

## The Economic Benefits of Immigrant Authorization in California

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CSII

CENTER FOR THE STUDY OF  
IMMIGRANT INTEGRATION



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## EXECUTIVE SUMMARY

This report provides estimates of the economic benefits that would accrue to California and the nation through authorization of the currently unauthorized workforce. We find that undocumented status not only penalizes workers, but also has significant social and economic implications. Legalization of undocumented workers would result in a multitude of immediate and long-term benefits for the state, nation, and society overall. Specifically:

- There are nearly 1.2 million children of unauthorized Latinos in California. They comprise approximately 13 percent of all children, making them an integral part of the state's vitality and future economy.
- The wages earned by California's unauthorized Latino immigrant workers are substantially lower than those of workers with similar human capital characteristics and in similar jobs (9.5 percent lower for full-time workers and 4.2 percent for part-time workers).
- Unauthorized Latino immigrants in California thus missed out on approximately \$2.2 billion in wages and salary income last year alone due solely to their legal status, and the state lost out on the multiplied impacts of that potential income and spending, suggesting a total potential gain of \$3.25 billion annually from authorization.
- The loss in wages not only impacts the consumption and spending power of unauthorized immigrant workers and the state, but also represents a loss in income and sales taxes that local, state, and federal governments are unable to capture – including \$310 million in income taxes for the state and \$1.4 billion for the federal government last year.
- If granted legal status, California's unauthorized immigrants could strengthen our national social safety net, bolstering Social Security and Medicare taxes by an additional \$2.2 billion annually.
- Assuming that newly authorized workers improve education levels and English skills, as happened in previous reforms, wages would rise another \$8.6 billion; along with initial increases from authorization and the multiplier impacts, this would be a total gain for California of \$16 billion annually.

## INTRODUCTION

In this brief, we ask a simple question: what could authorization of undocumented immigrants in California do for the wages of currently unauthorized workers, and what are the economic benefits that would accrue to the state and society as a whole?

Much of the debate over amnesty or “authorization” of immigrants in the U.S. tends to center around the net economic costs and benefits to the nation. A full answer to this question depends on the specifics of any immigration reform legislation; unknown factors such as which and how many public benefits would be available to newly documented individuals and families, whether health care reform would promote the private purchase of health insurance by immigrants, and whether or not driver licenses would be an option are all important to crunching the numbers on the exact costs and savings of reform.

Our analysis takes a more limited approach: we focus instead on generating some reasonable measurements of the economic benefits that would accrue to California and the nation through authorization of the currently unauthorized workforce in the state. For methodological reasons involving the surveys used to generate our estimation procedures, we restrict our attention to unauthorized Latino adults in California.<sup>1</sup> While we would ideally include all unauthorized workers

<sup>1</sup> The methodological challenge is that information about legal status is not available in standard public surveys and the method we employ for estimating who is residing illegally was originally developed using a survey of Mexican immigrants only; while the general characteristics of other Latino immigrants in California are similar enough to those of Mexican immigrants in California to apply the same predictive equation, the same cannot necessarily be said for those arriving from other countries.

– the omission of Asians is a shortcoming of particular note for a California analysis – a focus on Latinos in California does make some sense: the state is home to nearly a quarter of all of the nation’s unauthorized immigrants, and the vast majority are working-age Latinos.<sup>2</sup>

To estimate the contributions of unauthorized Latino adults and the economic benefits of their authorization, we rely on recent data from the American Community Survey (ACS), pooling surveys from the years 2005 through 2007 to enhance the reliability of our figures.<sup>3</sup> Drawing on the work of Enrico Marcelli,<sup>4</sup> we use a predictive model to estimate who is and who is not an unauthorized Latino immigrant, and develop a multivariate wage regression to approximate the “wage penalty” that can be attributed to legal status alone for working-age unauthorized Latinos. A multivariate regression is a tool used to evaluate many factors together in order to separate their different relationships with a single measure of interest. In this case, we are interested in isolating the independent effect of legal status on wages. Because differences in wages between unauthorized immigrant workers and authorized immigrant workers could be due to a variety of factors (e.g., differences in education levels, work experience, English language ability), a regression is needed to effectively hold all of these factors constant.

It is commonly understood that unauthorized workers earn lower wages than authorized workers for the same work, and here we estimate the annual aggregate dollar amount of this wage penalty. Our estimates suggest an hourly wage penalty of about 9.5 percent for full-time unauthorized workers and 4.2 percent for part-time unauthorized workers, which is in effect a subsidy to low-wage employers. Without it, household incomes of unauthorized workers would rise, spurring consumption, investment, and contributions to the state, local, and national economy.<sup>5</sup>

We also estimate how authorization and its immediate wage effects might improve tax collection. Of course, the net fiscal costs of reform depend on what additional benefits are extended or not to the newly authorized, as well as the extent to which the income increases we project change benefit eligibility. We suspect that any authorization program will not extend benefits rapidly and that many fiscal costs associated with the unauthorized and their families – public education, police protection, and emergency health services – will have cross-cutting pressures (e.g., if more immigrants can access private health insurance, they may have less emergency room visits). On the other hand, insuring successful integration could raise costs for English classes and adult education, all likely to benefit immigrant productivity and the California economy. Because the net fiscal impacts are so uncertain and deserve a separate accounting, we maintain, as noted above, a more limited focus in this brief on the impacts of authorization on the overall economy.

