

UC Berkeley

California Journal of Politics and Policy

Title

The Economic Impact of the Earned Income Tax Credit (EITC) in California

Permalink

<https://escholarship.org/uc/item/2jj0s1dn>

Journal

California Journal of Politics and Policy, 2(1)

Authors

Avalos, Antonio
Alley, Sean

Publication Date

2010-07-18

DOI

10.5070/P2XW24

Peer reviewed

THE CALIFORNIA *Journal of*
Politics & Policy

Volume 2, Issue 1

2010

**The Economic Impact of the
Earned Income Tax Credit (EITC) in California**

Antonio Avalos and Sean Alley
California State University, Fresno

Abstract

Using Internal Revenue Service (IRS) data in an input-output (IO) model, this paper assesses the economic impact and foregone economic impact of the Earned Income Tax Credit (EITC) in the 58 counties in California in 2006, the most recent year for which data are available. Findings show EITC payments received by California residents contributed over \$5 billion in output and nearly 30,000 jobs to the state economy in 2007. The foregone economic impact of unclaimed payments is substantial as well. Foregone claims are estimated to total \$1.1 billion in 2007. If claimed, the payments would have contributed \$1.2 billion in output and 7,500 jobs to the state economy. This foregone impact was likely 20% to 25% higher during the year 2010, due to the recession and accompanying legislation. The foregone economic impact is not spread uniformly across counties, but is more acute in counties where the presence of likely nonclaimants is higher. Revamping and increasing efforts to increase the participation rate in the federal EITC program is probably a cost effective policy approach in terms of labor force participation and poverty reduction per state tax dollar spent.

KEYWORDS: EITC, economic impact, California, welfare, employment

The Economic Impact of the Earned Income Tax Credit (EITC) in California

Antonio Avalos and Sean Alley*
CSU Fresno

I. Introduction

The Earned Income Tax Credit (EITC) is a refundable federal income tax credit for low- to moderate-income working households. Congress originally approved the tax credit legislation in 1975 in part to offset the burden of social security taxes and provide an incentive to work. As a refundable credit, the EITC provides assistance to families even if they do not face any tax liability. EITC payments have no effect on welfare benefits and are not used to determine eligibility for Medicaid, Supplemental Security Income (SSI), food stamps, low-income housing or nearly all Temporary Assistance for Needy Families (TANF) payments. To receive the federal EITC, an individual must have earned income, be a U.S. citizen or legal resident, and have a valid social security number. For tax year 2009, a qualified claimant may have investment income of less than \$3,100 and maximum annual total earned income of varying levels based on the number of qualifying children.

As with other federal government programs, some of the burden of the EITC program falls on California taxpayers. However, the EITC program is generally considered to be cheaper and even more efficient than other programs aimed at alleviating poverty (Danziger and Danziger, 2005; Neumark and Wascher, 2000), without producing many of the negative incentives that other traditional welfare programs can produce, such as discouraging employment. Holzblatt, et al. (1994) and Eissa and Liebman (1996) for example, argue that the EITC in fact promotes work. Also, Meyer (2002) and Meyer and Rosenbaum (2001) found that the EITC has indeed increased the labor force participation rate of women with children. In addition, the total cost of the EITC program is partially offset by a number of factors. For example, the EITC program reduces the number of single mothers and others receiving welfare (Liebman, 1998; Meyer and Rosenbaum, 2000; Ventry, 2001), household participation in the food stamp program (Mikelson and Lerman

*Antonio Avalos is an associate professor in the Department of Economics at California State University, Fresno. Sean Alley is an assistant professor, also in the Department of Economics at California State University, Fresno.

2004) and other welfare programs (Grogger, 2003). Further, the EITC generates new payroll taxes when it draws previously unemployed workers into the labor force and results in additional tax revenue when EITC claimants spend the credits and inject money into the local economy (Berube, 2006a). In fact, increasing labor force participation has been a goal of the EITC program from its early days. The EITC grew out of a failed attempt to provide a minimum national income (Nixon's Family Assistance Program (FAP)) when FAP opponents proposed an alternative (the Earned Income Credit) that would target "deserving" poor for federal assistance—"deserving" meaning those who were working (Infranca 2008; Hotz and Scholz 2001). Thus, the EITC was originally designed to offset payroll taxes, provide work incentives, and reduce welfare rolls (Infranca, 2008; s. REP. No. 94-36 (1975)).

While there is general agreement among EITC proponents regarding the positive characteristics of the EITC program, there is less harmony among those highlighting its negative features. Rothstein (2010) finds that "EITC-induced increases in labor supply may drive wages down," shift the transfer toward employers and hurt non-EITC low-skill workers. Likewise, Leigh (2009) found that EITC induced labor force participation increases puts downward pressure on wages, but the effect on wages is concentrated primarily on groups at lower education levels. However, Bartik (2001) has argued that the EITC usually only has modest effects in increasing employment, particularly in the number hours worked. This argument is supported by empirical evidence regarding single women with children who were already in the labor force (Eissa and Liebman, 1996). Another line of criticism has focused on the misreporting of children. McCubbin (2000) asserted, based on IRS reports, that \$4.4 billion in excess EITC was claimed for tax year 1994. McCubbin alleged that this excess was largely due to violations of the qualifying child eligibility criteria. However, as Greenstein (2003) has argued, IRS studies have significant methodological shortcomings that likely result in an overstatement of the overpayment rate.

The effectiveness of the EITC program in reducing poverty and other benefits has been extensively addressed by the academic literature (Edelman, 2009; Danziger and Danziger, 2005). However, research examining the economic regional and local impact of the program is less abundant and has been mostly conducted by think-tanks and advocacy groups. A main finding of this research is that the large sums of EITC dollars claimed by residents of any state provide a substantial amount of resources that are injected into the state's revenue stream. State economies greatly benefit from this annual infusion of money, as resident recipients spend the extra money (Goodman-Bacon and McGranahan, 2008). This spending represents new business sales, which recirculates each time the EITC dollars are respent, and represents a significant stimulus to the economy. The stimulus is magnified beyond the original EITC payment amount because the spending of EITC refunds creates ripple effects

as more dollars move among consumers, firms, and even among state and local governments that capture higher tax revenue. Further, the economic impact of the EITC funds could be even larger than it is. Since not all taxpayers who are eligible claim the credit, some EITC resources never make it into the state's revenue stream. Sometimes, taxpayers are not aware that the credit exists, face language or cultural barriers, or some may be afraid that by claiming the credit they will sacrifice their eligibility for other important income-support programs. In other words, the actual EITC participation rate is known to be well lower than 100% of eligible claimants (GAO, 2001).

Using EITC payments data for the state of California (collected from the IRS), this report focuses on the California economy and each of its 58 counties. The primary goals are threefold: (1) to assess the economic impact of the EITC program when EITC resources are injected into California's revenue stream, (2) to estimate the amount of foregone EITC dollars that state residents leave unclaimed, and (3) to assess the foregone economic impact of unclaimed EITC dollars that never make it into the state's revenue stream when eligible California residents fail to claim the credit.

Section II describes the general methodology employed, while specific assumptions and estimation details are discussed as they are implemented throughout the paper. Section III presents the estimated claimed and unclaimed EITC funds by California residents. Section IV presents the estimated economic impact of EITC claims in California. Section V shows the foregone economic impact of California's under-utilization of the federal EITC program, while Section VI presents estimates of these economic impacts for 2009. Section VII discusses some implications for economic policy and concludes.

II. Methodology and Data

The economic impact (or lack of) of the EITC attributable to the tax credit payments is obviously linked to the ways recipients spend this income in each county of the state. This report estimates the impact of the EITC in four different areas: (1) additional output (business sales), (2) number of jobs that these benefits payments support directly and indirectly, (3) additional labor income, and (4) additional state tax revenue.

The economic impact estimates are based on 2006, the most recent tax year for which zip code level data is available from the IRS. Since the EITC credits claimed in 2006 are actually received until the following year, the estimates reflect the economic impact that occurs in 2007. Also, since EITC eligibility is based on income, potential EITC payments and their associated economic impacts are likely to be much higher in 2009 when unemployment was higher and income was lower

due to the recession. Simple extrapolation techniques are employed to estimate the economic impact of the federal EITC for 2009, under which the American Recovery and Reinvestment Act (ARRA) granted temporary but significant increases to the maximum credits that families can claim. In addition, the calculation of the economic impact understates the potential impact of the EITC on low-income families in the state for two reasons: (1) not all eligible taxpayers claim the credit, and (2) not all taxpayers claiming the EITC credit get the entire amount for which they are eligible, mainly because they use the services of a professional tax preparer, often for a very high fee. While this practice of using professional tax preparation services does not necessarily limit the amount of EITC resources that are injected into the state's revenue stream, it does represent an unintended use of public funds. In these situations, EITC resources that are intended to help the working poor are diverted to financial professionals. This is a true social cost, although difficult to quantify, because these public funds are not being used as intended. This paper understates the true social cost of the current EITC payment regime because it ignores the social impact of these diverted funds and estimates only the amount and impact of funds that go entirely unclaimed.

