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# THE ALBUQUERQUE LIVING WAGE PROPOSAL: ROUGH ESTIMATES OF HOW WORKERS AND BUSINESSES WILL BE AFFECTED BY THE MEASURE 

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I am very grateful for the close collaboration of my colleague Dr. Jeannette Wicks-Lim on this study.

In October, 2005, citizens of Albuquerque, New Mexico will have the opportunity to vote on a proposal to raise the citywide minimum wage to $\$ 7.50$ per hour for businesses that employ 10 or more workers. This would represent a 46 percent increase over the current federal minimum wage of $\$ 5.15$ per hour, the minimum wage mandate that prevails in Albuquerque at present. The $\$ 5.15$ federal minimum has been in place since 1997. In addition, for tipped workers, the minimum wage would rise from its current federal level of $\$ 2.13$ to $\$ 4.50$.

The aim of this study is to provide a rough assessment of what the overall impact is likely to be were Albuquerque to proceed with this measure. This is not a full-scale, in depth study of the likely costs and benefits of this measure. Rather, this work draws on the extensive existing research on similar measures that have been proposed and passed into law throughout the United States over the past decade. This research includes several studies conducted by myself, most of these in conjunction with colleagues Mark Brenner, Stephanie Luce and Jeannette Wicks-Lim. Among these works is a 2004 study I wrote as a legal brief in consideration of the ordinance that is now law in Santa Fe, New Mexico. I also draw on the work of other researchers in developing the main perspectives and findings in this study. I provide a listing of these references at the end of this report.

This study does provide new evidence related to Albuquerque itself. This evidence relies entirely on publicly available data sources supplied by various branches of the United States government. These are the same statistical sources which serve as the foundation for most economic policy decisions at the federal, state, and local levels within the United States. I have made use of these data sources through statistical techniques that are virtually identical to those that my colleagues and I have utilized in our earlier studies, including that for Santa Fe in 2004. Detailed descriptions of those techniques are provided in the more extensive studies listed in the reference section, and through requests to me.

## Background on U.S. Living Wage Laws

Living wage proposals have passed into law in about 130 municipalities in the United States since the Baltimore City Council approved the first ordinance in 1995. In addition, statelevel minimum wage standards above the $\$ 5.15$ per hour federal minimum now operate in 16 states and the District of Columbia. But this is not the first living wage movement in the U.S. Indeed the initial establishment of minimum wage laws in the U.S.-first at the state level beginning with Massachusetts in 1912 then moving to the Federal level through various measures between 1933-36-was itself the culmination of an explicit "living wage" movement. One of the most influential works supporting the movement was a 1906 book by Monsignor John A. Ryan titled A Living Wage: Its Ethical and Economic Aspects. By the mid-1930s, President Franklin D. Roosevelt made his position on the issue clear, stating that "no business which depends for existence on paying less than living wages to its workers has any right to exist in this country."

The contemporary living wage movement began in Baltimore not through the work of political activists, academics, or unions-but rather because religious workers running homeless shelters and soup kitchens observed that increasing numbers of people with families and jobs were relying on their charitable services. If a worker with a job still needs to bring her/his family to a soup kitchen to get through the week, the message is clear: the wages that the worker is earning are not sufficient to maintain herself and her family at a minimally decent and dignified living standard.

Though the religious workers in Baltimore did not consult statistics to reach the conclusion that a renewed living wage movement was needed in the U.S., their observations were
consistent with clear evidence as to the declining fortunes of low-wage workers and, more generally, the sharply rising trend in wage and income inequality in the U.S. economy. Thus, as we can see in Figure 1, the real value of the national minimum wage as of 2004, at $\$ 5.15$ per hour, was 41 percent below its peak value in 1968 of $\$ 8.69$ (expressed in constant 2004 dollars; please also note that Figure 1 and all Tables to which I refer are found at the end of this document). This means that, outside of those exempt from minimum wage laws and after controlling for inflation, the lowest-paid legally employed workers in the United States in 1968 were earning $\$ 8.69$ an hour. In other words, even a teenager coming to work for his or her first day at McDonalds would legally earn no less than $\$ 8.69$ an hour in 1968. It is also important to recognize that average labor productivity in the U.S. has roughly doubled between 1968 - 2004. This means that if the real value of the national minimum wage had risen exactly in step with the rate of labor productivity growth-and no more than that-the minimum wage as of 2004 would be $\$ 17.38$.

Even more to the point, someone who works full-time for 52 weeks at the $\$ 5.15$ national minimum would earn $\$ 10,712$ over a year. This figure is 13.2 percent below the 2004 national poverty threshold for a family of two (1 adult, 1 child) of $\$ 12,335$, and a broad range of researchers consider such official poverty thresholds themselves to be between 25 and 50 percent too low (as I discuss more below).

Despite these trends, opponents of living wage ordinances argue that these measures will not benefit, but will actually hurt, the very low-wage workers and their families that the movement is trying to assist. In other words, according to opponents, the living wage movement is a classic case of the "law of unintended consequences" as it operates in economics-that is, well-meaning people ending up doing harm while seeking to do good, through their misapprehension as to how economic policy interventions play themselves out in actual market settings. Opponents point to two major unintended consequences of living wage ordinances that are relevant for the Albuquerque proposal:

1) They will cause a decline of job opportunities for low-wage workers and/or a displacement of currently employed workers by those possessing higher skills.
2) They will induce firms located in cities with living wage ordinances to relocate out of these areas, as a means of avoiding being covered by the mandates of the law.

These concerns that critics raise are very serious; indeed, they need to be examined especially hard by anyone who is favorably disposed toward the living wage idea. These are the issues on which I have focused my research since 1996. I would like to share some of my main findings as well as the results of other researchers as they apply to the situation in Albuquerque. I would first like to examine the question "who would benefit from the living wage ordinance?" I will then consider "who will bear the costs of the living wage ordinance?" In examining this second question, I will obviously need to focus on how businesses that presently employ lowwage workers are likely to adjust to the increased labor costs they will face.