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<sup>2</sup> See Public Policy Institute of California (PPIC), *Illegal Immigrants: Just the Facts*, (Public Policy Institute of California, June 2008). [http://www.ppic.org/content/pubs/jtf/JTF\\_IllegalImmigrantsJTF.pdf](http://www.ppic.org/content/pubs/jtf/JTF_IllegalImmigrantsJTF.pdf)

<sup>3</sup> Given the three-year period over which data was drawn for the analysis, the estimated economic benefits of authorization represent a long-term perspective (i.e., not taking into account the current recession and assuming that in the future the economy will recover to a sustainable trajectory).

<sup>4</sup> For a recent description of the estimating approach, see Enrico Marcelli and B. Lindsay Lowell, “Transnational Twist: Pecuniary Remittances and Socioeconomic Integration among Authorized and Unauthorized Mexican Immigrants in Los Angeles County,” *International Migration Review*, 39(1): 69-102, (2005).

<sup>5</sup> See the appendix for a more detailed discussion of the data and methods used to produce the estimates reported in this brief.

## FINDINGS

### ***Unauthorized Latinos are already an integral part of the California economy, and their children are important for the future of the economy. Authorization would increase self-employment and thereby create jobs.***

- There are more than 1.8 million unauthorized Latino adults in the state.
  - They represent 7 percent of the state's total population and are about two-thirds of the state's undocumented population.<sup>6</sup>
  - Nearly all (about 99 percent) are working-age, between the ages of 18 and 64.
  - Approximately 59 percent of undocumented working-age Latinos are male and 41 percent are female.
  - Nearly 70 percent are employed, with males more likely to be employed and females being less likely to be employed than the overall working-age population.
    - 86.2 percent of undocumented Latino working-age males are employed (as compared to 77.6 percent of all working-age males).
    - 43.7 percent of undocumented Latina working-age females are employed (as compared to 62.9 percent of all working-age females).

#### Unauthorized Latino workers are an integral part of several major industries and occupations

In terms of industries, unauthorized Latino workers account for:

- 39% of the agricultural industry
- 20% of the construction industry
- 15% of the arts, entertainment, recreation, & food services industry
- 11% of the repair and personal services industry
- 11% of the manufacturing industry

In terms of occupations, unauthorized Latino workers account for:

- 49% of farming, fishing, & forestry workers
- 26% of building maintenance and groundskeeping workers
- 24% of construction workers
- 20% of food preparation and serving workers
- 16% of production workers

<sup>6</sup> There were an estimated 2.7 million total unauthorized immigrants in California in 2008, of which, according to our estimates, unauthorized Latino adults make up 67 percent; the share that unauthorized Latinos of all ages account for is significantly higher. See Pew Hispanic Center, A Portrait of Unauthorized Immigrants in the United States (Pew Hispanic Institute, April 2009). <http://pewhispanic.org/reports/report.php?ReportID=107>

Unauthorized Latinos are already an integral part of the California economy, and their children are important for the future of the economy.



Photo by Jennifer Tran.

78% of children of unauthorized Latinos in California are U.S.-born.

