did not work	0.232	0.230	0.235	0.244	0.216
Spouse's hourly wage between $0 & $6	0.077	0.079	0.082	0.078	0.067
Spouse's hourly wage between $6 & $8	0.039	0.035	0.033	0.044	0.045
Spouse's hourly wage between $8 & $10	0.030	0.030	0.028	0.034	0.027
Spouse's hourly wage greater than $10	0.047	0.042	0.043	0.048	0.053
Spouse's annual hours of work between 1 and 1000	0.267	0.331	0.237	0.250	0.248
Spouse's annual hours of work between 1000 and 1500	0.155	0.177	0.145	0.121	0.179
Spouse's annual hours of work greater than 1500	0.578	0.492	0.618	0.629	0.573
Household income less than 100% of poverty	0.417	0.434	0.393	0.409	0.432
Household income 100%-200% of poverty	0.583	0.566	0.607	0.591	0.568
Household married with children	0.361	0.372	0.367	0.378	0.326
Household single with children	0.325	0.304	0.329	0.325	0.343
Households without children	0.314	0.325	0.304	0.297	0.331
Number of observations	2535	662	671	619	583

Table 4-3: Fraction of Affected Families Below Poverty Level and Low-Income Level

	All Affected Families
Under 100% of Poverty Line	
Earnings Only	28.2%
Earnings Only Plus Additional Living Wage Income	19.5%
Comprehensive Income	17.6%
Comprehensive Income Plus Additional Living Wage Income	11.2%
Under 200% of Poverty Line	
Earnings Only	58.7%
Earnings Only Plus Additional Living Wage Income	52.7%
Comprehensive Income	68.3%
Comprehensive Income Plus Additional Living Wage Income	61.5%

*Note: Poverty and Low-Income rates are calculated from the 420 affected families. Comprehensive income includes all taxes (federal, state, and FICA), as well as TANF benefits, food stamps, and Section 8 benefits. All benefits are considered to be

Table 4-4: Annual Earnings and Income Change by Category

	Median Earnings Level	Median Earnings Change	Median Comprehensive Income Level	Median Comprehensive Income Change	Median Marginal Tax Rate	Median Marginal Tax Rate at 100% Participation in Eligible Programs
All Families	$19,752	$2,143.40	$20,896	$1,376.93	30.2%	46%
Received No Welfare Benefit	$25,740	$2,273.72	$22,944	$1,625.10	29.6%	42%
Received Some Welfare Benefit	$8,851	$1,836.70	$17,647	$806.40	52.7%	80%
No Full-Time Employee	$11,925	$1,887.52	$17,079	$1,245.72	28.8%	60%
One Full-Time Employee	$33,529	$2,525.15	$28,141	$1,702.47	31.2%	40%
No Children	$16,806	$1,992.00	$13,780	$1,359.61	28.8%	44%
Children	$21,502	$2,170.20	$22,380	$1,411.98	31.7%	46%
Los Angeles	$17,790	$2,286.40	$18,908	$1,483.76	28.7%	48%
San Francisco	$22,550	$1,571.91	$24,517	$997.85	32.2%	53%
Chicago	$31,351	$2,589.40	$28,132	$1,768.30	25.7%	38%
Baltimore	$21,804	$3,348.80	$21,993	$3,296.12	30.1%	35%
Boston	$17,450	$1,880.40	$18,768	$1,244.87	28.7%	59%
Detroit	$32,200	$2,116.70	$26,765	$1,547.25	33.1%	38%
New York City	$17,645	$1,851.00	$20,712	$1,345.84	32.3%	49%

*Note: Median Marginal Tax Rate is not directly related to the adjacent columns. Marginal tax rates are calculated and then the medians are computed and reported here.

Table 4-5:Median Marginal Tax Rate on a Wage Increase to $8.83 per Hour

	All Affected Families	Average Fraction Receiving Welfare Benefits	All With Welfare Benefits	All Without Welfare Benefits	All With Children	All Without Children	All With One Full-Time	All Without One Full-Time
All Cities	30.2%	13.8%	52.7%	29.6%	31.7%	28.8%	31.2%	28.8%
Los Angeles	28.7%	13.5%	41.0%	28.7%	28.7%	26.7%	28.7%	26.5%
San Francisco	32.2%	25.3%	58.8%	27.4%	43.7%	26.9%	32.2%	31.3%
Chicago	25.7%	7.2%	52.4%	25.7%	25.7%	25.7%	25.7%	25.7%
Baltimore	30.1%	11.5%	35.1%	30.1%	30.1%	35.3%	30.1%	35.3%
Boston	28.7%	11.9%	55.3%	28.7%	29.0%	28.7%	28.7%	32.4%
Detroit	33.1%	19.3%	53.7%	27.0%	33.1%	30.0%	27.0%	34.7%
New York City	32.3%	14.5%	40.7%	32.3%	33.3%	30.2%	37.0%	30.2%