The analysis makes extensive use of IMPLAN, which allows users to build economic models to estimate the impacts of economic changes in their states, counties, or communities.¹ The total economic impact of the EITC is equal to the sum of three components: the *direct* effect, the *indirect* effect, and the *induced* effect. The direct effect is the immediate upshot caused by residents when they spend their EITC payments. Due to the interactions between firms, industries, and social institutions that occur within the regional and state economy, the direct effect initiates a series of iterative rounds of income creation, spending, and re-spending that result in indirect and induced effects. The indirect effects consist of changes in production, employment, and income that result from the interindustry purchases triggered by the direct effect. Finally, induced effects arise due to changes in household income and spending patterns caused by direct and indirect effects. Since the total impact of the EITC payments that are spent within the regional economy is a multiple of the initial expenditures, the total effect is expressed as a multiplier effect. The increases in economic activity resulting from the multiplier process become smaller with each round due to leakages from the spending stream. Further, spending on goods and services that are not produced within the regional economy do not generate additional regional spending. Therefore, the multiplier process traces the flows of spending and re-spending until the initial expenditures have completely leaked out to other regions.

Assessing the economic impact of the EITC in a given region depends on two basic sets of data. First, the IMPLAN data comprises the input-output (IO) table of the regional economy of the impact region, in this case California and its 58

counties. These data were used to trace the impact of EITC payments. Second, individual income tax data by zip code is produced by the IRS for California. This data was purchased and was used to calculate the EITC payments received as well as unclaimed EITC payments.

III. The Claimed and Unclaimed EITC Funds by California Residents

Given available data, it is relatively straightforward to calculate the amount of EITC funds claimed by state residents. However, the ability to accurately estimate the EITC participation rate is extremely limited and it is not possible to calculate with precision the amount of unclaimed EITC dollars. This difficulty results primarily from two factors: first, some residents who claim the EITC refund are not technically eligible for it; second, it is impossible to know how many eligible families there are at the county or state level, and therefore is impossible to calculate how many eligible families fail to claim the EITC.

No single data set has the information necessary to calculate the participation rate of the EITC (Hotz and Scholz, 2001). In 2001, the U.S. General Accounting Office (GAO, 2001) estimated that the average participation rate for the whole country is approximately 75% (25% of the eligible population does not claim the EITC). However, some researchers argued that this estimate for the EITC participation rate was too low and contested GAO's methodology because the study was based on information from two mismatched databases (Burman and Kobes, 2002). In 2002, the Internal Revenue Service (IRS, 2002) released a report estimating the national EITC nonfiler rate to be 17.8% using the Census Bureau's Survey of Income and Program Participation (SIPP). In general, scholars have more confidence in the IRS estimate due to the methodology employed (Burman and Kobes, 2002). The same IRS report lists California as having the highest EITC nonfiler rate (24.9%) in the nation. However, in order to avoid overstating the economic impact of foregone EITC claims, this study assumes an EITC nonfiler rate of 20% and uses this number to estimate the amount of unclaimed EITC payments.

Table 1 presents the federal EITC payments made to California residents as well as the estimated unclaimed EITC payments by county. The first column shows the total number of Individual Income Tax Returns as reported by the IRS for the 2006 tax year. The second column shows the total number of EITC claims. The third column results from dividing the second column by the first to calculate the EITC returns as a percentage of the total Individual Income Tax Returns. Similarly, to calculate the average EITC credit, the total amount of EITC payments is divided by the total number of EITC claims.

In 2006, residents in the state claimed more than \$4.5 billion in EITC payments. Not surprisingly, residents of the poorest counties in the state (such as Fresno,

Table 1: Federal EITC Payments to State Residents and Estimated Unclaimed EITC Payments by County, Tax Year 2006

COUNTY	Total Returns	EITC Returns	EITC Returns as % of Total	Claimed EITC Payments	Average EITC Credit Claimed	EITC Returns Unclaimed	Unclaimed EITC Payments	Average EITC Credit Unclaimed
Alameda	651,851	69,375	10.6%	\$116,430,469	\$1,678	23,125	\$29,107,617	\$1,259
Alpine	479	58	12.2%	\$83,653	\$1,432	19	\$20,913	\$1,074
Amador	15,969	1,601	10.0%	\$2,481,383	\$1,550	534	\$620,346	\$1,163
Butte	85,118	14,083	16.5%	\$24,378,058	\$1,731	4,694	\$6,094,515	\$1,298
Calaveras	21,740	2,439	11.2%	\$4,031,883	\$1,653	813	\$1,007,971	\$1,240
Colusa	8,865	1,569	17.7%	\$2,857,822	\$1,822	523	\$714,455	\$1,366
Contra Costa	474,582	40,047	8.4%	\$67,357,249	\$1,682	13,349	\$16,839,312	\$1,261
Del Norte	9,202	1,818	19.8%	\$3,353,904	\$1,845	606	\$838,476	\$1,384
El Dorado	79,019	7,204	9.1%	\$11,285,381	\$1,567	2,401	\$2,821,345	\$1,175
Fresno	330,517	85,970	26.0%	\$182,253,755	\$2,120	28,657	\$45,563,439	\$1,590
Glenn	11,076	2,298	20.7%	\$4,245,879	\$1,848	766	\$1,061,470	\$1,386
Humboldt	53,397	9,294	17.4%	\$14,411,671	\$1,551	3,098	\$3,602,918	\$1,163
Imperial	70,279	25,374	36.1%	\$52,494,241	\$2,069	8,458	\$13,123,560	\$1,552
Inyo	9,506	1,088	11.4%	\$1,772,278	\$1,630	363	\$443,069	\$1,222
Kern	290,522	71,296	24.5%	\$151,589,072	\$2,126	23,765	\$37,897,268	\$1,595
Kings	55,482	13,744	24.8%	\$27,617,182	\$2,009	4,581	\$6,904,296	\$1,507
Lake	24,578	4,499	18.3%	\$7,794,325	\$1,732	1,500	\$1,948,581	\$1,299
Lassen	11,145	1,502	13.5%	\$2,627,290	\$1,749	501	\$656,822	\$1,312
Los Angeles	4,018,309	769,347	19.1%	\$1,480,043,437	\$1,924	256,449	\$370,010,859	\$1,443
Madera	51,438	12,340	24.0%	\$25,788,488	\$2,090	4,113	\$6,447,122	\$1,567
Marin	125,019	6,574	5.3%	\$8,066,684	\$1,227	2,191	\$2,016,671	\$920
Mariposa	10,272	1,307	12.7%	\$2,114,672	\$1,618	436	\$528,668	\$1,214
Mendocino	36,705	6,238	17.0%	\$10,458,578	\$1,677	2,079	\$2,614,644	\$1,257
Merced	91,046	22,931	25.2%	\$46,837,932	\$2,043	7,644	\$11,709,483	\$1,532
Modoc	4,720	850	18.0%	\$1,463,929	\$1,722	283	\$365,982	\$1,292
Mono	10,843	1,148	10.6%	\$1,714,888	\$1,494	383	\$428,722	\$1,120
Monterey	188,717	32,429	17.2%	\$64,629,771	\$1,993	10,810	\$16,157,443	\$1,495
Napa	59,170	4,883	8.3%	\$7,737,908	\$1,585	1,628	\$1,934,477	\$1,189
Nevada	51,180	5,194	10.1%	\$7,734,017	\$1,489	1,731	\$1,933,504	\$1,117
Orange	1,280,238	144,964	11.3%	\$253,495,035	\$1,749	48,321	\$63,373,759	\$1,312
Placer	155,553	12,372	8.0%	\$19,305,375	\$1,560	4,124	\$4,826,344	\$1,170
Plumas	10,163	1,290	12.7%	\$2,021,291	\$1,567	430	\$505,323	\$1,175
Riverside	811,045	150,548	18.6%	\$306,425,050	\$2,035	50,183	\$76,606,262	\$1,527
Sacramento	582,724	88,283	15.2%	\$165,278,992	\$1,872	29,428	\$41,319,748	\$1,404
San Benito	22,956	3,143	13.7%	\$5,721,480	\$1,820	1,048	\$1,430,370	\$1,365
San Bernardino	771,063	164,217	21.3%	\$339,692,704	\$2,069	54,739	\$84,923,176	\$1,551
San Diego	1,316,627	175,693	13.3%	\$310,665,093	\$1,768	58,564	\$77,666,273	\$1,326
San Francisco	406,313	38,739	9.5%	\$52,739,363	\$1,361	12,913	\$13,184,841	\$1,021
San Joaquin	261,778	48,350	18.5%	\$94,383,024	\$1,952	16,117	\$23,595,756	\$1,464
San Luis Obispo	113,801	11,607	10.2%	\$18,360,874	\$1,582	3,869	\$4,590,218	\$1,186
San Mateo	337,503	22,814	6.8%	\$33,950,497	\$1,488	7,605	\$8,487,624	\$1,116
Santa Barbara	170,096	20,950	12.3%	\$37,518,397	\$1,791	6,983	\$9,379,599	\$1,343
Santa Clara	772,003	64,420	8.3%	\$104,608,152	\$1,624	21,473	\$26,152,038	\$1,218
Santa Cruz	118,678	14,772	12.4%	\$25,340,068	\$1,715	4,924	\$6,335,017	\$1,287
Shasta	76,567	12,538	16.4%	\$21,849,985	\$1,743	4,179	\$5,462,496	\$1,307
Sierra	2,266	335	14.8%	\$488,300	\$1,458	112	\$122,075	\$1,093
Siskiyou	19,100	3,385	17.7%	\$5,570,710	\$1,646	1,128	\$1,392,678	\$1,234
Solano	176,936	20,985	11.9%	\$37,185,731	\$1,772	6,995	\$9,296,433	\$1,329
Sonoma	216,781	18,984	8.8%	\$28,164,818	\$1,484	6,328	\$7,041,205	\$1,113
Stanislaus	194,970	36,579	18.8%	\$70,466,031	\$1,926	12,193	\$17,616,508	\$1,445
Sutter	38,920	6,949	17.9%	\$12,927,316	\$1,860	2,316	\$3,231,829	\$1,395
Tehama	26,222	5,081	19.4%	\$9,262,145	\$1,823	1,694	\$2,315,536	\$1,367
Trinity	5,092	874	17.2%	\$1,404,593	\$1,606	291	\$351,148	\$1,205
Tulare	182,161	56,865	31.2%	\$124,947,518	\$2,197	18,955	\$31,236,879	\$1,648
Tuolumne	24,928	3,113	12.5%	\$4,957,903	\$1,593	1,038	\$1,239,476	\$1,195
Ventura	370,370	42,507	11.5%	\$75,267,327	\$1,771	14,169	\$18,816,832	\$1,328
Yolo	76,613	9,285	12.1%	\$16,094,460	\$1,733	3,095	\$4,023,615	\$1,300
Yuba	27,242	5,812	21.3%	\$11,028,586	\$1,898	1,937	\$2,757,146	\$1,423
CALIFORNIA	15,419,437	2,401,947	15.6%	\$4,522,770,000	\$1,883	800,649	\$1,130,692,500	\$1,412