## WHO ARE THE LOW WAGE WORKERS IN ALBUQUERQUE?

In Tables 1-4, I provide some basic evidence as to who are the low-wage workers in the Albuquerque metropolitan area. These figures cover workers in the Albuquerque Metropolitan Statistical Area (MSA) or within Bernalillo County (I specify whether data are drawn from the MSA or County pool). There are no publicly available data that are appropriate for this report
that are restricted to the City of Albuquerque itself. Of course, it would be preferable to have figures for workers only within the City of Albuquerque itself. Nevertheless, these figures for the MSA and Bernalillo County certainly provide a good first approximation as to the profile of the workers who will be covered by the proposed Albuquerque ordinance. I conclude this based on these observations:

1) 78 percent of employed workers residing in the Albuquerque MSA reside in Bernalillo County;
2) 88 percent of employees in Albuquerque MSA business establishments are employees of establishments located in Bernalillo County;
3) The average total payroll figure per employee are similar in the two major counties within the Albuquerque MSA, with the payroll per employees figure being $\$ 30 /$ hour in Bernalillo County and $\$ 33.50$ /hour in Sandoval County; and
4) 81 percent of the population of Bernalillo County is made up of residents of the City of Albuquerque.
5) 86 percent of employed workers residing in Bernalillo County are residents of the City of Albuquerque.

## Basic Demographics

To begin with, our rough estimate, as shown in Table 1 (again, found at the end of the document) is that a total of 24,196 workers would be covered by the Albuquerque living wage ordinance. This includes two categories of workers, those whose earnings are from wages only; and those who receive tips as at least 50 percent of their overall earnings:

1) Workers whose earnings are from wages only, and who now receive a wage between the current federal minimum of $\$ 5.15$ and the proposed Albuquerque minimum of $\$ 7.50$.
2) Workers who receive tips and who now earn in the wage component of their overall earnings between the current federal minimum of $\$ 2.13$ for tipped workers and the proposed Albuquerque minimum of $\$ 4.50$.

These workers constitute 11.8 percent of the working population in Albuquerque, with 11 percent being wages-only workers and 0.8 percent being tipped workers.

- The average age of these workers is 30.6 years, and their average estimated labor force tenure is 12.8 years. For the most part therefore, the jobs these workers hold now reflect their long-term occupational trajectory. They are not on a career ladder that will be moving them to a significantly better job situation.
- Nearly 27 percent of the workers in this wage range are teenagers. Another way to express this statistic is to say that 73 percent of those who would be covered by the living wage ordinance are adults. ${ }^{1}$
- $\quad$ These workers are predominantly non-white ( 59.5 percent of total), Hispanic (47.7 percent of total) and female ( 61.5 percent of total).


## Distribution of Covered Workers by Industry

Table 2 shows the distribution of affected workers by industry. As is generally the case throughout the U.S., the highest concentration of affected workers in Albuquerque work in restaurants and hotels, constituting roughly 40 percent of all the affected workers in the area. The next highest concentration is in retail trade, with roughly 21 percent of covered workers. The third-ranked industry in terms of proportion of affected workers is administrative support, waste management and remediation services, with 10.3 percent of all affected workers. This industry includes security guards, janitorial, call center, trash collection, and temporary services. The next largest is health care and social assistance with 9.3 percent. Together, these four industry areas account for roughly 80 percent of the workers who would be affected by the proposed Albuquerque ordinance.

## Family Structure and Income Levels

What is the family status of workers who would be affected by the living wage ordinance? Table 3 provides some evidence on this. Roughly speaking, the average low-wage worker in Albuquerque is living in a family with two other people, and there is one other person in the family holding a job. However, we also see that the low-wage worker in the family is the primary bread-winner, contributing 56.8 percent to the family's overall earnings. Low-wage families frequently do not live only off of their own earnings however. Families with working members can also get funds from alimony and child support payments, pensions and government programs such as unemployment insurance and workers' compensation. Thus, in the next row of the table, we also see how much of the total family income-including all sources in addition to wages-that the low-wage workers in our sample contribute through their wages. As we see, that figure is about 45 percent. That is, after taking account of all possible other sources of income, including the wages of other family members, pensions, and government supports, the workers earning below $\$ 7.50$ an hour in Albuquerque bring home a little less than half of what their family has to spend in a year.

Mean and median measures of family income. What is the income level of these families? We face some statistical difficulties in sorting this out, because we get a different picture when we observe mean and median figures. To illustrate the statistical problem, consider

[^0]the following example. Take five workers with the following amounts of income: $\$ 3,000$, $\$ 3,000, \$ 3,000, \$ 3,000, \$ 8,000$. We calculate the mean by adding up the total amount of income of the workers, which is $\$ 20,000$, and dividing by the number of workers, which is five. The mean income of these four workers is therefore $\$ 4,000$. We calculate the median by ranking the workers incomes in order from lowest to highest. The median income is the figure precisely in the middle of the rankings. This is $\$ 3,000$.

Which is the most accurate indicator of the reality we are trying to describe? Both the mean and median tell us something useful about the world. But the difference is that, with the mean, the one worker earning $\$ 8,000$ brings up the average substantially, and the resulting $\$ 4,000$ mean figure does not adequately capture the fact that most workers are earning $\$ 3,000$ and that no workers are actually earning $\$ 4,000$.

We see from Table 3 that the mean family income figures are much higher than the medians, with the median figure at $\$ 28,843$ and the mean at $\$ 44,692$-i.e. a difference of $\$ 15,849$. Despite these disparities, these figures tell us a couple of basic things. The first is that the highest concentration of low-wage workers in Albuquerque live in families whose income is in the range of $\$ 30,000$. The second is that there are a small number of low-wage workers who live in much better off circumstances, with family incomes in the $\$ 40,000-\$ 50,000$ range.