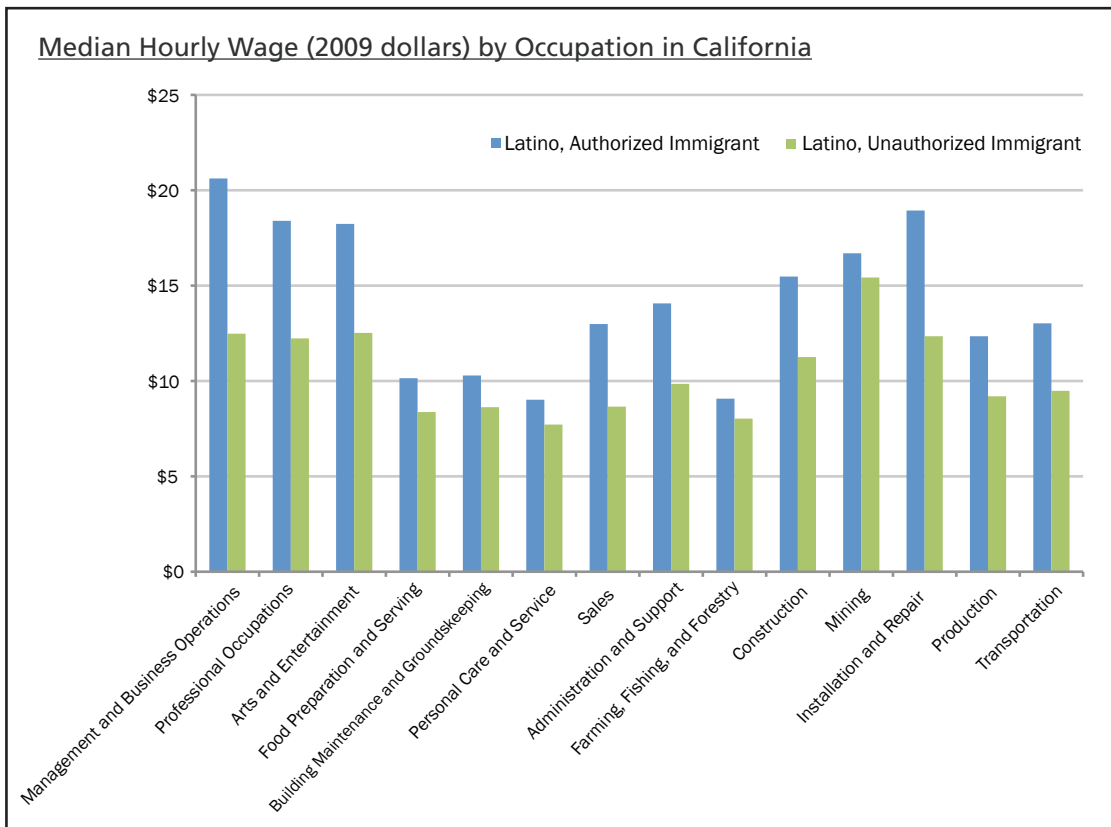
- Authorized Latino immigrants have a self-employment rate for the working-age population that is about the same as the rate for all native-born workers (nearly 10 percent), but the rate for unauthorized Latinos is much lower (6 percent).
  - If unauthorized self-employment rates eventually reached 10 percent, it could add up to 68,500 jobs to the state economy.<sup>7</sup>
- There are nearly 1.2 million children of unauthorized Latinos in the state.
  - They are about 13 percent of all children, making them an important part of the future economy.
  - About 78 percent are U.S.-born citizens and are a permanent part of California society.

<sup>7</sup> The figure of 68,500 assumes that each newly self-employed worker either went from not being employed to being self-employed, or, if they were previously already employed, that their vacated job was filled by someone else. It was calculated for the working-age population (18-64) by applying the rate of self-employment for authorized Latinos to unauthorized Latinos to get the number that would be self-employed if they had the same rate, and then subtracting the number that were actually self-employed.



***The wages earned by unauthorized Latino immigrant workers are substantially lower than authorized workers with similar human capital characteristics and in similar jobs. Authorization would increase the already substantial spending power and consumption of unauthorized Latinos, and the effects would ripple throughout the state and local economy.***

- The chart below illustrates the differences between the wages of authorized Latino immigrants and unauthorized Latino immigrants.
  - Across all occupations, unauthorized Latino immigrants make between \$1.04 (in Farming, Fishing, and Forestry occupations) and \$8.14 (in Management and Business Operations) less per hour than authorized Latino immigrants.
  - Much of these differences in wages by occupation are attributable to variation in skills, education, or other measures of “human capital” – but a substantial portion is due to legal status.
  - If authorized, the additional wages of unauthorized Latino workers would stimulate the economy by increasing consumer spending and inducing job creation in other local industries.



**Unauthorized Latino immigrants missed out on approximately \$2.2 billion in wages and salary income last year due to their legal status alone. Breaking down the legal barrier for undocumented workers would result in immediate economic gains and long-term benefits for society.**

Authorization of California's unauthorized Latino workforce would lift 44,000 children out of poverty.

Photo by Jennifer Renteria.



- Unauthorized Latinos working full-time experienced on average a 9.5 percent wage penalty from 2005 through 2007, as compared to authorized Latino immigrant workers with similar characteristics.
- In aggregate, unauthorized Latino workers earned \$27.4 billion per year, but would have received \$29.6 billion had it not been for the wage penalty – a significant difference of \$2.2 billion.
- This potential rise in income would spur direct consumption spending by about \$1.75 billion dollars per year, which would ripple throughout the state economy, generating an additional \$1.5 billion in indirect local spending. Such an increase in direct and indirect consumer spending of about \$3.25 billion would generate over 25,000 additional jobs in the state.<sup>8</sup>
- We estimate that by increasing the wages of undocumented Latino workers in California, the state would effectively lower the poverty rate for the families of unauthorized Latino workers from 25.1 percent to 22.7 percent and the child poverty rate for this group from 32.1 percent to 29.1 percent.