Source: Internal Revenue Service (IRS) and authors' calculations.

Merced, and Tulare) show the largest number of EITC returns as percentage of the total returns and also the largest average EITC payments, well above the state average in both categories. In terms of sheer EITC dollars claims, the state shows significant variation among counties. For example, Los Angeles (the most populous county in the state) accounts for close to a third of the total EITC funds claimed (almost \$1.5 billion). Smaller counties such as Alpine, Sierra, and Trinity claim less than \$2 million added together.

Based on the assumed 20% EITC nonfiler rate, the federal unclaimed EITC payments to state residents are estimated to total over \$1.1 billion. Arguably, the average credit owed to eligible EITC recipients who failed to claim the credit is not the same as that for the average actual claimant because these two groups have different characteristics. For example, Hotz and Scholz (2001) found that claiming the EITC is more likely for those getting large credits (with children) and among those more familiar with the tax system and with the English language. One of the goals of the aforementioned IRS study was to identify the composition and characteristics of individuals who were eligible for the EITC but did not file a tax return to obtain the credit. They found that the proportion of EITC nonfilers was higher: (1) among those with no qualifying children, (2) in areas of high concentration of Hispanics, (3) among individuals with lower incomes than eligible individuals who filed a tax return to get the EITC, and (4) among individuals that participated in food stamp assistance programs. So, if eligible nonclaimants are less likely, for instance, to have qualifying children, then the average nonclaimant will be owed a smaller credit than the average recipient.

Following what other research has done to account for the differences between filers and nonfilers, the average received credit is multiplied by 75% to obtain a more accurate picture of the average credit owed to eligible EITC recipients who failed to claim the credit (Berube, 2010). This calculation is shown in the last column of Table 1 and is then used to estimate the number of unclaimed EITC returns (an estimate of the number of individuals that fail to claim the credit). The estimate of unclaimed EITC returns is obtained by dividing the total amount of unclaimed EITC payments by the estimated average credit owed to eligible EITC recipients who failed to claim the credit. These estimates indicate that approximately 800,000 California residents failed to claim \$1.1 billion in EITC refunds in 2006.

IV. The Economic Impact of the Federal EITC Program

EITC payments to state residents are injected into the state economy when they are spent. The impact of EITC dollars in the state is made smaller when there are leakages such as savings withheld from the economy by individuals and dollars spent outside the state's economy. Determining exactly which fraction of the EITC

payments is spent within the state would probably require expensive primary data collection. Following what other research has done in similar work to account for initial expenditure leakages, it is assumed that only 80% of the EITC payments made to state residents were spent within the state's economy. For example, the Jacob France Institute (2004) of the University of Baltimore, assumes that two-thirds of the EITC payments made to city residents were respent within the city of Baltimore. Similarly, John Haskell (2006) assumes that 87% of the EITC disbursements are spent within the Nashville region. For California, this assumption is a conservative one considering (1) the low mobility of low-income families, (2) empirical evidence suggesting the low savings rate (and negative in some cases) for low-income families, and (3) the geography of the state, which is bounded on three sides by mountains, deserts, and an ocean. This report also assumes that EITC dollars are spent following a typical pattern for households with incomes between \$15,000 and \$25,000. In other words, it is assumed that the spending profile of EITC recipients resembles one of typical families earning this income level.

An additional issue when calculating the economic impact of the EITC program is that not all taxpayers who claim the EITC are technically eligible to receive the credit. There are obviously some who claim and receive the credit but do not meet all of the eligibility requirements. The "error rate" of ineligible EITC claimants is, according to IRS (2002) calculations for the tax year 1999, between 27% and 32% of EITC claims nationwide. Some researchers have argued that the IRS study has significant methodological shortcomings that likely result in an overstatement of the error rate (Greenstein, 2003). Even if the error rate of the program was accurately known, it would probably be inaccurate to assume that such error rate applied to every county in the state (Berube, 2006a).

This study employs IRS data reporting the actual dollars received as EITC credits in California. Although some of these funds were surely obtained by error or fraud, the fact is that they made it to the state and produced an economic impact. Assuming the IRS audits and catches some ineligible claimants, and assuming further that corrected returns and penalties are assessed, the repayment of any ill-gotten EITC payments would occur years after the funds were injected into the state economy, well after they produced an economic impact. A completely accurate picture of the economic impact would include a lagged leakage of the amount later collected by the IRS. However, payments are rarely recovered once made (Hotz and Scholz, 2001). Given low audit rates generally and the likelihood that the perpetrators will be unable to repay or will have left the state, this leakage is likely to be very small relative to the initial payment.²

Table 2 shows the economic impact of EITC payments by county. Results indicate that spending resulting from state residents' receipt of the federal EITC dollars creates a total of over \$5 billion in business sales in the state (output),

Avalos and Alley: EITC Economic Impact in California

Table 2: Estimated Economic Impact of the Federal EITC Program in the State by County, Tax Year 2007