Table 4-6: Median Measure of Poverty Deprivation by Total Earnings Poverty Ratio for All Affected Families

	Earnings / Poverty Level	New Earnings / Poverty Level	Change	Comprehensive Income / Poverty Level	New Comprehensive Income / Poverty	Change
All Families	1.59	1.92	0.33	1.56	1.66	0.11
Received No Welfare Benefit	1.92	2.12	0.20	1.65	1.78	0.13
Received Some Welfare Benefit	0.61	0.85	0.24	1.27	1.33	0.06
No Full-Time Employee	0.99	1.21	0.22	1.21	1.33	0.12
One Full-Time Employee	2.11	2.43	0.32	1.77	2.02	0.25
No Children	1.80	2.12	0.32	1.56	1.70	0.15
Children	1.52	1.63	0.11	1.54	1.65	0.11
Los Angeles	1.28	1.58	0.30	1.33	1.47	0.14
San Francisco	1.96	2.12	0.16	1.82	1.91	0.10
Chicago	1.83	2.07	0.24	1.58	1.76	0.18
Baltimore	1.79	2.08	0.29	1.41	1.74	0.33
Boston	1.52	1.65	0.13	1.53	1.65	0.11
Detroit	2.27	2.63	0.36	1.90	2.16	0.26
New York City	1.51	1.89	0.38	1.59	1.66	0.07

Table 4-7: Poverty Gap for All Poor Families (100% of FPL)

	Average Annual Earnings	Average Total Income	Average Poverty Gap (Earnings)	Average Poverty Gap After Living Wage (Earnings)	Average Poverty Gap (Total Income)	Average Poverty Gap After Living Wage (Total Income)
All Families	$9,519	$14,030	$5,494	$3,751	$2,221	$1,466
Received No Welfare Benefit	$10,844	$12,565	$4,389	$2,715	$2,900	$1,857
Received Some Welfare Benefit	$7,150	$16,651	$7,471	$5,605	$1,007	$767
No Full-Time Employee	$7,670	$12,728	$6,526	$4,884	$2,794	$1,938
One Full-Time Employee	$14,965	$17,866	$2,456	$416	$534	$76
No Children	$5,728	$6,586	$3,081	$2,140	$2,400	$1,772
Children	$10,288	$15,539	$5,983	$4,078	$2,185	$1,404
Los Angeles	$8,566	$9,854	$2,751	$788	$1,463	$391
San Francisco	$10,276	$13,065	$3,228	$1,062	$1,421	$542
Chicago	$8,457	$13,072	$5,945	$4,158	$1,414	$581
Baltimore	$8,650	$13,976	$6,472	$4,636	$2,659	$1,852
Boston	$12,678	$13,907	$3,180	$1,932	$2,123	$1,437
Detroit	$5,914	$16,365	$8,890	$7,216	$1,032	$711
New York City	$9,681	$10,644	$3,586	$1,921	$2,881	$1,438

*Note: All observations considered here are in poverty before considering a living wage or other benefits.

Table 4-8: Low-Income Gap for All Low-Income Families (200% of FPL)

	Average Annual Earnings	Average Total Income	Average Low-Income Gap (Earnings)	Average Low-Income Gap After Living Wage (Earnings)	Average Low-Income Gap (Total Income)	Average Low-Income Gap After Living Wage (Total Income)
All Families	$14,433	$16,329	$13,766	$11,174	$1,074	$706
Received No Welfare Benefit	$16,062	$16,189	$12,308	$9,566	$1,169	$746
Received Some Welfare Benefit	$9,043	$16,792	$18,595	$16,496	$761	$574
No Full-Time Employee	$11,211	$14,331	$16,724	$14,414	$1,841	$1,272
One Full-Time Employee	$18,340	$18,752	$10,180	$7,245	$144	$21
No Children	$11,046	$10,113	$7,334	$5,051	$837	$605
Children	$15,498	$18,282	$15,787	$13,098	$1,149	$738
Los Angeles	$15,412	$17,007	$13,579	$11,152	$780	$530
San Francisco	$13,199	$17,938	$14,360	$12,075	$716	$344
Chicago	$16,503	$16,672	$13,466	$10,453	$1,621	$1,167
Baltimore	$13,416	$13,313	$10,527	$8,679	$754	$201
Boston	$15,623	$16,994	$10,864	$8,129	$462	$176
Detroit	$11,229	$13,663	$15,270	$13,107	$895	$365
New York City	$13,039	$15,673	$14,682	$12,016	$1,345	$937

*Note: All observations considered here are low-income (200% of poverty level) before considering a living wage or other benefits.