<sup>8</sup> Due to the lack of a California-specific marginal propensity to consume for unauthorized Latinos and multiplier of consumption, our estimates of increased spending here are extrapolated from a Chicago-based study [see Chirag Mehta, et al., *Chicago's Undocumented Immigrants: An Analysis of Wages, Working Conditions, and Economic Contributions* (Center for Urban Economic Development, University of Illinois at Chicago, February 2002)]. In particular, we used information reported in Table 16 and footnote 15 to obtain the marginal propensity to consume for undocumented Latino workers (or the share of income that goes toward consumption) and multiplied that by our estimate of increased earnings due to authorization to get the increase in direct spending, and then estimated indirect and total spending by applying the multiplier of consumption that is implied by the figures reported in the last paragraph of page 34 of the aforementioned study. The number of new jobs was figured by dividing the \$3.25 billion in new spending by GDP per job for California in 2008, with information on GDP and total employment (all industries) in the state coming from the Bureau of Economic Analysis and the California Employment Development Department, respectively.



- The decline in the child poverty rate translates to approximately 44,000 fewer children in California living in poverty. While this has immediate benefits for society, there are also longer-term benefits on the horizon. Lifting children out of poverty has the potential to improve their life outcomes; research has shown that the adverse effects of growing up in poverty follow children into adulthood, impacting their educational, health, and emotional and behavioral outcomes.<sup>9</sup>

***The benefits of legalization are not simply limited to wages. A change in legal status would also improve education access and English language acquisition opportunities for unauthorized workers.***

- A study of undocumented immigrants who gained legal status under the 1986 Immigration Reform and Control Act (IRCA), the United States' last legalization program, found that 58% of "IRCA immigrants" in 2006 had attained a high school degree or better, compared to 30% in 1990.<sup>10</sup> We estimate that if the average level of educational attainment for undocumented workers increased to that of a GED, the result would be an additional \$4 billion increase in wage income each year.
- Furthermore, legalization opens up the possibility for English language acquisition. Under IRCA, applicants were required to complete an English course and a civics course. Those who participated were able to build their "human capital," and as a result, increased access to job opportunities with greater mobility and higher wages.<sup>11</sup>
- Our estimates suggest that the ability to speak English fluently would increase an unauthorized worker's earnings

<sup>9</sup> See Harry Holzer, et al., *The Economic Costs of Poverty* (Center for American Progress, January 2007). [http://www.americanprogress.org/issues/2007/01/pdf/poverty\\_report.pdf](http://www.americanprogress.org/issues/2007/01/pdf/poverty_report.pdf)

<sup>10</sup> See Rob Paral & Associates, *Economic Progress via Legalization; Lessons from the Last Legalization Program* (Immigration Policy Center, November 2009). <http://www.ilw.com/articles/2009,1116-paral.pdf>

<sup>11</sup> See Deborah A. Cobb-Clark, et al., *The Effects of Employer Sanctions and Legalization on Wages* (Journal of Labor Economics, vol. 13, No. 3, July 1995), pp. 472-498.

Photo by AntyDiluvian.



Legalization would provide opportunities for workers to build their "human capital."

California would benefit from an additional \$384.4 million in income and sales tax revenue.

Photo by Dayna Bateman.



on average by 18 percent, resulting in an aggregate of \$4.6 billion each year.

- All together, gains from increased levels of educational attainment to a GED and English fluency would result in an additional \$8.6 billion in wage income. The multiplied impact of this on the California economy in direct and indirect spending would be about \$12.7 billion. Combined with the immediate effects, this would be a \$16 billion boost to California annually.

***The loss in wages not only impacts the consumption and spending power of working unauthorized immigrants, but it also represents a loss in income and sales taxes that local, state, and federal governments are unable to capture.***

- In the short term, if unauthorized Latino workers were granted legal status, the state government would benefit from a gross increase of \$310 million in income taxes and the federal government would gain \$1.4 billion in paid income taxes each year.
- This is not to say that they don't pay already: our estimates suggest that \$280 million in state and \$1.4 billion in federal income taxes are already being paid each year by California's unauthorized Latinos.
- Furthermore, local and state governments would stand to benefit from gains in sales tax revenue. Not taking into account the potential multiplier effects, an increase in wages for unauthorized workers would generate at least an additional \$74.4 million in annual sales tax revenue.
- A full fiscal accounting would depend on the provisions of reform. Insuring successful integration and enhancing immigrant productivity could involve higher expenses for English classes and adult education. On the other hand, it seems likely that access to benefits for the newly authorized would be delayed, and many of the services currently received by families with unauthorized household heads – education, police protection, and emergency health services – would not change substantially.

- If California were, as projected, able to collect \$310 million in income taxes and \$74.4 million in sales tax revenue, the state could use the combined \$384.4 million towards closing the state and local budget gaps. For example, \$384.4 million could have prevented cuts from several of the state's important social safety net programs:<sup>12</sup>
  - Maternal, Child and Adolescent Health (program cut by \$7 million)
  - Community Clinic Programs (program cut by \$35 million)
  - Healthy Families (program cut by \$179 million)
  - Mental Health-Community Mental Services (program cut by \$164 million)

### ***Granting legal status for unauthorized immigrants would strengthen our national social safety net.***

- The Social Security Administration estimates that in recent years, unauthorized immigrants have contributed about \$6-7 billion in Social Security tax revenue and \$1.5 billion in Medicare taxes on an annual basis.<sup>13</sup>
- In California, our estimates suggest that unauthorized Latinos contribute \$2.4 billion in combined Social Security and Medicare taxes each year.
- We estimate that, if authorized, the California unauthorized Latino immigrant population would strengthen the Social Security and Medicare system by an additional \$2.2 billion annually.
  - This includes \$237 million from an increase in wages resulting from legal status, and \$2 billion from more workers and employers paying Social Security and Medicare taxes.

