

THE SOCIO-ECONOMIC IMPACT OF E-VERIFY IN AN ERA
OF GLOBALIZATION: A SCOPING REVIEW AND
ANALYSES OF WORKFORCE OUTCOMES

by

Kathleen Casey Galvin

A dissertation submitted to the faculty of
The University of Utah
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

Department of Social Work

The University of Utah

August 2014

Copyright © Kathleen Casey Galvin 2014

All Rights Reserved

ABSTRACT

Latinos have accounted for 56% of the Nation's population growth in the past decade and in March of 2012 there were 11.7 million undocumented immigrants living in the U.S. Fifty-two percent (6.05 million) of these immigrants were of Mexican origin and 8 million of the total number of undocumented immigrants were/are part of the Nation's workforce, representing 5.2% of all workers. In response to these statistics and a public perception that foreign workers are "taking" jobs away from American workers, President Obama has said that immigration reform is a "top priority" for his administration. Mandating an electronic employment eligibility verification system is a key component (sometimes referred to as the "lynchpin") of immigration reform efforts. E-Verify is an electronic employment eligibility verification system that aims to deter unauthorized immigration and increase job security for U.S. citizens by curbing unauthorized employment. This dissertation followed a Multiple Article Path (MAP) format and resulted in three articles for publication. The overarching goal of this work was to contribute to the literature in a greatly under-researched area of immigration policy, workplace enforcement and specifically, E-Verify. In this dissertation, I first conducted a scoping review to map empirical knowledge currently available on E-Verify. Subsequently, I conducted two quasi-experiments utilizing interrupted time series designs to evaluate how variation in implementation of E-Verify influenced key workforce indicators. The overarching policy recommendation that I assert, based on the work of this dissertation, is that as social workers we must involve ourselves in political processes

and advocate for inclusive rather than exclusive immigration policies – this research supports that when immigration policies are inclusive, everyone is better off.

This dissertation is dedicated to my two awesome daughters, Clare and Erin Robke, who have literally spent their entire lives patiently awaiting the completion of their momma's Ph.D. And to my amazing husband, Wayne Robke, whose unconditional love, steadfast support, and unwavering certainty that this would get finished are the reasons that it did.

TABLE OF CONTENTS

ABSTRACT	iii
LIST OF TABLES	viii
LIST OF FIGURES	ix
Chapters	
1 INTRODUCTION	1
E-Verify: What Is It?	2
E-Verify: Where Did It Come From?	3
Research Questions	6
Literature Review	7
Theoretical Framework	19
MAP Article Outlines	26
Contributions to Social Work Education	30
Contributions to Social Work Practice (Macro)	31
References	31
2 ELECTRONIC EMPLOYMENT ELIGIBILITY VERIFICATION: WHAT DO WE KNOW ABOUT E-VERIFY?	34
Introduction	34
Methods	37
Narrative Summary of Included Studies	40
Summary of Findings from the 2009 E-Verify Program Evaluation	51
Narrative Assessment of Included Studies	51
Findings	55
Summary of Gaps in Research	61
Limitations	61
Conclusion	62
References	62
3 GLOBAL DISTRIBUTIVE JUSTICE AND E-VERIFY: AN ANALYSIS OF STATE-LEVEL WORKFORCE OUTCOMES	65
Introduction	65
Review of Literature	67
Study Overview	71
Methods	76

	Findings.....	77
	Limitations	87
	Discussion.....	88
	References.....	91
4	THE IMPACT OF VARIATION IN E-VERIFY IMPLEMENTATION ON WORKFORCE OUTCOMES IN TWO CALIFORNIA COUNTIES	94
	Introduction.....	94
	Overview of Paper	94
	Literature Review.....	96
	Federal History of E-Verify	97
	Methods.....	104
	Findings.....	106
	Limitations	107
	Discussion	113
	Conclusion	115
	References.....	116
5	SUMMARY, IMPLICATIONS, AND CONCLUSION	117
	Summary.....	117
	Implications.....	123
	Conclusion and Policy Recommendations.....	125
	References.....	126
	APPENDIX: INDICATOR DEFINITIONS.....	127