## Poverty and Basic Family Budget Living Standard Benchmarks

In Table 4, we obtain a further sense of the situation of the families in which low-wage workers live by comparing their incomes levels to some basic living standard benchmarksspecifically a poverty benchmark and a "basic family budget" benchmark. But for these benchmarks to be at all meaningful, we first need to briefly describe the ways in which they have been developed. Of course, the U.S. government has calculated for many decades its own measurements of a poverty benchmark for families of different types. But, as I have discussed in previous work, there are some serious problems with this standard. These problems have been widely recognized in the professional literature.

The basic concern with the official poverty line is that its methodology for measuring poverty has not been modified since the government first developed it in 1963, even though conditions facing the poor in the U.S. have changed substantially over the past 40 years.

When it was first developed, the government methodology began by determining the costs of families of various sizes subsisting on what the Department of Agriculture terms the "Economy Food Plan,"-which was the lowest cost bundle of food items available that could ensure each family member received the basic caloric minimum. Based on survey evidence from the time, the government's methodology then assumed that poor families spent approximately one-third of their budget on food. Thus, to generate the dollar figures for the poverty threshold, the government simply multiplied the dollar value of the "Economy Food Plan" by three. In subsequent years, upward adjustments to the poverty thresholds were made every year using the annual rate of inflation.

The fundamental problem with this methodology is its assumption that the costs for the poor of purchasing basic necessities are accurately reflected in this annual inflation adjustment. In fact, the costs of necessities for the poor-including medical treatment, childcare, transportation, and especially housing-have risen faster than the overall rate of inflation as measured by the Consumer Price Index that applies to all urban households. Indeed, a large research project sponsored by the National Research Council provided a range of alternative
methodologies that take account of the rising relative costs to the poor of non-food necessities. ${ }^{2}$ Of particular interest for our purposes, the NRC reported that in considering six alternative methodologies, the average value for the poverty threshold generated by these six alternative methodologies was 41.7 percent higher than the official poverty threshold. In addition, the official methodology for measuring poverty makes no adjustment for regional differences in the cost of living. We roughly estimate that the cost of living for working families in Albuquerque is about 2 percent higher than the national average. ${ }^{3}$

To obtain a better measure of poverty for Albuquerque, we can therefore simply sum the effects of these two weaknesses in the official poverty thresholds-that the studies reported by the NRC suggest an alternative poverty line in the range of 42 percent above the official line and that the cost of living in Albuquerque is 2 percent above the national average. Adding these two factors together would suggest that the appropriate poverty line for Albuquerque should be about 44 percent above the official line. We could therefore assume that an appropriate poverty threshold for Albuquerque is a bit less than 50 percent above the official poverty line. I therefore report a 150 percent of official poverty as a rough Albuquerque poverty line. I then also report "175 percent of official poverty" as a "near poor" standard. I do also report the official poverty threshold figures in Table 4, but consider this as properly measuring a "severe poverty" standard.

Finally, I report a "basic family budget" line. This concept draws on the work of numerous recent researchers, and is defined by Boushey, Brocht, Gundersen and Bernstein as providing "a realistic picture of how much income it takes for a safe and decent standard of living. ${ }^{4}$ Bouschey et al. have developed specific estimates of this concept for communities throughout the United States. For Albuquerque, they estimate the following as constituting a basic family budget for a family with one parent and two children: \$699/month for housing; $\$ 405 /$ month for food; $\$ 869 /$ month for childcare; $\$ 272 /$ month for transportation; $\$ 231 /$ month for health care; $\$ 298 /$ month for other necessities; and $\$ 179 /$ month for taxes. This amounts to a total of $\$ 2,953 /$ month, or roughly $\$ 35,000 /$ year. For the various family types that they consider for Albuquerque, they estimate basic family budgets as being between about $\$ 28,000$ (one parent, one child) and \$56,000 (two parents, three children). Drawing from their methodology, I then also estimate the percentage of families with low-wage workers that fall below the basic family budget threshold.

In Table 4, we now are able to get a sense of what types of workers, along with their families, would be affected by the living wage ordinance. As we see, 22 percent of the families with low-wage workers in Albuquerque now live below the official government poverty line, what I conclude, following the work of the National Research Council project, should properly be termed a "severe poverty" threshold. Moreover, still referring to the studies cited by the NRC, 39 percent of low-wage workers and their families live below what is a more reasonable poverty line and 46 percent are near poor. Finally, we see in Table 4 that 62 percent live below the basic family budget line.

## IMPACT OF ORDINANCE ON WORKERS AND BUSINESSES

[^1]I am able to provide a rough estimate of the amount of the wage increases for workers, and the corresponding costs for businesses of the proposed Albuquerque ordinance from publicly available data.

Average Wage Increase. In Table 5, we show the average wage increase for both the wages-only workers between $\$ 5.15$ - $\$ 7.50$ and the tipped workers.

Considering first the wages-only workers, we see that, at present, their average wage is $\$ 6.55$ per hour. This means that the average raise for these workers would be 95 cents per hour, to bring them up to the new mandated minimum of $\$ 7.50$. In addition, the average work week for these covered workers is 30.8 hours, and they work 41 weeks per year. This means that, if the average covered worker maintained her same number of overall hours worked over the course of a year after the living wage ordinance were passed, her total increase in total wage income over the year would be $\$ 1,200$.

With tipped workers, the average raise per hour would be higher. The average tipped worker now receives $\$ 2.65$ per hour. To bring these workers to the new hourly minimum of $\$ 4.50$ would therefore mean a raise of $\$ 1.85$ per hour. If these workers continued their current level of employment, of 27.3 hours per week, and 33.1 weeks per year, this would then mean an average raise of $\$ 1,672$.

Mandated Costs to Businesses. Based on the figures in Table 5, we are able to calculate the total mandated wage increases for all covered businesses, which we present in Table 6. As we see, total mandated costs would amount to $\$ 32.1$ million in wage increases, of which $\$ 29.8$ million would be raises and $\$ 2.6$ million would be the increase in payroll taxes faced by businesses corresponding to these wage increases.