## **CONCLUSION**

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In summary, our analysis finds that authorization would lead to an increase in earnings for currently unauthorized workers and their families, which would in turn have a variety of significant short- and long-term positive effects on the local, state, and national economy. While our focus has been on the more immediate benefits of authorization, the long-term gains would be much larger. Although immigration reform is indeed a matter of federal policy, it is imperative that our state legislators engage in discussions of comprehensive immigration reform; as home to the largest population of unauthorized immigrants in the country, California may have the most to gain from authorization, and it also has the most to lose should unauthorized immigrants remain in the shadows of society. These are our friends and neighbors, and their children are our future.

<sup>12</sup> See The California Budget Project, *Governor Signs Budget* (California Budget Project, August 2009) [http://www.cbp.org/documents/090727\\_Governor\\_Signs\\_Budget.pdf](http://www.cbp.org/documents/090727_Governor_Signs_Budget.pdf) and the California Legislative Analyst's Office, *State Budget Summary 2009-2010* (California Legislative Analyst's Office, July 2009) [http://www.lao.ca.gov/2009/bud/july\\_09\\_budget\\_package/July\\_2009\\_Budget\\_Package\\_072909.pdf](http://www.lao.ca.gov/2009/bud/july_09_budget_package/July_2009_Budget_Package_072909.pdf)

<sup>13</sup> See Eduardo Porter, "Illegal Immigrants are Bolstering Social Security with Billions," (New York Times, April 2005). [http://www.nytimes.com/2005/04/05/business/05immigration.html?\\_r=1](http://www.nytimes.com/2005/04/05/business/05immigration.html?_r=1)

## APPENDIX: DATA AND METHODOLOGY

The focus of this brief is on the economic benefits that would come from legalization of the currently unauthorized Latino adults in California. All calculations were made by the Center for the Study of Immigrant Integration (CSII) at the University of Southern California, using the IPUMS American Community Survey (ACS), pooled over the years 2005 through 2007.<sup>14</sup> We restrict our focus to working-age unauthorized Latino immigrants between the ages of 18 and 64 (inclusive), which make up the vast majority of all unauthorized Latino immigrants and the unauthorized Latino workforce in the state, who would likely see an immediate economic benefit if given legal status. We use the term “unauthorized Latino adults” to refer to all persons at least 18 years old of Latino origin living in California and determined to be unauthorized (or residing illegally) using the estimation technique described below.<sup>15</sup>

### *Estimates of Unauthorized Latino Adults*

To estimate which respondents in the survey were unauthorized Latino adults, we utilized a technique originally developed by Enrico Marcelli of San Diego State University and David Heer of the University of Southern California. The method relies on state-of-the-art random surveys that were personally administered by co-ethnics in order to collect information on which variables are most highly associated with being an unauthorized immigrant. These were transformed into an estimating equation (provided by Dr. Marcelli),<sup>16</sup> which was then applied to the ACS to get estimates of which respondents were unauthorized Latino adults. We give special thanks and acknowledgement to Dr. Marcelli for sharing his work with us; the results of his initial estimating equation are indeed the basis of all estimates we produce here.

Taking these initial estimates of who was an unauthorized Latino adult in our sample as a given, we assumed that the unauthorized were on average undercounted by 10 percent in the ACS and adjusted the weights accordingly.<sup>17</sup> The result yielded an estimated 1,829,948 as the average total number of undocumented Latino adults ages 18 to 64 over the 2005 through 2007 period, which is very close to other estimates that rely on different data and different methodologies.<sup>18</sup>

<sup>14</sup> Steven Ruggles, Matthew Sobek, Trent Alexander, Catherine A. Fitch, Ronald Goeken, Patricia Kelly Hall, Miriam King, and Chad Ronnander. Integrated Public Use Microdata Series: Version 4.0 [Machine-readable database]. Minneapolis, MN: Minnesota Population Center [producer and distributor], 2009.

<sup>15</sup> The term “undocumented” is used interchangeably with “unauthorized.”

<sup>16</sup> For a recent description of the estimating approach, see Enrico Marcelli and B. Lindsay Lowell, “Transnational Twist: Pecuniary Remittances and Socioeconomic Integration among Authorized and Unauthorized Mexican Immigrants in Los Angeles County,” *International Migration Review*, 39(1): 69-102, (2005).