COUNTY	Claimed EITC Payments	80% Spent Locally	Economic Impact		
			Output	Employment	Labor Income
Alameda	\$116,430,469	\$93,144,375	\$130,606,323	729.8	\$34,992,263
Alpine	\$83,653	\$66,922	\$68,207	0	\$3,435
Amador	\$2,481,383	\$1,985,107	\$2,293,251	12	\$402,314
Butte	\$24,378,058	\$19,502,446	\$25,147,726	172.1	\$5,718,639
Calaveras	\$4,031,883	\$3,225,506	\$4,506,360	19.4	\$593,021
Colusa	\$2,857,822	\$2,286,258	\$2,442,152	12.8	\$319,041
Contra Costa	\$67,357,249	\$53,885,799	\$71,523,934	376.9	\$17,533,527
Del Norte	\$3,353,904	\$2,683,123	\$3,017,344	16.1	\$489,612
El Dorado	\$11,285,381	\$9,028,305	\$10,852,219	58.6	\$2,026,600
Fresno	\$182,253,755	\$145,803,004	\$200,521,056	1379.7	\$49,261,160
Glenn	\$4,245,879	\$3,396,703	\$3,718,869	17.7	\$475,905
Humboldt	\$14,411,671	\$11,529,337	\$14,525,409	97.3	\$3,020,547
Imperial	\$52,494,241	\$41,995,392	\$48,281,810	249.9	\$7,535,181
Inyo	\$1,772,278	\$1,417,822	\$1,604,015	8.2	\$248,291
Kern	\$151,589,072	\$121,271,257	\$155,020,708	914	\$32,648,383
Kings	\$27,617,182	\$22,093,746	\$25,233,288	131.8	\$4,069,874
Lake	\$7,794,325	\$6,235,460	\$7,190,405	35.1	\$1,200,656
Lassen	\$2,627,290	\$2,101,832	\$2,397,268	13.6	\$388,974
Los Angeles	\$1,480,043,437	\$1,184,034,749	\$1,786,898,654	10830.3	\$489,405,794
Madera	\$25,788,488	\$20,630,790	\$23,757,822	125.9	\$4,140,401
Marin	\$8,066,684	\$6,453,347	\$8,288,711	42.4	\$2,003,752
Mariposa	\$2,114,672	\$1,691,737	\$1,820,637	7.8	\$191,292
Mendocino	\$10,458,578	\$8,366,862	\$10,185,556	61.6	\$2,040,939
Merced	\$46,837,932	\$37,470,346	\$45,116,957	269.5	\$8,100,264
Modoc	\$1,463,929	\$1,171,143	\$1,243,007	4.8	\$126,847
Mono	\$1,714,888	\$1,371,910	\$1,477,249	5.6	\$162,547
Monterey	\$64,629,771	\$51,703,816	\$65,516,349	368.4	\$14,925,917
Napa	\$7,737,908	\$6,190,326	\$7,861,226	42.7	\$1,823,130
Nevada	\$7,734,017	\$6,187,214	\$7,548,120	44	\$1,523,151
Orange	\$253,495,035	\$202,796,028	\$293,589,861	1669.9	\$76,206,754
Placer	\$19,305,375	\$15,444,300	\$19,686,597	116.6	\$4,509,412
Plumas	\$2,021,291	\$1,617,033	\$1,780,897	7.5	\$221,710
Riverside	\$306,425,050	\$245,140,040	\$323,286,620	1910.1	\$71,674,321
Sacramento	\$165,278,992	\$132,223,194	\$177,957,244	1062.5	\$44,466,366
San Benito	\$5,721,480	\$4,577,184	\$5,143,204	21.4	\$708,767
San Bernardino	\$339,692,704	\$271,754,163	\$374,563,318	2378	\$90,492,972
San Diego	\$310,665,093	\$248,532,074	\$349,996,925	2074.5	\$87,798,005
San Francisco	\$52,739,363	\$42,191,491	\$53,252,730	250.5	\$13,466,332
San Joaquin	\$94,383,024	\$75,506,419	\$100,793,785	653.4	\$24,159,689
San Luis Obispo	\$18,360,874	\$14,688,699	\$19,233,546	119.9	\$4,206,623
San Mateo	\$33,950,497	\$27,160,398	\$35,454,043	175.3	\$8,773,132
Santa Barbara	\$37,518,397	\$30,014,718	\$40,308,228	242.2	\$9,791,463
Santa Clara	\$104,608,152	\$83,686,521	\$105,129,114	511.9	\$25,934,486
Santa Cruz	\$25,340,068	\$20,272,055	\$26,575,140	157.2	\$6,160,013
Shasta	\$21,849,985	\$17,479,988	\$23,013,001	159.8	\$5,500,544
Sierra	\$488,300	\$390,640	\$403,219	1.1	\$25,632
Siskiyou	\$5,570,710	\$4,456,568	\$5,191,175	29.5	\$897,455
Solano	\$37,185,731	\$29,748,584	\$38,314,346	227.4	\$8,508,437
Sonoma	\$28,164,818	\$22,531,854	\$31,068,180	196.6	\$7,892,287
Stanislaus	\$70,466,031	\$56,372,824	\$73,928,557	487.2	\$17,283,954
Sutter	\$12,927,316	\$10,341,853	\$12,618,959	75.6	\$2,543,523
Tehama	\$9,262,145	\$7,409,716	\$8,387,381	43.6	\$1,366,145
Trinity	\$1,404,593	\$1,123,675	\$1,195,111	5	\$129,571
Tulare	\$124,947,518	\$99,958,014	\$120,366,547	664.6	\$22,009,342
Tuolumne	\$4,957,903	\$3,966,322	\$4,766,801	27.8	\$914,116
Ventura	\$75,267,327	\$60,213,862	\$79,789,399	464.5	\$18,907,052
Yolo	\$16,094,460	\$12,875,568	\$16,069,013	87.4	\$3,383,939
Yuba	\$11,028,586	\$8,822,869	\$9,724,894	42.8	\$1,471,906
CALIFORNIA	\$4,522,770,000	\$3,618,216,000	\$5,088,191,467	29,912	\$1,244,775,405

Source: Internal Revenue Service (IRS) and authors' calculations.

supports almost 30,000 jobs and creates more than \$1.2 billion in labor income.³ Among the counties that experience the largest impact, Los Angeles, Riverside and San Bernardino stand out with a combined business sales impact of almost \$2.5 billion and a combined employment impact of over 15,000 jobs. In regions that exhibit the highest poverty rates, for example San Joaquin Valley counties (Fresno, Madera, Merced, Kern, Kings, San Joaquin, Stanislaus, and Tulare), the data show a combined business sales impact of more than \$700 million and a combined employment impact of over 4,600 jobs. These calculations suggest that if the EITC program did not exist (or if no state resident claimed it), none of these impacts would occur.

With respect to this last point, the following qualification is appropriate. Assuming a relatively full-employment economy such as the one that existed in the United States until around 2007, research using a more general equilibrium approach indicates that if the EITC program did not exist at all (and thus California residents would not receive any credits), there would likely be adjustments in prices and wages due to changes in the labor market that would compensate for the loss of jobs, output, income, and tax revenue (Rothstein, 2010; Leigh, 2009). That is, the increase in labor market participation caused by the EITC may put downward pressure on wages in affected markets, muting the effect on total wages earned. An IO model such as the one used in IMPLAN would miss the effect of this price adjustment in the labor market. In other words, the estimated economic impact in this paper may overestimate the losses if the EITC program did not exist during a full employment economy.

However, in 2009, California was mired in a severe recession and the EITC was playing a more important role in propping up economic variables such as employment, wages and tax revenues. The loss of the EITC during a time of economic distress would create an additional recessionary shock that would ripple through the state economy. Conversely, an increase in EITC participation during a recessionary economy could create substantial new economic activity that otherwise would not exist. So, the estimated economic impact in this paper is more likely to reflect the potential losses that California would experience if the EITC did not exist or if no state resident claimed it during the 2009 recession than in 2006, when the economy was operating at full employment.

Further, the EITC dollars spent in the economy of the state generate additional sales and income for local firms and residents, which subsequently lead to further spending and income in an economic ripple effect. This additional spending and income can also generate additional tax revenue for the cities, counties, and for the state as presented in Table 3. The multiplier effect of federal EITC dollars spent in California's economy generates more than \$355 million in tax revenue, and 65% of this amount comes from indirect business taxes (mostly sales taxes). The

Table 3: Local and State Tax Impact of the EITC in the State, Tax Year 2007

	Employee Compensation	Household Expenditures	Corporations	Indirect Business Taxes	TOTAL
State Taxes	Corporate Profits Tax		\$22,483,658		\$22,483,658
	Dividends		\$32,303,755		\$32,303,755
	Indirect Bus Tax: Motor Vehicle License			\$2,112,237	\$2,112,237
	Indirect Bus Tax: Other Taxes			\$20,512,570	\$20,512,570
	Indirect Bus Tax: Property Tax			\$78,541,098	\$78,541,098
	Indirect Bus Tax: S/L NonTaxes			\$9,440,743	\$9,440,743
	Indirect Bus Tax: Sales Tax			\$119,097,641	\$119,097,641
	Indirect Bus Tax: Severance Tax			\$37,171	\$37,171
	Personal Tax: Income Tax		\$47,714,044		\$47,714,044
	Personal Tax: Motor Vehicle License		\$1,798,252		\$1,798,252
	Personal Tax: NonTaxes (Fines- Fees)		\$12,531,875		\$12,531,875
	Personal Tax: Other Tax (Fish/Hunt)		\$323,515		\$323,515
	Personal Tax: Property Taxes		\$609,218		\$609,218
	Social Ins Tax- Employee Contribution	\$1,639,700			\$1,639,700
Social Ins Tax- Employer Contribution	\$6,561,009			\$6,561,009	
TOTAL	\$8,200,709	\$62,976,905	\$54,787,413	\$229,741,460	\$355,706,487

Source: Internal Revenue Service (IRS), IMPLAN and authors' calculations.

methodology employed to calculate the fiscal impact (IMPLAN) does not produce separate reports for the state and local governments. Thus, the estimates include total estimated tax revenue for all levels of government. However, the tax revenue produced by each county is proportional to impact on economic output.

V. The Foregone Economic Impact of Under-utilizing the Federal EITC Program in California

A significant amount of unclaimed EITC payments (estimated to total over \$1.1 billion) are never injected into the state's revenue stream when eligible residents fail to claim the EITC. These foregone transfer payments represent a lost opportunity to generate new business sales, jobs, income, and tax revenue. Table 4 shows the foregone economic impact of the unclaimed EITC payments by county. These estimates illustrate the potential economic impact if all state residents claimed the EITC payments to which they were eligible.