Ripple Effect Wage Increases. "Ripple effects" refer to the non-mandated increases in wages and benefits above the living wage minimum that businesses provide to some of their workers after a living wage ordinance is implemented. Businesses provide these non-mandated raises to maintain some semblance of the wage hierarchy that prevailed prior to implementation of a new mandated minimum wage. But estimating ripple effects is necessarily more speculative than estimates for mandated raises, for precisely the reason that ripple effect raises are nonmandated.

With respect to the Albuquerque ordinance, there are two categories of likely recipients of such wage increases:

1. Employees who, prior to implementation of the Albuquerque living wage, were earning more than the Federal minimum wage of $\$ 5.15$ but less than the Albuquerque living wage of $\$ 7.50$. After the living wage ordinance is implemented, some of these employees will receive wage increases that put them above the Albuquerque living wage minimum.
2. Employees who are now earning more than the Albuquerque living wage of $\$ 7.50$ and who nevertheless receive a raise when the living wage policy becomes law.

The key question in determining the size of the ripple effect is to estimate how much of an increase in wage equality will occur in covered firms after the lowest paid workers receive their mandated raises. The term "wage compression" is frequently used to describe the condition of wages becoming more equal, either within a given firm or more broadly, including throughout the economy as a whole. Recent research on the ripple effects arising due to increases in the
federal minimum wage and state-wide minimum wages has found that the increases tend to diminish fairly rapidly at higher wage rates, which means that wages will become more equali.e. wage compression does indeed generally occur--within the affected firms.

For example, in studying the impact in Texas of the 1991 federal minimum wage increase from $\$ 3.80$ to $\$ 4.25$, Lawrence Katz and Alan Krueger (1992) found that, sorting restaurants according to their previous wage structure, only between 16-33 percent of the restaurants they sampled maintained the wage hierarchy under which they had operated prior to the minimum wage increase. The overwhelming majority allowed wage compression to occur as the lowest earners got mandated raises due to the new minimum. Among the restaurants with the lowest initial starting wages, only nine percent granted wage increases to workers earning $\$ 4.50$ or above prior to the minimum wage rise to $\$ 4.25$.

More recently, Jeannette Wicks-Lim has conducted an extensive analysis of the magnitude of the ripple effect based on increases in the federal and statewide minimum wages from 1983 to 2002. Wicks-Lim (2005) examined the impact of minimum wage changes across all employed workers. She found that ripple effects extended to workers earning up to around 35 percent above the minimum wage. These were workers in the bottom 15 percent in terms of their wage level. But Wicks-Lim also found that the size of the ripple effect dropped precipitously beyond the gains received by the lowest five percent category of wage earners. For example, a worker whose wages ranked them at the lowest $15^{\text {th }}$ percentile received, on average, a raise only about 20 percent as large as the raise received by workers who got the mandated minimum wage increase. Overall then, Wicks-Lim finds that the ripple effect is generally weak in terms of the amount of raises that are received by workers who are earning above the new minimum wage threshold.

Based on these and similar findings, my colleagues and I have developed some techniques for roughly estimating the size of the ripple effect based on the level of the mandated wage increase in different cities and states. In the technique we applied in Santa Fe (and described at length in the Santa Fe study), we estimated that the total ripple effect costs would amount to roughly 20 percent of the total costs for businesses of the living wage ordinance there, with the mandated cost increases therefore accounting for about 80 percent of the total costs. In my judgment, assuming this type of rough cost breakdown-i.e. 80 percent mandated costs and 20 percent ripple effect costs-is a reasonable rule-of-thumb estimate for the purposes of discussion here. As such, in Table 6, I present a rough estimate of the total costs of the Albuquerque ordinance, including mandated and ripple effect wage increases as well as the corresponding rise in payroll taxes. As the table shows, the total cost increases for business due to the living wage ordinance is likely to be on the order of $\$ 40$ million.

I should add that allowing for ripple effect wage increases also expands the total number of workers who receive raises from the minimum wage increase-including now both those receiving mandated increases and ripple effect increases. Because I have not conducted a full study of the Albuquerque proposal, in particular, as regarding ripple effects, I can’t give a firm estimate as to the likely number of workers who would receive ripple effect increases. But working from our findings in Santa Fe , I would state, as a first rough approximation, that the number of workers getting at least some ripple effect raise is on the order of 80 percent of the people getting mandated raises. Given our estimate that about 24,000 workers are likely to receive mandated raises, this means that another 19,000 would receive some ripple effect raise. This then would bring the total number of workers likely to receive raises from the Albuquerque ordinance at around 43,000 .

## Total Costs Relative to Sales of Albuquerque Firms

In Table 7, we present data showing the estimated total cost increase of $\$ 40$ million broken down as a proportion of the total sales of the covered Albuquerque firms. In the first row, we show the average cost/sales ratio for all industries in our sample. ${ }^{5}$ As we see, this overall cost/sales ratio is 0.19 percent. In other words, roughly speaking, the average firm in Albuquerque would have to increase its sales revenue by only about $1 / 5$ of one percent in order to fully cover the additional costs resulting from the minimum wage proposal.

This is a crucial initial finding in evaluating the impact that the $\$ 7.50$ minimum wage proposal is likely to have on business firms in Albuquerque. However we still need to consider this cost increase/sales ratio in more specific terms, especially as it varies on an industry-byindustry basis, before we can reasonably consider how firms are likely to adjust to the cost increases they will face.

In the remaining rows of Table 7, I therefore examine the ratio of minimum wage costs/sales of the minimum wage proposal, broken down on an industry-by-industry basis. The industrial groupings in the table are based on the Department of Commerce's North American Industrial Classification System (NAICS) coding system. The table lists the industrial groups according to their minimum wage cost/sales ratio, starting with industries with the highest ratios. We present figures for the 10 industries with the highest cost increase/sales ratios. The table also shows again the size of each of these 10 industries in terms of their percentage of affected workers.

As the table shows, the "accommodation and food services"-including hotels, restaurants, bars, cafes, and caterers-has the highest cost increase among all industries in the city. We estimate the cost increase for accommodations and restaurants to be 2.1 percent. This is more than 10 times greater than the 0.19 percent average for all industries. At the same time, this cost increase is still modest and is therefore not likely to represent a significant burden for the state's restaurants and hotels (a subject we consider more below).