LIST OF TABLES

Table		Page
1	Summary of Included Studies	41
2	Findings from the 2009 E-Verify Program Evaluation.....	52
3	Assessment of Included Studies.....	56
4	State-Level E-Verify Legislation and Alignment with Global Distributive Justice.....	73
5	Arizona Findings.....	79
6	Illinois Findings	82
7	California Findings	84
8	Florida Findings	85
9	History of E-Verify Legislation in Orange County and Riverside County	102
10	Orange County Findings	108
11	Riverside County Findings	110

LIST OF FIGURES

Figure		Page
1	Data Collection Flow Chart	39
2	Publishers of Empirical Research on E-Verify	50
3	Visual Description of the Study	72

CHAPTER 1

INTRODUCTION

Latinos have accounted for 56% of the Nation's population growth in the past decade and in March of 2012; there were 11.7 million undocumented immigrants living in the U.S. (Passel, Cohn, & Gonzalez-Barrera, 2013). Fifty-two percent (6.05 million) of these immigrants were of Mexican origin and 8 million of the total number of undocumented immigrants were/are part of the Nation's workforce, representing 5.2% of all workers (Passel & Cohn, 2011). It is well documented that Mexicans frequently cross the border without documentation for the purpose of earning wages through employment with U.S. companies/organizations (Grimes et al., 2013; Massey et al., 2002). In response to these statistics and a public perception that foreign workers are "taking" jobs away from American workers, President Obama has said that immigration reform is a "top priority" for his administration (Bruno, 2013). Additionally, the 113th Congress has made many immigration-related proposals such as making an electronic employment verification system mandatory for all employers and permitting or requiring the electronic verification of previously hired workers (Bruno, 2013).

It is clear that immigration reform is at the center of public debate and a top priority for Congress and for the President. Further, it is clear that an electronic employment eligibility verification system is a key component (sometimes referred to as the "lynchpin") of immigration reform efforts. E-Verify is an electronic employment eligibility verification system that aims to deter unauthorized immigration and increase job security for U.S.

citizens by curbing unauthorized employment (Patel, 2010). In the context of comprehensive immigration reform, E-Verify is *the* current form of “workplace enforcement.”

As social workers, we are concerned with issues of social and economic justice and the rights of vulnerable populations (NASW Code of Ethics, 2008). In the U.S., we are working within the context of immigration reform being a “top priority” for the current administration and E-Verify being *the* key component of current workplace enforcement efforts. Further, E-Verify is a highly debated, emotionally-charged topic and one that has both far and deep-reaching implications for many of our most vulnerable clients. It is therefore incumbent upon us as social workers to better understand E-Verify and to subsequently advocate for our clients on micro, mezzo, and macro levels. This dissertation conducts analyses at the policy-level and will therefore be most useful for social workers at the macro level. It will also help us to better understand E-Verify and its implications through a social justice lens, which is central to our mission in the social work profession.

E-Verify: What Is It?

E-Verify is an electronic employment eligibility verification system in which, after reviewing a new employee’s I-9 form, an employer is required to log into an online system for the purpose of verifying the identity and work eligibility of that new employee. E-Verify employs databases of the Social Security Administration (SSA) and the U.S. Citizen and Immigration Services (USCIS) to “verify” the identity and employment eligibility of new hires. The employer has 3 days from the date of hire to submit the new employee’s information (social security number, date of birth, and citizenship status) to E-Verify. If a match exists, verification is successful. If a match does not exist, a tentative nonconfirmation (TNC) is issued. In the case of a TNC, the employer is supposed to tell the

employee about the TNC. The employee then has 8 days to resolve the issue. No negative actions can be taken against the employee during the time of appeal (Barnett, 2009; Patel, 2010; Rosenblum, 2011).