The results show that if state residents fully participated in the EITC program and if they spent 80% of the EITC payments in the state, then these EITC resources would create over \$1.2 billion in additional business sales (output), support an additional (almost) 7,500 jobs, and create more than \$300 million in labor income. Most of the foregone economic impact is concentrated in Los Angeles, Riverside,

Table 4: Estimated Foregone Economic Impact of the Federal EITC Program in the State by County, Tax Year 2007

COUNTY	Unclaimed EITC Payments	80% Spent Locally	Foregone Economic Impact		
			Output	Employment	Labor Income
Alameda	\$29,107,617	\$23,286,094	\$32,651,581	182	\$8,748,066
Alpine	\$20,913	\$16,731	\$17,052	0	\$859
Amador	\$620,346	\$496,277	\$573,313	3	\$100,579
Butte	\$6,094,515	\$4,875,612	\$6,286,932	43	\$1,429,660
Calaveras	\$1,007,971	\$806,377	\$1,126,590	5	\$148,255
Colusa	\$714,455	\$571,564	\$610,538	3	\$79,760
Contra Costa	\$16,839,312	\$13,471,450	\$17,880,984	94	\$4,383,382
Del Norte	\$838,476	\$670,781	\$754,336	4	\$122,403
El Dorado	\$2,821,345	\$2,257,076	\$2,713,055	15	\$506,650
Fresno	\$45,563,439	\$36,450,751	\$50,130,264	345	\$12,315,290
Glenn	\$1,061,470	\$849,176	\$929,717	4	\$118,976
Humboldt	\$3,602,918	\$2,882,334	\$3,631,352	24	\$755,137
Imperial	\$13,123,560	\$10,498,848	\$12,070,453	62	\$1,883,795
Inyo	\$443,069	\$354,456	\$401,004	2	\$62,073
Kern	\$37,897,268	\$30,317,814	\$38,755,177	229	\$8,162,096
Kings	\$6,904,296	\$5,523,436	\$6,308,322	33	\$1,017,469
Lake	\$1,948,581	\$1,558,865	\$1,797,601	9	\$300,164
Lassen	\$656,822	\$525,458	\$599,317	3	\$97,244
Los Angeles	\$370,010,859	\$296,008,687	\$446,724,664	2,708	\$122,351,449
Madera	\$6,447,122	\$5,157,698	\$5,939,456	31	\$1,035,100
Marin	\$2,016,671	\$1,613,337	\$2,072,178	11	\$500,938
Mariposa	\$528,668	\$422,934	\$455,159	2	\$47,823
Mendocino	\$2,614,644	\$2,091,716	\$2,546,389	15	\$510,235
Merced	\$11,709,483	\$9,367,586	\$11,279,239	67	\$2,025,066
Modoc	\$365,982	\$292,786	\$310,752	1	\$31,712
Mono	\$428,722	\$342,978	\$369,312	1	\$40,637
Monterey	\$16,157,443	\$12,925,954	\$16,379,087	92	\$3,731,479
Napa	\$1,934,477	\$1,547,582	\$1,965,307	11	\$455,783
Nevada	\$1,933,504	\$1,546,803	\$18,871,780	11	\$380,788
Orange	\$63,373,759	\$50,699,007	\$73,397,465	417	\$19,051,689
Placer	\$4,826,344	\$3,861,075	\$4,921,649	29	\$1,127,353
Plumas	\$505,323	\$404,258	\$445,224	2	\$55,428
Riverside	\$76,606,262	\$61,285,010	\$80,821,655	478	\$17,918,580
Sacramento	\$41,319,748	\$33,055,798	\$44,489,311	266	\$11,116,592
San Benito	\$1,430,370	\$1,144,296	\$1,285,801	5	\$177,192
San Bernardino	\$84,923,176	\$67,938,541	\$93,640,830	595	\$22,623,243
San Diego	\$77,666,273	\$62,133,019	\$87,499,231	519	\$21,949,501
San Francisco	\$13,184,841	\$10,547,873	\$13,313,183	63	\$3,366,583
San Joaquin	\$23,595,756	\$18,876,605	\$25,198,446	163	\$6,039,922
San Luis Obispo	\$4,590,218	\$3,672,175	\$4,808,387	30	\$1,051,656
San Mateo	\$8,487,624	\$6,790,099	\$8,863,511	44	\$2,193,283
Santa Barbara	\$9,379,599	\$7,503,679	\$10,077,057	61	\$2,447,866
Santa Clara	\$26,152,038	\$20,921,630	\$26,282,279	128	\$6,483,622
Santa Cruz	\$6,335,017	\$5,068,014	\$6,643,785	39	\$1,540,003
Shasta	\$5,462,496	\$4,369,997	\$5,753,250	40	\$1,375,136
Sierra	\$122,075	\$97,660	\$100,805	0	\$6,408
Siskiyou	\$1,392,678	\$1,114,142	\$1,297,794	7	\$224,364
Solano	\$9,296,433	\$7,437,146	\$9,578,587	57	\$2,127,109
Sonoma	\$7,041,205	\$5,632,964	\$7,767,045	49	\$1,973,072
Stanislaus	\$17,616,508	\$14,093,206	\$18,482,139	122	\$4,320,989
Sutter	\$3,231,829	\$2,585,463	\$3,154,740	19	\$635,881
Tehama	\$2,315,536	\$1,852,429	\$2,096,845	11	\$341,536
Trinity	\$351,148	\$280,919	\$298,778	1	\$32,393
Tulare	\$31,236,879	\$24,989,504	\$30,091,637	166	\$5,502,336
Tuolumne	\$1,239,476	\$991,581	\$1,191,700	7	\$228,529
Ventura	\$18,816,832	\$15,053,465	\$19,947,350	116	\$4,726,763
Yolo	\$4,023,615	\$3,218,892	\$4,017,253	22	\$845,985
Yuba	\$2,757,146	\$2,205,717	\$2,431,224	11	\$367,977
CALIFORNIA	\$1,130,692,500	\$904,554,000	\$1,272,047,867	7,478	\$311,193,851

Source: Internal Revenue Service (IRS), IMPLAN and authors' calculations.

and San Bernardino counties, with a combined foregone business sales impact of over \$600 million and a combined foregone employment impact of over 3,700 jobs. The San Joaquin Valley (Fresno, Madera, Merced, Kern, Kings, San Joaquin, Stanislaus, and Tulare) suffers a foregone business sales impact of more than \$180 million and a foregone employment impact of over 1,100 jobs due to under-participation by eligible residents in the EITC program.

The proportion of individuals not claiming the EITC credit is unlikely to be uniformly 20% in all counties because county demographics vary with respect to characteristics of the average nonfiler. The IRS (2002) has identified that the proportion of those failing to claim the EITC credit is higher: (1) among those with no qualifying children, (2) in areas of high concentration of Hispanics, (3) among individuals with lower incomes than eligible individuals who filed a tax return to get the EITC, and (4) among individuals who participated in food stamp assistance programs. In counties where the demographic profile indicates a prevalence of these factors, the actual nonfiler rate is likely to be higher than the assumed 20%.

Table 5 shows these characteristics by county. The numbers in bold indicate that a given characteristic in a given county is more prevalent than the average for the state. For example, in Los Angeles County, the concentration of Hispanics and the percentage of households receiving food stamps are higher than the state average, while the median income is lower. These numbers suggest that the proportion of eligible individuals not claiming the EITC credit in Los Angeles County is likely to be higher than 20%, the assumed average for the state. It is impossible to accurately assess how much higher without resort to arbitrary calibration formulae. However, it is probably reasonable to assume a nonfiler rate as high as 25% in the counties with prevalent nonfiler characteristics (in bold). This rate is reported as the state average by the IRS. Among other counties with similar conditions, San Bernardino and Sacramento counties stand out, as well as Fresno, Kern, Merced, Stanislaus, and Tulare Counties in the Central Valley.

Finally, Table 6 shows that if state residents claimed the estimated unclaimed EITC payments, more than \$88 million in additional tax revenue would be generated at all levels of government.

VI. The Foregone Economic Impact in 2010

This report calculates the foregone economic impact of the federal EITC for 2007, the most recent year for which data is available. There is a time lag of three years because the IRS does not make the data available for the current tax year.⁴ Since EITC eligibility is based on income, potential EITC payments and their associated economic impact in the state were likely to be much higher in 2009 when unemployment was higher and income was lower due to the economic recession.