As the table also shows, the accommodation and foodservices industry is the only one in the state that will experience a cost increase significantly more than one percent as a result of raising the city's minimum wage to $\$ 7.50$. The industry with the second highest ratio is administrative and support and waste management and remediation services. This ratio is 1.1 percent. This industry, again, includes security guard, janitorial, call center, trash collection and temporary services.

The accommodation and foodservices industry-i.e. restaurants and hotels-are clearly of major significance here. Not only will the restaurants and hotels experience the largest cost increases, but, as we have seen, roughly 40 percent of all workers receiving raises in Albuquerque will be employed in this industry.

[^2]
## HOW WILL THE COSTS OF THE LIVING WAGE ORDINANCE BE BORNE?

Businesses will certainly make adjustments to their higher labor costs, but laying off workers or relocating are not the only adjustments they can make. In fact, there are five basic ways that firms can adjust to the higher costs associated with a living wage ordinance. Layoffs or relocation are only two of the five options. The other three are: 1) raising prices; 2) improving productivity; and 3) redistributing income within the firm through reducing profit margins or reducing the differences between the wages of the firms' lowest and highest paid employees.

There is, moreover, an important difference for the firms between adjusting through price and productivity increases or income redistribution rather than through layoffs and relocations. It is that adjustments through price, productivity, and income redistribution-if they can be managed-are less costly to the firms than adjusting through layoffs or relocations. Layoffs mean reducing the scale of operation of a business. Relocations are simply not a feasible option for most service sector businesses, such as hotels, restaurants, hospitals, educational institutions, theatres, art museums, and the businesses that feed off of these institutions. Let me raise a few points about each of these various possibilities.

Price. If firms can pass along all of their increased labor costs to consumers in the form of price increases, they will be able to maintain their current profit margins without having to make any further adjustments in their operations. The relevant question, of course, is how high would prices have to go to cover the increased costs of Albuquerque's ordinance? We obtained a rough sense of this from the cost/sales ratios we present above. From these figures, it follows that for the average firm in Albuquerque, it would need to raise its price by 0.19 percent, while maintaining the identical level of demand from their customers, in order to fully cover the costs of the ordinance. Thinking about, say, a hardware store which experiences a cost increase relative to sales from the living wage ordinance equal to the citywide average, a price adjustment would entail that instead of a hammer costing $\$ 15$ before the living wage law were implemented, its price would have to rise to $\$ 15.03$.

Of course, these price increases would have to be higher in the industries facing higher relative cost increases, in particular hotels and restaurants. But even in these industries, a price increase on the order of two percent would still fully cover the costs of paying workers the $\$ 7.50$ living wage minimum. For example, for the average restaurant, increasing the price of a $\$ 10$ meal to $\$ 10.20$ would fully cover the costs of the ordinance for the restaurant owner. Similarly, the room rate on a $\$ 100$ hotel room would have to rise to $\$ 102$ to fully compensate the hotel owner for their higher labor costs.

The general issue with hotels and restaurants is clear: if you were willing to pay $\$ 10$ for a meal at a Albuquerque restaurant, would you stop going to the restaurant if the price of the meal rose to $\$ 10.20$ ? Keep in mind that, in general, this price increase would not apply to one restaurant only in Albuquerque, but to all its competitors as well. Or if a tourist was willing to pay $\$ 100$ for a Albuquerque hotel room, would they choose not to come to Albuquerque if the room cost $\$ 102$ ? The evidence I have examined in other studies leads me to conclude that that price increases of this amount in response to raising the minimum wage floor will not produce a discernable drop in demand for the hotels and restaurants. At the same time, these price increases would, in most cases, fully cover the increased costs of a living wage ordinance of the type being considered by Albuquerque.

Productivity. If affected businesses are able to cover most, if not all, of their increased costs through raising prices, there wouldn't need to be any improvements in productivity to
prevent a reduction in business profits. However, it is almost certainly the case that businesses will see productivity improve through raising wages of the lowest-paid workers. As a result of the Albuquerque living wage ordinance, productivity should, first of all, improve through reductions in job turnover and absenteeism, which then allow firms to spend less money on replacing and supervising workers. Firms should also benefit through a general increase in morale that will come from the low-wage workers earning a living wage. Of course, the rise in productivity will not fully compensate firms for the increase in their labor costs. If the rise in productivity did more than compensate businesses for the increased labor costs, then all of the businesses would voluntarily pay living wages without regard to whether a law mandated them to do so. The point is that, in most business settings, the rise in productivity can serve to at least partially offset the rise in costs, as a compliment and subsidiary to the rise in prices.

Income redistribution within firm. Of course, business owners don't want to cut into their profits. Higher-paid workers also don't want to see their own incomes cut so that the lowest-paid workers can get raises. Again, the main point here is that, if firms can absorb most, if not all, of their increased costs through raising prices and productivity, there would not have to be any redistribution within firms in order for the higher costs of a living wage ordinance to be fully absorbed. At the same time, it is worth remembering that income distribution in the U.S. has become increasingly skewed over the past generation. For example, according to Business Week magazine and the Bureau of Labor Statistics, the average CEO in the U.S. earned 54 times more than the average worker in 1987. But as of 2001, the average CEO earned 449 times more than the average worker.

Obviously, these comparisons between CEOs and average workers don't apply to every business in Albuquerque. Still, along with the sharp decline we discussed above for the minimum wage since 1968 and similar trends for average wages, this ratio between our economy's best compensated managers and the wages of the average worker at least indicate that room exists in the economy for a more equitable income distribution. It is also the case that this shift in income distribution would not have to entail that higher compensated people would actually experience a pay cut to allow for the wage gains of low-wage workers. It would more likely entail that the wage increases of the highest paid workers would grow at a slightly lower pace for a year or two to allow for the lowest paid workers to obtain living wage increases.