Participation in the program was originally on a voluntary basis determined by each employer. However, in 2007, Congress enhanced workplace enforcement of immigration laws and as part of their effort to control unauthorized employment, all federal contractors and subcontractors were required to use E-Verify. This is still the case for federal contractors and subcontractors. Outside the public sector, participation in E-Verify has remained largely voluntary with participation determined by individual employers. Increasingly, however, E-Verify laws are being differentially implemented on a state-by-state basis (Newman et al., 2012).

E-Verify: Where Did It Come From?

Historically, there have been three major federal programs/policies that have “set the stage” for E-Verify. The federal government’s first formal attempt to regulate work relationships between employers and foreign workers from México was the Bracero Program, which was in existence between 1942 and 1964. In 1986, with an estimated 3.2 million undocumented immigrants from México living and working in the U.S., the Immigration Reform and Control Act was passed. Ten years later, with the still growing number of undocumented immigrants from México entering the country and the workforce, Congress passed the Illegal Immigration Reform and Immigration Responsibility Act (1996). In an effort to strengthen the employment verification process, E-Verify was then born out of the Illegal Immigration Reform and Immigration Responsibility Act (IIRIRA). More details about each of these programs/policies follow later in this introduction.

Political Context

Similar to gun control, abortion, and welfare, immigration is a highly polarizing issue and one that divides everyday Americans, our elected officials on both local and federal levels, as well as those who have themselves immigrated to the United States. Those on the “proimmigrant” side of the debate typically include human rights organizations such as Amnesty International and business organizations such as the Associated Industries of Florida. Human rights and economic stability are the primary arguments for a proimmigrant stance. Those on the “anti-immigrant” side of the debate typically include politically conservative organizations such as the Federation for Immigration Reform (FAIR) and the Center for Immigration Studies (CIS).

These organizations point to their argument that both legal and illegal immigration (to use their language) have serious social, economic, environmental, security, and fiscal consequences for the United States (www.fairus.org; www.cis.org). Of note, though labor unions historically take an anti-immigration stance for reasons of job security for American workers (Baker, 2004), in 2011, the Service Employees International Union’s (SEIU) International Secretary-Treasurer Eliseo Medina made this public statement in reference to E-Verify: “Congress must stand up to the anti-immigrant forces and quit wasting time on job-killing government mandates. Instead, the House leadership should push for solid immigration solutions that strengthen our economy, support working families and restore the rule of law for the long-term” (retrieved from SEIU.org). Also of note, nationalist organizations such as the American Freedom Party that are typically anti-immigration in order to protect the “character of our nation,” do not support E-Verify as these organizations see it as a violation of privacy rights (Paul, 2013).

As this introduction is being written, the Border Security, Economic Opportunity, and Immigration Modernization Act of 2013, a bipartisan attempt at comprehensive immigration reform, was recently passed in the Senate (SB 68-32). It includes both mandatory E-Verify implementation by all employers in all states as well as clear pathways towards citizenship for undocumented immigrants already living and working within the U.S. It is an attempt to appease both “proimmigrant” and “anti-immigrant” interests. Whether it will be considered in the House of Representatives is still unknown due to the “path to citizenship” components of the legislation and the Republican-controlled House’s opposition to any such provisions.

While immigration itself is a deeply polarizing issue, E-Verify is overwhelmingly supported by Democrats and Republicans in both the House and the Senate as well as President Obama (Bruno, 2013). Since its inception, E-Verify has received unilateral support from all branches of the federal government – Executive, Legislative, and Judicial. The program has consistently received significant funding and has been extended time and time again. Most recently, the 112th Congress extended E-Verify until September 30, 2015 and allocated \$111 million towards improvement and implementation efforts (Bruno, 2013).