Table 5: Characteristics Associated with High Rates of Unclaimed EITC Funds

COUNTY	Families with no children under 18 years	Hispanic Population	Median Income	Received Food Stamps
Alameda	39.2%	21.4%	\$70,079	3.4%
Alpine	54.7%	NA	NA	NA
Amador	54.7%	10.6%	\$56,258	3.8%
Butte	46.1%	12.6%	\$41,569	8.1%
Calaveras	55.7%	NA	\$57,703	3.6%
Colusa	41.6%	NA	\$50,288	6.7%
Contra Costa	42.2%	22.4%	\$78,619	2.9%
Del Norte	46.3%	NA	\$35,861	15.3%
El Dorado	47.5%	11.3%	\$70,022	3.1%
Fresno	33.9%	48.2%	\$45,805	11.5%
Glenn	39.6%	NA	\$40,284	7.1%
Humboldt	44.2%	8.2%	\$40,515	7.2%
Imperial	30.5%	76.0%	\$37,492	13.1%
Inyo	NA	NA	NA	NA
Kern	32.8%	46.2%	\$46,442	9.8%
Kings	31.4%	48.5%	\$49,419	10.6%
Lake	43.2%	15.4%	\$41,619	10.0%
Lassen	43.7%	15.3%	\$50,077	8.2%
Los Angeles	35.4%	47.3%	\$55,192	4.8%
Madera	38.4%	50.0%	\$45,646	10.8%
Marin	48.4%	13.6%	\$88,101	1.9%
Mariposa	48.6%	NA	NA	NA
Mendocino	48.6%	20.1%	\$43,307	6.2%
Merced	31.4%	52.4%	\$44,338	12.2%
Modoc	NA	NA	NA	NA
Mono	NA	NA	NA	NA
Monterey	38.3%	52.2%	\$59,140	4.5%
Napa	45.5%	29.3%	\$67,484	2.0%
Nevada	55.2%	7.4%	\$56,890	3.3%
Orange	40.6%	33.2%	\$75,176	2.3%
Placer	45.1%	11.7%	\$73,260	2.1%
Plumas	61.5%	NA	\$50,817	1.3%
Riverside	36.3%	43.1%	\$58,168	3.5%
Sacramento	38.2%	19.8%	\$57,779	6.9%
San Benito	33.4%	53.0%	\$72,228	5.1%
San Bernardino	33.1%	46.7%	\$56,575	6.0%
San Diego	41.0%	30.4%	\$63,727	2.7%
San Francisco	48.0%	14.0%	\$71,957	2.4%
San Joaquin	33.8%	36.4%	\$54,711	7.3%
San Luis Obispo	50.2%	18.8%	\$57,722	2.9%
San Mateo	44.1%	23.1%	\$84,684	1.2%
Santa Barbara	41.6%	38.7%	\$59,850	3.8%
Santa Clara	40.6%	25.6%	\$87,287	2.5%
Santa Cruz	44.2%	28.7%	\$67,070	3.3%
Shasta	46.6%	7.8%	\$43,836	6.7%
Sierra	NA	NA	NA	NA
Siskiyou	51.3%	NA	\$36,171	9.8%
Solano	39.5%	22.2%	\$68,603	4.8%
Sonoma	46.0%	22.5%	\$63,768	2.5%
Stanislaus	36.8%	38.9%	\$51,601	7.0%
Sutter	38.4%	26.9%	\$52,505	7.1%
Tehama	42.7%	19.9%	\$36,731	11.3%
Trinity	NA	56.7%	NA	NA
Tulare	33.2%	56.7%	\$43,995	13.4%
Tuolumne	55.1%	9.7%	\$47,466	6.3%
Ventura	40.3%	37.4%	\$76,269	3.3%
Yolo	39.6%	28.2%	\$58,851	3.8%
Yuba	33.6%	NA	\$45,727	15.4%
CALIFORNIA	38.5%	36.1%	\$61,154	4.6%

Source: U.S. Census Bureau, American Community Survey (ACS), 2006, 07, 08 estimates.

Table 6: Local and State Tax Foregone Impact of the EITC in the State, Tax Year 2007

	Employee Compensation	Household Expenditures	Corporations	Indirect Business Taxes	TOTAL
State	Corporate Profits Tax		\$5,620,915		\$5,620,915
	Dividends		\$8,075,939		\$8,075,939
	Indirect Bus Tax: Motor Vehicle License			\$528,059	\$528,059
	Indirect Bus Tax: Other Taxes			\$5,128,143	\$5,128,143
	Indirect Bus Tax: Property Tax			\$19,635,275	\$19,635,275
	Indirect Bus Tax: S/L NonTaxes			\$2,360,186	\$2,360,186
	Indirect Bus Tax: Sales Tax			\$29,774,410	\$29,774,410
	Indirect Bus Tax: Severance Tax			\$9,293	\$9,293
	Personal Tax: Income Tax		\$11,928,511		\$11,928,511
	Personal Tax: Motor Vehicle License		\$449,563		\$449,563
	Personal Tax: NonTaxes (Fines- Fees		\$3,132,969		\$3,132,969
	Personal Tax: Other Tax (Fish/Hunt)		\$80,879		\$80,879
	Personal Tax: Property Taxes		\$152,305		\$152,305
Local	Social Ins Tax- Employee Contribution	\$409,925			\$409,925
	Social Ins Tax- Employer Contribution	\$1,640,252			\$1,640,252
TOTAL	\$2,050,177	\$15,744,226	\$13,696,853	\$57,435,365	\$88,926,622

Source: Internal Revenue Service (IRS), IMPLAN and authors' calculations.

Therefore, the 2007 estimates likely understate the *current* foregone economic impact of the EITC program.

One way to estimate the *current* foregone impact is to look at the historical relationship between EITC claims and unemployment rates in the state, and then extrapolate the data for 2009. Table 7 shows this relationship over the last 10 years where at least four facts stand out. First, the accumulated amount of estimated unclaimed EITC dollars between 1997 and 2006 is large, adding up to almost \$10 billion. Second, the number of total tax returns has grown more rapidly (1.8% annually) than the number of EITC returns (0.8% annually). Consequently, EITC returns as a percentage of the total returns have declined. Third, the average EITC return has steadily increased by close to 23% during the 1997–2006 period, which may reflect both inflation adjustments and efforts to building a more generous EITC program. The recent evolution of the EITC program indicates that such efforts to build a more generous EITC program have been underway. This has been particularly evident during the last tax year when the ARRA provided a temporary increase in the credit.

By way of illustration, the maximum credit for a family with no qualifying children in tax year 2000 was \$353, with one qualifying child was \$2,353, and with two or more qualifying children was \$3,888. Six years later, the maximum

Table 7: Historical EITC Data and Unemployment Rates in California

Tax year	Total Returns	EITC Returns	EITC Returns as % of Total	Claimed EITC Payments	Unclaimed EITC Payments	Average EITC Credit	Unemployment Rate
1997	13,136,556	2,238,370	17.04%	\$3,436,211,994	\$859,052,999	\$1,535	6.4%
1998	13,576,420	2,232,825	16.45%	\$3,612,096,985	\$903,024,246	\$1,618	6.0%
1999	13,930,437	2,208,165	15.85%	\$3,696,392,424	\$924,098,106	\$1,674	5.3%
2000	14,289,773	2,198,596	15.39%	\$3,685,090,381	\$921,272,595	\$1,676	4.9%
2001	14,470,542	2,175,394	15.03%	\$3,713,183,870	\$928,295,968	\$1,707	5.4%
2002	14,493,603	2,364,922	16.32%	\$4,158,763,563	\$1,039,690,891	\$1,759	6.7%
2003	14,440,197	2,384,703	16.51%	\$4,205,930,878	\$1,051,482,720	\$1,764	6.9%
2004	14,592,665	2,378,695	16.30%	\$4,273,588,132	\$1,068,397,033	\$1,797	6.3%
2005	14,796,934	2,376,646	16.06%	\$4,397,875,497	\$1,099,468,874	\$1,850	5.4%
2006	15,419,437	2,401,947	15.58%	\$4,522,770,000	\$1,130,692,500	\$1,883	4.9%

Source: Internal Revenue Service (IRS), California Employment Development Department (EDD).

credits were \$412, \$2,747, and \$4,536 respectively. For tax year 2009, the federal government increased the credit and dependent allowances such that if a family has three or more children, the family can qualify for an even larger tax credit (eliminating the two-child credit cap). So, the maximum credit for a family with no qualifying children in tax year 2009 was \$457, with one qualifying child was \$3,043, with two qualifying children was \$5,028, and with three or more qualifying children was \$5,657. This temporary increase granted by the ARRA amounts to a nearly 11% increase over tax year 2006. Therefore, the extrapolation for 2009 accounts for this temporary increase in the maximum credits. Finally, there is small but positive correlation (0.33) between the unemployment rate and the number of EITC returns, which supports the notion that more state residents claim the EITC credit when unemployment is high.

Based on these data, it is possible to estimate the foregone economic impact of the EITC program for the year 2009 under two scenarios: a conservative scenario and a less conservative one. The conservative scenario assumes that both total EITC returns and the average EITC credit will continue growing at the average annual rate observed for the last 10 years of available data and also takes into account the increase in the maximum credits granted by the ARRA. Under these assumptions, Table 8 shows that the total amount of unclaimed EITC payments would amount to approximately \$1.37 billion for 2009.