Employment losses. Again, firms will not need to lay off any workers in the face of living wage cost increases if they are able to absorb their increased costs through price and productivity increases or small changes in the firms' distribution of income. This dynamic was crucial to the important results by Profs. David Card of UC Berkeley and Alan Krueger of Princeton in their path-breaking book examining the employment effects of raising the state-wide minimum wages in New Jersey, Myth and Measurement: The New Economics of the Minimum Wage. Card and Krueger found that the New Jersey fast-food outlets that they surveyed were able to raise their prices by about the same amount as their total costs were increased, which amounted to about 3.4 percent. It is therefore not surprising that the firms Card and Krueger studied did not lay off their workers to any statistically discernable extent. This basic finding has been reaffirmed through many subsequent studies examining the impact of both minimum wage laws and living wage ordinances.

Relocation. Would firms move out of Albuquerque to escape the living wage mandate? As a first consideration, it is important to emphasize that most service sector firms-such as the hotels and restaurants-cannot move. What about other types of service-sector firms, such as those providing janitorial services? In this case, the business address need not remain within Albuquerque proper. But if the employees of the firm were still working within Albuquerque, for
example cleaning offices or museums within the city, the firms would still have to pay the living wage, and would still therefore have no incentive to relocate.

There are only a relatively small proportion of firms in Albuquerque or most other large U.S. cities for which the benefits of relocation are likely to exceed its costs. These would have to meet two criteria: 1) Their business is not tied to their location; and 2) They would be experiencing large cost increases as a result of the living wage ordinance. In my study with Stephanie Luce and Mark Brenner of New Orleans businesses, we found that the number of firms that fit these criteria amounted to less than one percent of the roughly 12,400 firms located within the city limits. There is no reason to expect the incentives to relocate would be stronger among Albuquerque businesses.

These considerations would also apply to firms considering relocating into Albuquerque. Virtually all the firms that might consider locating within Albuquerque would be one of two types: 1) a major part of their operations would need to take place within the city itself, or 2) the costs they would face by locating inside Albuquerque would be negligible. Again there will be a very small percentage of firms for which locating within the city proper isn't necessary to their operations, or that would face much higher overall costs by operating within the city. These firms are likely to be discouraged from locating within Albuquerque because of the living wage ordinance. But again, the number of such firms is likely to be very small. Indeed, their numbers are likely to be significantly less than the number of firms operating in lower-income neighborhoods-or contemplating opening in these neighborhoods-that will benefit from the fact that the working people living in the neighborhoods will have more money to spend.

Labor Substitution. Even if Albuquerque firms neither relocated nor reduced their number of employees at all in response to the living wage ordinance, a negative unintended consequence of the measure could still result through labor substitution-i.e. businesses replacing their existing minimum wage employees with workers having better skills or credentials. Because the firms in Albuquerque would pay more than what workers could get for comparable positions outside the city limits, the job openings in Albuquerque would likely attract workers with somewhat better credentials, on average, than those in the region's general labor pool.

How significant is this effect likely to be? We examined this question in both our New Orleans and Santa Monica studies. Our approach was to first examine differences in personal characteristics between those who fell within the wage range close to the pre-living wage minimum and those who would fall within the newly mandated living wage minimum. In the case of Albuquerque, for example, this would entail comparing the personal characteristics of workers close to the existing $\$ 5.15$ minimum relative to workers earning close to the proposed $\$ 7.50$ living wage minimum. In general, we did find that the pool of workers within the higher wage range had somewhat different characteristics. In particular, those in the higher wage category tended to be somewhat older; a higher proportion of them had high school degrees; and a somewhat lower proportion were ethnic minorities. If the living wage ordinance were to be implemented, the pool of workers seeking low-wage jobs within the city would tend to reflect differences in characteristics as well. In short, in short, some labor substitution is likely to occur.

But the most pertinent question is not whether any labor substitution will occur, but how large this effect is likely to be. From our analysis, we conclude that the effect will be modest. In fact, through comparing data on personal characteristics of workers within different wage ranges, we are actually establishing an upper limit as to the likely degree of labor substitution. This is because, by comparing figures on personal characteristics, we are effectively asking whether, if firms in Albuquerque covered by the living wage ordinance were newly hiring their entire low-
wage work force, and if they were advertising their job openings at a wage rate in the range of $\$ 7.50$ rather than $\$ 5.15$, how would the profile change of the newly hired workers?

Having thus defined the upper limit of labor substitution effects through these figures, the next step is to recognize why any actual labor substitution effects are likely to be far more modest. This is first of all because, in reality, businesses are unlikely to newly hire their entire workforce after a living wage law was enacted, nor would they want to do so. Rather, workers earning the higher minimum will be less inclined to leave their jobs, and their work effort should correspondingly rise. By the same token, businesses are not likely to terminate their existing workers, even if they have relatively poor formal credentials, as long as their performance is satisfactory. For most of the jobs that would be covered by the Albuquerque ordinance-e.g. janitors, nurse's aids, gardeners, parking lot attendants, elevator operators, hotel maids, restaurant dishwashers, and retail cashiers-the qualities that would distinguish one worker from another will not likely be based primarily on formal qualifications such as years of schooling. Hiring "better workers" would rather most likely entail hiring people who work harder and are more conscientious in their duties.

As such, again, I would still expect some labor substitution to occur after the living wage ordinance was implemented. However, the size of this substitution is likely to be modest.

## CONCLUSION

My conclusions with respect to labor substitution effects are reflective of my overall evaluation of the evidence concerning negative unintended consequences, including layoffs and relocations. One certainly has to face head on these issues in any serious assessment of living wage ordinances. But when the impact of living wage ordinances on most affected businesses firms is modest, such that they could fully absorb their higher costs through raising prices by about $1 / 5$ of one percent on average, the likely adjustments firms will make will be of a comparably modest magnitude. Moreover, as we discussed, even in cases where cost increases are relatively large, as would be true with the hotels and restaurants in Albuquerque, the price increases one would need to absorb the higher wage costs are in the range of two percent-that is, again, a dinner for $\$ 10.20$ instead of $\$ 10$. Such price increases are not likely to significantly discourage business at Albuquerque restaurants and hotels, especially, again, since all of the firms will face comparable cost increases and will likely try to raise prices to a similar extent.