While Congress and the President are presently committed to E-Verify, academics have pointed to a variety of existing and potential problems with the program, both from a practical, implementation standpoint (i.e., cost to employers, erroneous nonconfirmations) and from a philosophical, social justice standpoint (i.e., furthering vulnerability of an already vulnerable population, reducing collective bargaining power, violating privacy laws). Further, while the program has been funded repeatedly and there are no signs that funding will be reduced anytime soon, there has been little research or evidence to support

the notion that increasing workplace enforcement of immigration policy through strengthening employment eligibility verification (E-Verify) has in fact resulted in deterring undocumented immigration and/or “protecting” jobs for American workers. Additionally, little has been written about E-Verify in the academic literature and there is no available scholarly work that empirically analyzes state-level variation in E-Verify policies (Newman et al., 2012). Given the current political context and the lack of available research on the impact of E-Verify implementation, this work is both timely and important. It aims to identify what is/is not known empirically about E-Verify and to contribute empirically to the literature by evaluating the policy’s impact on the workforce.

Research Questions

Following the Multiple Article Path (MAP) process, each article in this dissertation had its own specific research goal, guided by the overarching questions of this dissertation. These overarching questions were:

1. What is known, empirically, about the impact of E-Verify?
2. What is the socio-economic impact of E-Verify, by industry, in California, Florida, Arizona, and Illinois?
3. How do the findings from research question 2 (RQ2) align with global distributive justice?
4. What is the socio-economic impact of E-Verify on the workforce in the California counties of Orange County and Riverside County?

Literature Review

Historical Context

As stated in the previous section, there are three major federal programs/policies that create the historical context for E-Verify: the Bracero Program (1942-1964); the Immigration Reform and Control Act (1986); and the Illegal Immigration Reform and Immigration Responsibility Act (1996). What follows is an overview of each of these programs/policies.

Bracero Program (1942-1964)

In 1942, with the United States entering World War II, there was widespread fear of an agricultural labor shortage, and agriculture was seen as a significant component of national defense (Bickerton, 2001). Therefore, the U.S. government determined that action needed to be taken to maintain a strong agricultural economy despite mobilization. Because México had just entered World War II on the side of the Americans, there was a high sense of cooperation between the two countries and this provided an opportunity for contract labor, which both countries saw as beneficial at the time (Baker, 2004; Bickerton, 2001).

Under the wartime agreement, the two governments were responsible for operating the Bracero Program together. The idea was that braceros (Spanish term meaning “the strong-armed ones”) would come to a farm in the U.S., work for a specified period of time at the end of which the bracero would return to his family in México. Theoretically, braceros had their food, lodging, transportation, and repatriation to México at the end of their tenure paid for by the grower with whom they were employed. Braceros were unable to work for any other entity in the U.S., except for the employer with whom the contract originated. Additionally, the bracero was guaranteed, “. . . protection against discriminatory acts,” and

guaranteed work for at least 75% of the time of their contract (Baker, 2004, p. 84).

The original Bracero Program lasted from 1942 until 1947, at which time the program continued, but was restructured. Rather than operating as a government-to-government endeavor, it became a grower-to-worker arrangement. Under this system, there were increased human rights violations. “Exploitation of foreign contract workers, which had always been a problem during the war years, became even worse with reduced government oversight over the growers” (Baker, 2004, p. 84). Also with this version of the program, undocumented emigration from México to the U.S. increased due to the fact that those who were already residing in the U.S. were first in line to receive grower contracts (Baker, 2004). Therefore, there was an incentive for Mexican workers to first get themselves into the U.S. before seeking a contract.

México became displeased with the grower-to-worker arrangement. However, it wasn't until 1951, when the U.S. felt it was again necessary to gain Mexican support to alleviate fear of another labor shortage incited by the Korean War, that the U.S. and México signed another agreement which reestablished the government-to-government contract system (Bickerton, 2001). This is how the program operated until it ended in 1964 under a cloud of lowering domestic wages, increasing undocumented immigration, and allowing ongoing human rights violations.

From 1964 to 1986 there were no formal attempts through policy implementation to regulate work relationships between employers and foreign workers from México.