<sup>17</sup> This strategy is consistent with other work estimating the undocumented using the Current Population Survey. See Katrina Fortuny, Randy Capps, and Jeffrey S. Passel, *The Characteristics of Unauthorized Immigrants in California, Los Angeles County, and the United States*, (Washington, DC: The Urban Institute, March 2007).

<sup>18</sup> For example, drawing on information reported in Table 8 and Table 9 of Fortuny et al. (2007), and assuming that the age distribution of unauthorized Latinos is the same as that for other unauthorized immigrants, we infer an estimate of 1,635,220 unauthorized Latino adults (18-64) in 2004, which is very close the 1,695,742 we get if we consider our annual estimates and apply the growth rate from 2005-2006 backwards to get an estimate for 2004.

## **Modeling the Wage Penalty**

Key to most of the figures reported in this brief is the estimated “wage penalty” for unauthorized Latino adults due solely to legal status. In essence, we sought to isolate the wage difference associated exclusively with authorization, and we used this difference to calculate the total wage, salary, and self-employment income that would be gained if such a wage difference did not exist (i.e., if all unauthorized Latino adults in California were given legal status). To do so, we developed a wage regression that modeled the natural log of wages on a comprehensive set of socio-demographic and human capital characteristics, using a sample that included all people ages 18 to 64 who had worked during the year prior to the survey.<sup>19</sup> These explanatory variables included measures such as sex; work experience; educational attainment; English language ability; and controls for industry, occupation and self-employment; as well as dummy variables for four major regions in the state. In addition to such typical measures, we also included two less traditional measures that are telling of a workers’ wage prospects: a dummy variable for whether the respondent was employed at the time of the survey – an indication of job stability – and a dummy variable for living in group quarters (typically prisons, military barracks or other institutions) – an indication of either criminal status or membership in the armed forces. We then added a dummy variable for unauthorized Latino adults and interpreted its coefficient as capturing the more or less “pure” impact on wages, or wage penalty, for being an unauthorized Latino adult.

Because Latinos have lower wages on average than non-Latinos, and Latino immigrants (authorized and unauthorized) have even lower average wages than other Latinos, two more control variables were necessary: a Latino dummy variable and a foreign-born (or immigrant) dummy variable had to be included on the right-hand-side of the regression in order to allow the coefficient of the unauthorized Latino adult dummy variable to capture the *additional* wage penalty for being unauthorized – above and beyond the wage penalty for being Latino and immigrant. It was necessary to specify the model in this way because of the narrow focus on the wage impact associated with legal status alone for unauthorized Latinos. In other words, if authorized, we would not expect the wages of currently unauthorized Latinos to rise to heights of those of U.S. workers overall, but only as high as those of authorized Latino immigrants with similar human capital characteristics, whose wages are significantly lower.<sup>20</sup> Thus, our model provides a realistic and conservative estimate of how much wages would increase on average for currently unauthorized Latino adults if given legal status.

Finally, because wages are generally lower for part-time workers as compared to full-time workers, the estimated wage penalty for unauthorized Latino immigrants as compared to authorized Latino

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<sup>19</sup> Wages were determined by summing up wage, salary and self-employment income from the 12 months prior to the survey for each worker and dividing by the implied total hours worked during that period (weeks worked times usual hours worked per week). All figures were adjusted for inflation to 2007 US dollars using the California CPI for all urban consumers from the California Department of Finance. To prevent outlying imputed wages from skewing our regression estimates, we excluded the highest and lowest one percent of cases from the regression.

<sup>20</sup> To further illustrate this point, the results of our wage equation for full-time workers suggests that, holding other factors constant, the average wages of Latinos are about 8.2 percent lower than those of non-Latinos, and the wages of immigrants are about 6.2 percent lower than those of non-immigrants. Thus, the wage penalty for a Latino immigrant in California is about 14.4 percent (8.2 percent + 6.2 percent) and this is increased by an additional 9.5 percent for unauthorized Latino immigrant adults, bringing the total wage penalty to about 23.9 percent. Thus, the 9.5 percent wage penalty is what we estimate to be due purely to legal status; if authorized we would expect wages to rise about 9.5 percent but still be about 14.4 percent below those of U.S.-born, non-Latinos with similar human capital characteristics.

immigrants and other groups was hypothesized to be lower as well. This turned out to be that case, and we therefore estimated the above model separately for full-time and part-time workers (with full-time defined as those who usually worked at least 35 hours per week and worked at least 50 weeks during the year prior to the survey). Under these models, the estimated wage penalty was 9.5 percent for full-time workers and 4.2 percent for part-time workers.<sup>21</sup> These estimates are very close to the middle range of estimates of the effects experienced by beneficiaries of IRCA.<sup>22</sup> The estimates were applied separately to each group to calculate the increase in wage, salary, and self-employment income that would result if given legal status, and summed to get the total. All dollar amounts reported are adjusted to 2009 U.S. dollars.<sup>23</sup> Similarly, estimates of the increase in income expected due to improvements in education levels and English language ability were made by applying the respective regression coefficients to the difference between the indicated improved level and the average level for unauthorized Latino immigrants in the regression sample.