Overall then, raising prices and productivity by a relatively small amount are likely to be the predominant means through which most affected firms will absorb their increased costs. In such cases, the gains of living wage ordinances to low-wage workers and their families will be larger than the costs of the ordinance that would be borne by either businesses or the consumers facing small price increases. To put this another way: a well-designed living wage ordinance has the characteristic that its benefits will be concentrated among low-wage workers and their families while the costs can be broadly diffused among the affected firms and their consumers.

Of course, the benefits of a living wage standard in Albuquerque can't be fully captured by the types of statistical evidence that I have presented here. As Monsignor John Ryan recognized a century ago, paying workers a living wage is fundamentally a matter of human dignity and fairness. But for those of us that seek to increase fairness and raise the dignity of low-wage workers in our economy, it is our obligation to be as confident as possible that the means we employ will actually made a positive contribution toward the goal we desire.

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Table 1. Basic Demographics of Low-Wage Workers
in Albuquerque, 2004

|  | Categories of Affected Workers |  |  |
| :--- | :---: | :---: | :---: |
|  | All |  | Tipped <br> Workers, |
|  | Affected <br> Workers | $\$ 5.15-$ <br> $\mathbf{\$ 7 . 4 9}$ | $\$ 2.13-$ <br> $\$ 4.49$ |
| Number of Workers | 24,196 | 22,609 | 1,587 |
| Percentage of Workforce | $12.2 \%$ | $11.4 \%$ | $0.8 \%$ |
| Average Age | 30.6 | 31.1 | 24.2 |
| Labor Force Tenure (years) | 12.8 | 13.3 | 5.6 |
| Percentage Teenagers (15-19) | $26.7 \%$ | $26.9 \%$ | $24.6 \%$ |
| Percentage Non-White (including |  |  |  |
| Hispanic) | $59.5 \%$ | $60.8 \%$ | $40.4 \%$ |
| Percentage Hispanic | $47.7 \%$ | $48.5 \%$ | $36.0 \%$ |
| Percentage Female | $61.5 \%$ | $61.3 \%$ | $64.5 \%$ |

Sources: Current Population Survey ORG (2000-2004), County Business Patterns (2003), and American Community Survey (2004)
Notes: Tipped workers include only hotel and restaurant workers. Workforce only includes employed workers with positive wage data. Figures for number of workers affected are for the city of Albuquerque. The number of affected workers is generated by estimating the number of affected workers in Bernalillo County and multiplying this by the proportion of employed workers residing in Bernalillo County who reside in the city of Albuquerque (86\%) based on the American Community Survey (2004). Demographic figures are for workers in the Albuquerque Metropolitan Statistical Area (MSA).

Table 2. Distribution by Industry of Affected Low-Wage Workers in Albuquerque, 2004

| Industry | \% of Affected <br> Workers |
| :--- | :---: |
| Accommodation \& food services | $39.6 \%$ |
| Retail trade | $20.8 \%$ |
| Admin, support, waste mgt, remediation services | $10.3 \%$ |
| Health care and social assistance | $9.3 \%$ |
| Arts, entertainment \& recreation | $4.8 \%$ |
| Other services (except public administration) | $3.2 \%$ |
| Manufacturing | $2.7 \%$ |
| Construction | $2.2 \%$ |
| Information | $1.1 \%$ |
| Finance \& insurance | $1.1 \%$ |
| Management of companies \& enterprises | $1.0 \%$ |
| Educational services | $1.0 \%$ |
| Transportation \& warehousing | $0.8 \%$ |
| Professional, scientific \& technical services | $0.7 \%$ |
| Real estate \& rental \& leasing | $0.6 \%$ |
| Wholesale trade | $0.6 \%$ |
| Utilities | $0.1 \%$ |
| Forestry, fishing, hunting, and agriculture support | $0.0 \%$ |
| Mining | $0.0 \%$ |
| Sorces |  |

Sources: County Business Patterns (2003), Current Population Survey ORG (2003-2004).
Note: Figures are for Bernalillo County. Low-wage workers include workers earning at least $\$ 5.15$ and less than $\$ 7.50$ per hour and hotel and restaurant workers earning at least $\$ 2.13$ and less than $\$ 4.50$ per hour, employed at establishments with more than 10 employees.

## Table 3. Family Structures and Incomes of

## Low-Wage Workers in Albuquerque, 2004

| Average Family Size | 2.8 |
| :--- | :---: |
| Average Number of Wage Earners per Family | 1.9 |
| Average Percentage of Total Family Earnings <br> Contributed by Worker | $56.8 \%$ |
| Average Percentage of Total Family Income <br> Contributed by Worker | $44.6 \%$ |
| Total Family Income | $\$ 28,843$ |
| Median | $\$ 44,692$ |
| Mean |  |

Source: Current Population Survey Annual Social and Economic Supplement (2001-2005)
Notes: Figures are for Albuquerque MSA. Low-wage workers include workers earning at least $\$ 5.15$ and less than $\$ 7.50$ per hour and hotel and restaurant workers earning at least $\$ 2.13$ and less than $\$ 4.50$ per hour. Sample restricted to workers whose main employer had more than 10 employees.