Immigration Reform and Control Act (1986)

In 1986, with 3.2 million undocumented immigrants from México living and working inside the U.S., the Immigration Reform and Control Act (IRCA) was passed by

Congress and signed into law by President Reagan. This law was an attempt to reduce the magnet of employment for those migrating without proper documentation from México to the U.S. (Barnett, 2009; Bruno, 2013; Gomberg-Munoz & Nussbaum-Barberena, 2011; Patel, 2010). For the first time in U.S. history, it became illegal for an employer to hire someone who was unable to provide proof of identity and authorization to work in the U.S. The three primary provisions included in the IRCA were (a) making it unlawful to knowingly hire, recruit, refer for a fee, or continue to employ an unauthorized alien; (b) requiring all employers to examine documents presented by new hires to verify identity and work authorization; and (c) requiring employers to complete and retain eligibility verification forms, I-9 forms. These three provisions are collectively referred to as “employer sanctions” (Bruno, 2013).

The expectation was that employers would inspect documents presented by new hires and subsequently, the employer would complete an I-9 form. The two major problems with this system were (a) documents used to verify identity and work authorization were prone to fraud and (b) employers were largely protected from prosecution if they were not in compliance with any part of IRCA (Barnett, 2009; Patel, 2010). Consensus in the literature (Barnett, 2009; Harper, 2012; Patel, 2010) is that the Immigration Reform and Control Act failed to meet its goal of reducing the magnet of employment for those migrating without proper documentation from México to the U.S. and Immigration and Naturalization Services (INS) reports that by 1996, there were an estimated five million undocumented immigrants from México living in the U.S.

Illegal Immigration Reform and Immigration Responsibility Act (1996)

Given that the attempt to curb unauthorized employment in the U.S. with IRCA was considered a failure and in the context of the still increasing number of undocumented immigrants from México entering the U.S., Congress enacted the Illegal Immigration Reform and Immigration Responsibility Act (IIRIRA) in 1996. The passing of IIRIRA was a direct effort to strengthen the employment verification process. Its purpose was to (a) reduce false claims of U.S. citizenship and document fraud; (b) reduce discrimination against employees; and (c) reduce the burden on employers to verify employees' work eligibility (Barnett, 2009; Bruno, 2013; Gomberg-Munoz & Nussbaum-Barberena, 2011; Patel, 2010). In order to accomplish these goals, the Attorney General was responsible for conducting three voluntary pilot projects in which an employer could verify the identity and employment eligibility of their new hires after examining their documents and completing an I-9 form.

The first of these three voluntary pilot projects began in 1997 and was called the Basic Pilot Program. It was available in the five states with the largest populations of undocumented immigrants - California, Florida, Illinois, New York, and Texas. In 2003, the Basic Pilot Program became available nationwide. In 2005, the program became internet-based and was re-named E-Verify in 2007. As of September 8, 2009, all employers with federal contracts over \$3,000 were (and still are) mandated to use E-Verify (Executive Order, 13465).

The Department of Justice (DOJ) and Immigration and Naturalization Services (INS) were originally responsible for operating the program. However, in the aftermath of the terrorist acts of September 11, 2001, George W. Bush established the Department of

Homeland Security (DHS) and administration of the Basic Pilot Program came under DHS's Immigration and Customs Enforcement (ICE) unit on March 1, 2003 (Bruno, 2013; Gomberg-Munoz & Nussbaum-Barberena, 2011; Patel, 2010). This shift, combined with an economic crisis in the U.S., created a situation in which undocumented immigrants were now associated with terrorism and their act of being in the U.S. without proper documentation was considered criminal (Gomberg-Munoz & Nussbaum-Barberena, 2011).

State-Level Implementation

Although through IRCA and IIRIRA, regulating the citizenship and naturalization status of individuals clearly falls to the federal government, the U.S. Constitution does not exclude states from regulating their undocumented populations (Barnett, 2009). Pointing again to the events of September 11, 2001 and in the context of struggling state economies, to varying degrees, states have become involved in workplace enforcement as a way to “protect” American jobs within individual states and to deter undocumented immigrants from entering and staying within state boundaries. Further, after September 11, 2001, state-level assistance in enforcing immigration laws was encouraged by the federal government and states are now permitted to investigate, arrest, and detail suspected violators (Patel, 2010). The following section outlines how the four states included in this dissertation have used/not used E-Verify to exclude undocumented immigrants from the workforce.