### **Tax Estimates**

Using reported income for respondents in the ACS that were determined to be unauthorized Latino adults and the projected increases in earned income that would be expected to result from authorization from above, we estimated total federal and state income taxes, Social Security and Medicare contributions, and state and local sales taxes currently being paid by unauthorized Latino adults, and the amount that each of these sources of public revenue would be expected to increase under authorization.

For federal and state income taxes, we used family characteristics available in the ACS, including marital status and the number of qualifying children, to assign all unauthorized Latino adults to a tax filing status. Everyone who was married and whose spouse lived in the same household were assigned a filing status of “married filing jointly,” all of those who were single without children (or married but with their spouse not living in the same household) were assigned a filing status of “single,” and all of those falling in the latter category but with one or more “qualifying children” in the household were assigned a filing status of “head of household.”<sup>24</sup> Taxable income was derived by subtracting the standard deduction for each filing status, as well as any dependent exemption amounts for qualifying children from total income (adjusted to 2009 dollars) or combined income

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<sup>21</sup> In both models, all of the key explanatory variables were highly significant. The model for full-time workers had an adjusted r-squared of 0.45 with 282,982 observations while the part-time model had an adjusted r-squared of 0.31 with 210,893 observations.

<sup>22</sup> See discussion of the literature on pg. 8 of: Raul Hinojosa-Ojeda, *Raising the Floor for American Workers; The Economic Benefits of Comprehensive Immigration Reform* (Center for American Progress, January 2010).

<sup>23</sup> The Census measures of income we use are typically significantly lower than income measures generated by the Bureau of Economic Analysis (BEA) whose estimates more closely approximate gross domestic product (GDP). The differences are technical (see, for example, John Ruser, Adrienne Pilot and Charles Nelson, *Alternative Measures of Household Income: BEA Personal Income, CPS Money Income, and Beyond*, (Federal Economic Statistics Advisory Committee, December 2004), available at: <http://www.bea.gov/about/pdf/AlternativeMeasuresHHIncomeFESAC121404.pdf>) but include the fact that the Census data excludes certain components of income, including the value of employer-paid benefits. As a result, we may be understating the effects of authorization on the well-being of formerly unauthorized immigrant workers (who might gain benefits in better jobs) and on the state as a whole.

<sup>24</sup> For definitions of head of household and qualifying children that were used, see 1040 Instructions 2008, pp. 15-17, available at: <http://www.irs.ustreas.gov/pub/irs-pdf/i1040.pdf>



from both spouses for those with a filing status of “married filing jointly.”<sup>25,26</sup> Total federal and state taxes due were then calculated by applying the appropriate rates for each filing status and taxable income amount from federal and state tax rate schedules for 2009.<sup>27</sup>

The above calculations of federal and state income taxes owed by unauthorized Latino adults were made both under actual income as reported in the ACS and the higher level of income that was estimated under authorization. Because not all workers pay income taxes – and it is presumed that unauthorized workers are less likely to pay than authorized workers – our estimates of total taxes that were actually paid in 2009 and what they would have been if all workers were authorized rely on information from other sources on the share of workers that pay taxes. Specifically, we follow the lead of other state-level studies and assume that 50 percent of unauthorized workers (unauthorized Latinos in this case) currently pay income taxes.<sup>28</sup> If authorized, our best guess is that formerly unauthorized workers would pay taxes at close to the same rates as authorized immigrants. While we could not find any outside estimates of the rate at which authorized immigrant workers pay taxes, we infer from a 2004 article by Enrico Marcelli a rate for all foreign-born (or immigrant) workers of 89.5 percent.<sup>29</sup> Therefore, our estimate of the gross increase in state and federal income taxes is a combination of increases due to a greater number of workers who would be paying if authorized as well as an increase in taxable income from the change in legal status.

Our estimates of the increases in Social Security and Medicare contributions rely on the same data and methodology as laid out above, but we substitute in the rates for Social Security and Medicare taxes in place of income tax rates – a much less complicated calculation given that the employer-employee combined rates are set at 12.4 percent and 2.9 percent, respectively, for all U.S. workers – and we use only earned income rather than total income as the amount that is taxed (which is virtually always the same for unauthorized immigrants in our sample given the extreme rarity or non-existence of other forms of income).<sup>30</sup> As was the case for our estimated increases in income taxes collected through authorization, our estimate of the increases in Social Security and Medicare collections comes from

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<sup>25</sup> For federal standard deduction amounts, see 2009 Form 1040-ES, p. 1, available at: [http://www.irs.gov/pub/irs-p\\_d/f1040es.pdf](http://www.irs.gov/pub/irs-p_d/f1040es.pdf). For state standard deduction amounts, see 2009 State Income Tax Rates Adjusted, available at [http://www.ftb.ca.gov/aboutftb/press/2009/release\\_46.shtml](http://www.ftb.ca.gov/aboutftb/press/2009/release_46.shtml).