The less conservative scenario assumes the total number of EITC returns will increase with unemployment, that average EITC credit will continue growing at the average annual rate observed for the last 10 years of available data and also takes into account the increase in the maximum credits granted by the ARRA (similar to the conservative scenario). The measured correlation between EITC returns and the unemployment rate for the 1997–2006 period implies that for every one

Table 8: Unclaimed 2009 EITC Payments under the Conservative Scenario

Tax year	EITC Returns	Claimed EITC Payments	Unclaimed EITC Payments	Average EITC Credit	Unemployment Rate
2007	2,421,883	\$4,665,652,129	\$1,166,413,032	\$1,926	5.4%
2008	2,441,985	\$4,813,048,151	\$1,203,262,038	\$1,971	7.2%
2009	2,462,253	\$5,508,060,552	\$1,377,015,138	\$2,237	11.7%

Source: Internal Revenue Service (IRS), IMPLAN and authors' calculations

percent increase in the unemployment rate, the number of EITC returns increases by 25,000. Table 9 shows that the total amount of unclaimed EITC payments would be approximately \$1.43 billion for 2009.

If 80% of the EITC payments are spent within the state, unclaimed EITC payments will result in the 2009 foregone economic impact shown in Table 10. Under the conservative scenario, the output impact would be \$1.55 billion and the employment impact would be 9,143 jobs, implying a 2009 impact that is approximately 20% larger than 2007. Under the less conservative scenario, the output impact would be close to \$1.61 billion and the employment impact would reach 9,518 jobs, implying a foregone economic impact in 2010 that is approximately 25% larger than 2006. The foregone economic impact in 2010 can be estimated for either the counties or the cities examined in previous sections by multiplying the estimated numbers for output, employment or labor income for 2007 by 20% under conservative assumptions or 25% under less conservative assumptions.

VII. Concluding Remarks and Policy Implications

The federal EITC program represents an important source of revenue for state and local governments and economies, as well as for the working families who receive EITC payments. For a variety of reasons, many eligible families within the state fail to claim these credits. In fact, it is estimated that around one out of every five eligible families fails to take advantage of this program. Efforts that successfully close the gap between potential EITC payments and actual EITC payments would help reduce poverty, increase labor force participation rates and provide a substantial injection of resources into the state's revenue stream.

Using conservative data and assumptions, this report estimates that California residents fail to claim over \$1.1 billion annually in EITC payments for which they are eligible. If these payments were claimed, economic activity resulting from the payments would support an additional 7,500 jobs and create more than \$300 million in new labor income each year. These foregone payments, if claimed, would also generate more than \$88 million in additional tax revenue for the state and

Table 9: Unclaimed 2009 EITC Payments under the Less Conservative Scenario

Tax year	EITC Returns	Claimed EITC Payments	Unclaimed EITC Payments	Average EITC Credit	Unemployment Rate
2007	2,414,447	\$4,651,326,691	\$1,162,831,673	\$1,926	5.4%
2008	2,459,447	\$4,847,465,424	\$1,211,866,356	\$1,971	7.2%
2009	2,571,947	\$5,753,445,439	\$1,438,361,360	\$2,237	11.7%

Source: Internal Revenue Service (IRS), IMPLAN and authors’ calculations

Table 10: Estimated Foregone Economic Impact for 2010

Scenario	Unclaimed EITC Payments	80% Spent Locally	Foregone Economic Impact		
			Output	Employment	Labor Income
CONSERVATIVE	\$1,377,015,138	\$1,101,612,110	\$1,555,288,405	9,143	\$380,485,830
LESS CONSERVATIVE	\$1,438,361,360	\$1,150,689,088	\$1,619,109,591	9,518	\$396,099,048

Source: Internal Revenue Service (IRS), IMPLAN and authors’ calculations.

local governments. There are reasons to believe that these numbers understate the current impact of these foregone payments. Using simple assumptions based on the historical relationship between EITC participation and unemployment, and taking into account the temporary increases to the maximum credits granted by the ARRA, it is likely that the current impact of state underparticipation in the EITC is 20–25% higher than the 2006 estimates featured in this report.

The state and its residents lose out on a great deal of resources by not fully exploiting the federal EITC program. The eligible residents lose out on money to which they are entitled by the Internal Revenue Code. Also, other state beneficiaries lose when that money is not spent and recirculated through the state economy. Using conservative estimates, the state economy would have created \$1.55 billion in new output and almost more than 9,000 new jobs in 2010 alone if the EITC were fully exploited.

Estimates in this study indicate an opportunity for state policymakers to stimulate the California economy without expending a great deal of its scarce resources. Such stimulus could take the form of investments in development of programs and services that increase the participation in the Federal EITC program. Enabling more EITC-eligible families in California to claim this credit would produce substantial economic benefits not only for individuals, but also for businesses, local governments and the California economy as a whole. To date, several such efforts are already underway the state level.

Arguably the most important EITC participation-related program in California is *We Connect*. *We Connect* is a public/private partnership designed mainly to increase eligible state resident participation in government programs such as the EITC, Nutrition Assistance Program, and the Women, Infant, and Children's Program, among others. Locally, numerous efforts have also been launched to boost EITC participation, particularly in those areas with high rates of nonfilers such as Los Angeles and the Bay Area. Most of these efforts are conducted by volunteer-led nonprofit organizations such as United Way and lesser known counterparts. As few as 1.5% of low-income working families take advantage of free tax preparation services through established programs like the Volunteer Income Tax Assistance (VITA), military VITA and Tax Counseling for the Elderly (Berube, 2006b). Despite the difficulties in measuring the effectiveness of such programs, it is clear that there is still a long way to go before nonfiler rates diminish such that the potential economic benefits that the Federal EITC program can provide are fully exploited for California residents. We Connect, VITA, and Tax Counseling for the Elderly programs could be useful tools to provide information on what participation rate is possible.

Furthermore, a state program to boost participation in the federal EITC program could also pay an extra dividend in the form of directing EITC resources into the pockets of the working poor, as nearly 70% of EITC participants use the services of a paid tax preparer (Berube, et. al., 2002). These payments are good for the state economy, but do nothing to further the goals of workforce participation and poverty alleviation that the EITC is designed to promote. A public program that allows the working poor to collect EITC payments without diversion to financial professionals raises the net value of the credit to the recipient, boosting the labor force participation incentives built into the EITC and raising even more EITC recipients out of poverty. It has been reported that \$1.75 billion of EITC payments are diverted to tax professionals as fees for filing (Brown, 2007).

State level EITC programs are regularly put forth as a boost to the federal EITC. Mostly during the mid to late 1990s, a number of states enacted a state level EITC that supplements the federal credit (Leigh, 2009). These programs typically work as a rebate for state taxes paid by low-income working people. To date, 23 states plus the District of Columbia offer their own EITC programs, which often operate as a percentage of the federal credit.⁵ California has been identified as a candidate for this type of program (California Budget Program, 2001). In fact, several failed legislative attempts have been launched to create a state EITC.⁶ Despite general public support for a state EITC, the cost of such a program makes it unattractive to many researchers and taxpayers. William and Johnson (2009) for example, estimate that a state EITC program for California set at 15% of the federal EITC program, would cost approximately \$530 million in 2010. One factor that drove state EITC

passage in other states during the 1990s was the regular presence of state budget surpluses (Leigh, 2009), which are not a luxury likely to exist in California any time soon. Not surprisingly, all efforts to launch such a program in California have failed.

As this paper shows, there are still significant gains to be obtained from the existing federal EITC program. Rather than creating a costly new state program that emulates the federal program, revamping and increasing efforts to increase the participation rate in the federal EITC program is probably more cost effective in terms of getting the most labor force participation and poverty reduction per tax dollar spent. Education campaigns and tax assistance could be effective at increasing the EITC participation rate. Research by Romich and Weisner (2000) and Liebman (1998) indicates that, although most low-income households know of the existence of the EITC, very few understand the relationship between how much they work and the size of their EITC payments. Leigh (2009) notes that EITC recipients may treat the EITC as a lump sum reward for working, rather than a more complicated system of payments with a phase-in and phase-out range of income. The aforementioned use of paid tax preparers probably exacerbates the lack of EITC understanding among recipients. Finally, education campaigns could magnify the economic impact of EITC participation if, as Infranca (2008) argues, the EITC causes low-income households to report previously unreported income earned through the informal economy.

The federal EITC program is not free for the government and taxpayers, of course, and some of the burden would fall on California taxpayers. California contributes around 11% of all federal tax revenue that, in turn, supports the federal EITC program (Tax Foundation, 2006). An increase in California take-up rates for the federal EITC will eventually have to be paid for by taxpayers nationally, with Californians picking up their share of the tab. It is interesting to note that California pays around 11% of the tax revenue regardless of whether it makes 11% of the EITC claims, so states with lower participation rates subsidize federal EITC payments of states with high participation rates. Also, the EITC program is widely considered to be cheaper and even more efficient than other programs designed to alleviate poverty, without producing many of the negative incentives that other traditional welfare programs can produce (such as discouraging employment).