California and E-Verify

On July 1, 2007, Mission Viejo, California was the first California locality to pass an E-Verify law. The city ordinance (Ordinance 07-247) required that the city and certain employers with city contracts use the E-Verify system to verify identity and work eligibility

of new hires. Between July 1, 2007 and September 1, 2011, 12 California localities followed suit and passed similar ordinances. Some local ordinances required all employers within the locality's boundaries to utilize E-Verify to verify the identity and work eligibility of new hires (e.g., Temecula, Murrieta, Menifee, Lancaster, and Lake Elsinor). Other local ordinances (e.g., Escondido, Hemet, Hesperia, San Bernadino, and Wildomar) required employers working with the city and/or county to utilize E-Verify to verify the identity and work eligibility of new hires. Still other local ordinances (Simi Valley and Palmdale) required certain employers doing business with the city/county to utilize E-Verify to verify the identity and work eligibility of new hires.

Each of these local ordinances was nullified on October 9, 2011 when, in an effort to “help businesses and grow and provide jobs, not set-up barriers that cost jobs” (Assemblyman Paul Fong) Governor Brown signed into law Assembly Bill 1236 – otherwise known as the Employment Acceleration Act of 2011 (AB 1236). This law, “. . . prohibits the state of California and any of its cities, counties, or special districts from requiring an employer (other than a government entity) to use E-Verify as a condition of receiving a government contract, applying for or maintaining a business license, or as a penalty for violating licensing or other similar laws” (AB 1236). Employers in California are still free to use E-Verify on a voluntary basis or as required by federal contracts.

Florida and E-Verify

On May 27, 2011, Governor Scott signed into law Executive Order 11-116, which specified that all public employers must use E-Verify to verify the identity and work eligibility of new hires. Additionally, all contractors with public contracts must use E-Verify to verify the identity and work eligibility of their new hires during the contract period.

Finally, all contractors with public contracts must require their subcontractors to use E-Verify to verify the identity and work eligibility of new hires during the contract period (Executive Order 11-116).

Similar to California, prior to state-level government passing a law(s) specific to E-Verify utilization, localities in Florida passed their own ordinances regarding E-Verify utilization. Different from California where there were 13 such localities, in Florida, there were only two localities that passed specific E-Verify utilization laws – Bonita Springs and Hernando County. On June 1, 2009, Bonita Springs passed Ordinance 09-04 which required any vendor or contractor providing services to the City to utilize E-Verify to verify the identity and work eligibility of new hires during the contract period with the exceptions of (a) contracts for services below \$5,000, (b) contracts for a single performance that will be done in less than 30 days, and (c) service provider provides an affidavit that they are an individual and that no one else will perform the work. In Hernando County, Legislative File #3516 (May 11, 2010) states that all contractors and subcontractors for the county must use E-Verify to verify the identity and work eligibility of new hires. Both of these local laws are still in effect.

Arizona and E-Verify

Under the Legal Arizona Workers Act (LAWA), Arizona's E-Verify law is simple and sweeping: As of January 1, 2008, all Arizona employers must participate in E-Verify to verify the identity and work eligibility of new hires (HB 2745). While there have been attempts to challenge LAWA in the courts (Arizona Contractors Association v. Candelaria and Chicanos Por La Causa v. Napolitano), LAWA has been upheld with the explanation that these lawsuits are challenging employment law (state regulated) versus immigration law

(federally regulated). Therefore, it is within the state's purview to enact and enforce such laws (Barnett, 2009).