<sup>26</sup> In implementing the definition of qualifying children as dependents in the ACS, we were limited to the criteria involving age, school enrollment and disability given the available information.

<sup>27</sup> For federal income taxes we used the rate schedule on page 5 of 2009 Form 1040-ES (available at: <http://www.irs.gov/pub/irs-pdf/f1040es.pdf>). For state income taxes, we applied the 2009 rates available at: [http://www.ftb.ca.gov/forms/2009\\_California\\_Tax\\_Rates\\_and\\_Exemptions.shtml](http://www.ftb.ca.gov/forms/2009_California_Tax_Rates_and_Exemptions.shtml).

<sup>28</sup> See, for example, Beth Pearson and Michael F. Sheehan, *Undocumented Immigrants in Iowa: Estimated Tax Contributions and Fiscal Impact*, (The Iowa Policy Project, October 2007), available at: <http://www.iowapolicyproject.org/2007docs/071025-undoc.pdf>; or Michael Cassidy and Sara Okos, *Fiscal Facts: Tax Contributions of Virginia’s Undocumented Immigrants*, (The Commonwealth Institute), available at: <http://www.thecommonwealthinstitute.org/Portals/16/Labor%20and%20Wage/immntaxcontribution.pdf>

<sup>29</sup> See Table 2 in Enrico Marcelli, “Unauthorized Mexican Immigration, Day Labour and other Lower-wage Informal Employment in California,” *Regional Studies*, 38(1): 1-13, (2004). The universe for the table is lower-wage workers in California. Our estimate of 89.5 percent of foreign-born workers filing taxes is as conservative an estimate as possible using the information from the 1997-1999 period for informal workers (furthest column to the right). It is the lowest rate possible given that the foreign-born account for 61 percent of all workers in that group and the group has a rate of filing taxes of 93.6 percent. The rate for informal workers was used because of that sector’s much higher concentration of foreign-born workers, and presumably, unauthorized immigrant workers.

<sup>30</sup> For Social Security and Medicare tax rates see: <http://www.socialsecurity.gov/pubs/10003.html>. The income limit of \$106,800 did not apply to any unauthorized Latino workers in our sample.

a combination of increases due to more formerly unauthorized workers paying taxes and increases due to higher earnings.

To estimate the increase in sales taxes being paid by unauthorized Latinos from authorization, we used data from the Tax Foundation on sales tax rates, state and local sales tax collections per capita, and per capita income for California.<sup>31</sup> By dividing state sales tax collections per capita in 2006 (the most recent year for which data was available) by per capita income in 2006, we got the share of each dollar of income that went toward state sales taxes that year. This figure was inflated (multiplied) by a factor of 1.32 to account for the increase in the California sales tax rate from 6.25 percent in 2006 to 8.25 percent in 2009 ( $8.25 / 6.25 = 1.32$ ).<sup>32</sup> Because the 2009 state sales tax rate includes a one percent statewide local sales tax, we took the resulting estimate of 3.3 cents of each dollar of income as the amount going toward state and local sales taxes combined – a conservative estimate, given that many cities impose an additional local sales tax of up to 1.5 percent. This estimate of 3.3 cents per dollar was multiplied by the estimated increase in income from above for unauthorized Latino adults due to a change in legal status to get the expected increase in state and local sales taxes that would result from authorization. We do not estimate the additional income tax and sales tax gains from the multiplied or indirect effects of increasing the income (and hence spending) of the newly authorized.

### **Poverty Estimates**

In addition to the above estimates, we also applied the expected increase in wage, salary, and self-employment income due to authorization to project the potential change in poverty rates for families and children of unauthorized Latino immigrants, and the number of people and children that would be lifted out of poverty. The IPUMS ACS provides data on the ratio of family income to their family-specific poverty threshold for each family, which applies to all individuals in the family. Federal poverty thresholds for each family (and individual) were thus backed out by dividing total family income by this ratio. An adjusted ratio of family income to the poverty threshold was then derived by adjusting family income up for the income gains that would be expected from authorization and dividing it by the poverty threshold for each family. Using the adjusted ratio and the actual ratio available in the ACS data, we were able to figure out the number of people and children that would be lifted out of poverty (i.e., from an actual ratio of less than one [below poverty] to an adjusted ratio of greater than or equal to one [above poverty]) and to calculate the potential statewide adjusted poverty rate for people and children in families of unauthorized Latino immigrants.

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<sup>31</sup> For 2006 collections per capita, see: <http://www.taxfoundation.org/taxdata/show/275.html>; for 2006 per capita income, see: [http://www.taxfoundation.org/files/sl\\_burden\\_california-20080807.pdf](http://www.taxfoundation.org/files/sl_burden_california-20080807.pdf); for California sales tax rates, see: <http://www.taxfoundation.org/taxdata/show/245.html>.

<sup>32</sup> The assumption made here was that the rate increase did not affect overall spending on goods for which a sales tax is imposed.





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