In 2006, the EITC resulted in \$4.5 billion in federal outlays to California residents due to the lower (often negative) tax payments made by EITC eligible taxpayers. On the other hand, the total cost of the EITC program is partially offset by a number of factors. The EITC program reduces the number of single mothers receiving welfare, generates new payroll taxes when previously unemployed workers are drawn into the labor force by the EITC and results in additional tax revenue when EITC claimants spend the credits and inject money into the local

economy. Estimates in this report (and others) indicate that the additional tax revenue generated by the EITC is significant.

This paper identifies a significant pool of external economic resources that are, as yet, lying dormant in the federal treasury. Given the huge potential gains to the state economy were the federal EITC program fully exploited by eligible California residents, it would be relatively straightforward to design a federal EITC participation boosting program that is revenue neutral (at worst) from a state budget perspective.

References

- California Budget Project. 2001. "How Can a State Earned Income Tax Credit Help California's Working Poor Make Ends Meet?" Policy Brief, Sacramento: California Budget Project, <<http://www.stateeitc.com/documents/california/CABudgetBrief.pdf>> [accessed May 2010].
- Bartik, Timothy J. 2001. *Jobs for the Poor: Can Labor Demand Policies Help?* New York: Russell Sage Foundation.
- Berube, Alan. 2006a. "Using the Earned Income Tax Credit to Stimulate Local Economies." Washington: Brookings Institution, <<http://www.brookings.edu/metro/pubs/Berube20061101eitc.pdf>> [accessed May 2010].
- . 2006b. "The New Safety Net: How the Tax Code Helped Low-Income Working Families during the Early 2000s." Washington: Brookings Institution, <http://www.brookings.edu/~media/Files/rc/reports/2006/02childrenfamilies_berube/20060209_newsafety.pdf> [accessed May 2010].
- . 2010. "EITC Interactive: User Guide and Data Dictionary." Washington, D.C.: Brookings Institution, <<http://www.brookings.edu/metro/EITC/EITC-Data.aspx>> [accessed February 2010].
- . 2010. "Earned Income Credit Participation—What We (Don't) Know." Washington, D.C.: Brookings Institution, <<http://www.brookings.edu/metro/eitcparticipation.pdf>> [accessed February 2010].
- Berube, A., A. Kim, B. Foreman, and M. Burns. 2002. "The Price of Paying Taxes: How Tax Preparation and Refund Loan Fees Erode the Benefits of the EITC." Washington, D.C.: Brookings Institution and Progressive Policy Institute, <http://www.brookings.edu/~media/Files/rc/reports/2002/05poverty_alan%20berube%20%20anne%20kim%20%20benjamin%20forman%20%20and%20megan%20burns/berubekimeitc.pdf> [accessed May 2010].
- Brown, Dorothy A. 2007. "Race and Class Matters in Tax Policy." *Columbia Law Review* 107: 790–831.

- Burman, Leonard E., and Deborah Kobes. 2002. "Analysis of GAO Study of EITC Eligibility and Participation." Washington: Urban Institute, <<http://www.urban.org/UploadedPDF/410435.pdf>> [accessed May 2010].
- Danziger, Sheldon, and Sandra K. Danziger. 2005. "The U.S. Social Safety Net and Poverty: Lessons Learned and Promising Approaches," mimeo. University of Michigan.
- Edelman, Peter B. 2009. "Changing the Subject: From Welfare to Poverty to a Living Income." *Northwestern Journal of Law and Social Policy* 4(1): 14–29.
- Eissa, Nada, and Jeffrey B. Liebman. 1996. "Labor Supply Response to the Earned Income Tax Credit." *The Quarterly Journal of Economics* 111(2): 605–37.
- Goodman-Bacon, Andrew, and Leslie McGranahan. 2008. "How Do EITC Recipients Spend Their Refunds?" *Federal Reserve Bank of Chicago Economic Perspectives* 32(2): 17–32.
- Greenstein, Robert. 2003. "What is the Magnitude of the EITC Overpayments." Washington: Center on Budget and Policy Priorities, <<http://www.cbpp.org/cms/index.cfm?fa=view&id=1899>> [accessed May 2010].
- Grogger, Jeffrey. 2003. "The Effects of Time Limits, the EITC, and Other Policy Changes on Welfare Use, Work, and Income among Female-Headed Families." *The Review of Economics and Statistics* 85(2): 394–408.
- Haskell, John. 2006. "The State of the Earned Income Tax Credit in Nashville: An Analysis of Economic Impacts and Geographic Distribution of the 'Working Poor' Tax Credit, TY 1997–2004," mimeo, Vanderbilt University.
- Hotz, V. Joseph, and John Karl Scholz. 2001. "The Earned Income Tax Credit." NBER Working Paper 8078, available at <<http://www.nber.org/papers/w8078>>.
- Holtzblatt, Janet, Janet McCubbin, and Robert Gillette. 1994. "Promoting Work through the EITC." *National Tax Journal* 47(3): 591–607.
- Infranca, John J. 2008. "The Earned Income Tax Credit at an Incentive to Report: Engaging the Informal Economy Through Tax Policy." *New York University Law Review* 83:203–40.
- Jacob France Institute. 2004. "The Importance of the Earned Income Tax Credit and Its Economic Effects in Baltimore City," mimeo. University of Baltimore.
- Leigh, Andrew. 2009. "Who Benefits from the Earned Income Tax Credit? Incidence among Recipients, Coworkers and Firms." *B. E. Journal of Economic Analysis & Policy* (forthcoming), <<http://people.anu.edu.au/andrew.leigh/pdf/EITC%20incidence.pdf>>, [accessed May 2010].
- Liebman, Jeffrey B. 1998. "The Impact of the Earned Income Tax Credit on Incentives and Income Distribution." *Tax Policy and the Economy* 12:83–119.
- McCubbin, Janet. 2000. "EITC Noncompliance: The Determinants of the Misreporting of Children." *National Tax Journal* (53): 1135–64.

- Meyer, B. 2002. "Labor Supply at the Extensive and Intensive Margins: The EITC, Welfare, and Hours Worked." *American Economic Review* 92: 373–79.
- Meyer, Bruce D., and Dan T. Rosenbaum. 2000. "Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers." *The Quarterly Journal of Economics* 116(3): 1063–1114.
- Mikelson, Kelly S., and Robert I. Lerman. 2004. "Relationship between the EITC and Food Stamp Program Participation among Households with Children." Washington: The Urban Institute.
- Neumark, David, and William Wascher. 2000. "Using the EITC to Help Poor Families: New Evidence and a Comparison with the Minimum Wage." NBER Working Paper No. W7599.
- Romich, J., and T. Weisner. 2000. "How Families View and Use the EITC: Advance Payment versus Lump Sum Delivery." *National Tax Journal* 53: 1107–34.
- Rothstein, Jesse. 2010. "Is the EITC as Good as the NIT? Conditional Cash Transfers and Tax Incidence." *American Economic Journal: Economic Policy* 2: 177–208.
- TaxFoundation. 2006. "Federal Tax Burdens and Expenditures by State." Special Report No. 139. Washington, D.C.
- United States General Accounting Office. 2001. "Earned Income Tax Credit Eligibility and Participation." GAO-02-290R, Washington, D.C.
- United States Internal Revenue Service. 2002. "Participation in the Earned Income Tax Credit Program for Tax Year 1996." Small Business Self Employed Research, Washington.
- . (2002), "Compliance Estimates for Earned Income Tax Credit Claimed on 1999 Returns." Washington, <<http://www.irs.gov/pub/irs-soi/compaitc.pdf>> [accessed February 2010].
- Ventry, Jr., Dennis J. 2001. "The Collision of Tax and Welfare Politics: The Political History of the Earned Income Tax Credit." *Making Work Pay: The Earned Income Tax Credit and Its Impact on America's Families*. Bruce D. Meyer & Douglas Holtz-Eakin eds.
- Williams, Erica, and Nicholas Johnson. 2009. "How Much Would a State Earned Income Tax Credit Cost in 2010?" Washington: Center on Budget and Policy Priorities.

Notes

¹ Minnesota IMPLAN Group, Inc. was founded in 1993 by Scott Lindall and Doug Olson as an outgrowth of their work at the University of Minnesota starting in 1984. This developmental work closely involved the U.S. Forest Service's Land Management Planning Unit in Fort Collins and Dr. Wilbur Maki at the University of Minnesota. See <www.implan.com>.

² As former Treasury Secretary Paul O'Neill observed, IRS audits of EITC returns result in "very little money." Brown, 2008, citing O'Neill's "Refreshing Candor," *Rocky Mountain News*, Apr. 19, 2002.

³ Employment includes total wage and salary employees as well as self-employed jobs, including both full-time and part-time jobs.

⁴ The IRS will release the data for tax year 2007 in the spring of 2010.

⁵ State EITC basics (www.stateeitc.com) tracks these figures for states, counties and cities throughout the nation.

⁶ See for example Senate Bill SB 224 introduced in 2003, or Assembly Bill AB 21 introduced in 2006.