Table 4. Poverty Status of Low-Wage Workers in Albuquerque, 2004

| Families in Severe Poverty | $22.0 \%$ |
| :--- | :---: |
| (Below Official Poverty Line) |  |
|  |  |
| Families in Poverty |  |
| (Below 150\% of Official Poverty Line) |  |
|  |  |
| Families in Near Poverty |  |
| (Below 175\% of Official Poverty Line) |  |
|  |  |
| Below Basic Needs Threshold |  | | Source: Current Population Survey Annual Social and Economic Supplement (2001-2005) |
| :--- |
| Notes: Figures are for Albuquerque MSA. Low-wage workers include workers earning at least \$5.15 and |
| less than \$7.50 per hour and hotel and restaurant workers earning at least $\$ 2.13$ and less than \$4.50 per |
| hour. Sample restricted to workers whose main employer had more than 10 employees. The sample for the |
| Basic Needs Threshold is limited to workers in families with one or two adults, and one to three children |
| under age 12. |

Table 5. Number of Workers Receiving Mandated Wage Increases and Average Wage Increases

|  | Categories of Affected Workers |  |
| :--- | :---: | :---: |
|  | $\mathbf{\$ 5 . 1 5 - \mathbf { \$ 7 . 4 9 }}$ | Tipped Workers, <br> $\mathbf{\$ 2 . 1 3 - \$ 4 . 4 9}$ |
| Number of Workers | 22,609 | 1,587 |
| Average Wage | $\$ 6.55$ | $\$ 2.65$ |
| Average Raise | $\$ 0.95$ | $\$ 1.85$ |
| Average Hours | 30.8 | 27.3 |
| Average Weeks Worked | 41.0 | 33.1 |
| Average Yearly Wage Increase | $\$ 1,200$ | $\$ 1,672$ |
|  |  | $\$ 2.7$ |
| Total Wage Increases (in millions) | $\$ 27.1$ | $\$ 2$ |

Sources: Current Population Survey ORG (2000-2004), Current Population Survey Annual Social and Economic Supplement (2001-2005), County Business Patterns (2003), and American Community Survey (2004)

Notes: Tipped workers include only hotel and restaurant workers. Figures for number of workers affected are for the city of Albuquerque (see notes to table 1). Remaining figures are for workers in the Albuquerque Metropolitan Statistical Area (MSA).

Table 6. Total Mandated and Ripple Effect Costs to Firms of Albuquerque Living Wage Proposal

| Mandated Costs (in millions): |  |
| :--- | :---: |
| Total Wage Increase | $\$ 29.8$ |
| Percentage of total increase | $74.3 \%$ |
| Payroll Taxes | $\$ 2.3$ |
| Percentage of total increase | $5.7 \%$ |
| Total Mandated Cost | $\$ 32.1$ |
| Percentage of total increase | $80.0 \%$ |
|  |  |
| Ripple Costs (in millions): | $\$ 7.5$ |
| Total ripple effect increase | $18.6 \%$ |
| Percentage of total increase | $\$ 0.6$ |
| Payroll taxes on ripple effect | $1.4 \%$ |
| Percentage of total increase | $\$ 8.0$ |
| Total ripple effect cost | $20.0 \%$ |
| Percentage of total increase | $\$ 40.1$ |
|  |  |
| Total Cost: |  |

Source: Author’s calculation.

## Table 7. Total Costs of Albuquerque Living Wage Proposal Relative to Firm Sales

|  | Total Cost <br> Increase/ <br> Total Sales | Pct. Of Total <br> Affected <br> Workers |
| :--- | ---: | ---: |
| All Industries | $\mathbf{0 . 1 9 \%}$ | --- |
|  |  |  |
| Accommodation \& food services | $2.08 \%$ | $39.6 \%$ |
| Admin, support, waste mgt, remediation services | $1.06 \%$ | $10.3 \%$ |
| Other services (except public administration) | $0.45 \%$ | $3.2 \%$ |
| Arts, entertainment \& recreation | $0.37 \%$ | $4.8 \%$ |
| Health care and social assistance | $0.25 \%$ | $9.3 \%$ |
| Educational services | $0.22 \%$ | $1.0 \%$ |
| Retail trade | $0.13 \%$ | $20.8 \%$ |
| Real estate \& rental \& leasing | $0.08 \%$ | $0.6 \%$ |
| Transportation \& warehousing | $0.07 \%$ | $0.8 \%$ |
| Construction | $0.05 \%$ | $2.2 \%$ |

Sources: County Business Patterns (2003), Current Population Survey ORG (2003-2004), and Annual Social and Economic Supplement (2003-2005)
Notes: Four two-digit NAICS industries were excluded in the all industries calculations: Mining, utilities, finance and insurance, and management of companies and enterprises. The first two were excluded because reliable estimates of hourly wage and hours could not be produced based on the CPS-ORG data. The last two were excluded because the Economic Census does not provide total sales aggregated at these 2-digit industries for the state, MSA, or county level.


[^0]:    ${ }^{1}$ There is another significant dimension to the incomes brought home by teenagers, which is, how much do the teenagers contribute to their family's overall living standard? Are they mostly middle-class kids buying IPods, clothes and car accessories? Or are they contributing significantly to meeting their family's basic needs? I have not had time to examine this with respect to Albuquerque. But my colleagues and I did study this question in some detail when we wrote our study on Santa Monica, CA. We found that the family incomes of the teenager workers was about 38 percent above the average-in other words, that the families that included the teenage workers were better off than the average family but not dramatically so. Moreover, the contribution of the teenagers to the family's overall income was playing an important role in bringing the overall income to the higher level.

[^1]:    ${ }^{2}$ Constance F. Citro and Robert T. Michael, eds. 1995, Measuring Poverty: A New Approach, Washington, DC: National Academy Press.
    ${ }^{3}$ This is derived from the ACCRA Cost of Living Index for Albuquerque. I discuss the application of the ACCRA index to lower-income families in Pollin and Brenner (2000), pp. 138-140.
    ${ }^{4}$ Heather Boushey, Chauna Brocht, Bethney Gundersen, and Jared Bernstein, Hardship in America: The Real Story of Working Families, Washington, DC: Economic Policy Institute, 2001.

[^2]:    ${ }^{5}$ For this calculation, we were not able to generate sales figures for four two-digit NAICS industries in Albuquerque: mining; utilities; finance and insurance, and management of companies and enterprises. Our "all industries" figure is therefore exclusive of these four industries. From past studies, however, I anticipate that the cost/sales ratio in all these cases would be below the average for the city as a whole. As such, the 0.19 percent figure we report would in all likelihood be lower still if we were able to include these industries.