Illinois and E-Verify

Illinois is a curious case in terms of E-Verify law. It is the only state that in 2007 actively tried to prevent private employers from using E-Verify to verify the identity and employment eligibility of new hires, citing privacy violations and inaccurate databases associated with the system (Gomberg-Munoz & Nussbaum-Barberena, 2011). However, the Department of Homeland Security (DHS) challenged this law in federal court and won. Therefore, as of January 1, 2010, E-Verify utilization in the state of Illinois is not prohibited and it remains voluntary (Act 096-0623).

Evaluation of E-Verify

Between 2009 and 2012, E-Verify was evaluated in the areas of database accuracy, employer opinions, employer and employee experiences in Arizona after state legislative mandates went into effect, and the relationship between E-Verify Employer Agents (EEAs), their clients, and the E-Verify Program. Each of these four studies was conducted by Westat, a private company that provides research services to the federal government. These evaluation efforts have been largely based on self-report data from employers who have utilized E-Verify. However, the E-Verify Transaction Database, document review, interviews with federal staff and contractors, and telephone interviews with EEAs and clients were also utilized for some components of the evaluation efforts. While the evaluations have shown improvements in database accuracy, they continue to show discrimination, compliance, and privacy remain areas of significant concern (Bruno, 2013;

Government Accountability Office, 2010).

Areas of Concern Related to Implementation

As stated previously, while Congress has demonstrated commitment to E-Verify and to its expansion, the literature points to significant areas of concern with implementation of E-Verify both as it stands now as well as concerns regarding its potential expansion. These concerns are summarized below.

Reliability/Accuracy of Databases

Since its inception, accuracy of the databases used by E-Verify to verify identity and employment eligibility of new hires has been an ongoing concern. Both erroneous nonconfirmations (current estimates range from .1% to 4%) as well as erroneous confirmations (current estimates are that roughly 54% of unauthorized workers are confirmed in the E-Verify system) occur with more frequency than would be ideal (Bruno, 2013; Patel, 2010; Rosenblum, 2011). While academics agree that improving database accuracy is an important area for improvement, there is some disagreement regarding what is an “acceptable” margin of error. Some argue that database accuracy is continuously improving and with such a large system, there has to be room for error (Barnett, 2009). Others look at the same numbers and argue that implementation of a system that affects so many people (hundreds of thousands) cannot afford any margin of error (Patel, 2010; Rosenblum, 2011).

Identity and Document Fraud

E-Verify can identify certain kinds of identity and document fraud. However, the system is still vulnerable to other kinds of identity and document fraud. For example, if an

employer is presented with a driver's license and supporting documents with a name and birthdate that "matches" in the SSA and USCIS databases, there is no way to determine whether that identity has been "stolen" or if the person presenting the documents is in fact the same person in the federal databases. It is for this reason that some have advocated for the addition of a photo tool to the current E-Verify system (Barnett, 2009; Rosenblum, 2011) Some academics have expressed concern that if E-Verify is made mandatory across the board, existing problems with identity and document fraud will likely be exacerbated (Barnett, 2009; Rosenblum, 2011).

Impact on Employers

Many academics have pointed to the burdensome nature of the E-Verify system (Patel, 2010; Rosenblum, 2011). For example, participation in E-Verify is free, but there are start-up costs for the employer such as setting aside time for training and loss of productive work time dealing with bureaucratic issues associated with the system. Rosenblum (2011) points to the time and uncertainty that E-Verify adds to the hiring process as being burdensome for employers. Additionally, as part of participating in the E-Verify system, an employer must enter into a memorandum of understanding (MOU) with DHS and SSA. The MOU states that the employer must release records beyond the scope of immigration matters. Further, the employer must periodically allow DHS and SSA to review I-9 and other employment records and to allow those agencies to interview the employer and employees regarding the employers' use of E-Verify. This arrangement leaves employers vulnerable to audit and/or raid as well as fines. Failure to comply with these criteria can result in contract termination and/or suspension of federal contracts (Patel, 2010).

Compliance

The literature identifies multiple concerns related to employer compliance in utilizing the E-Verify system (Barnett, 2009; Bruno, 2013; Patel, 2010; Rosenblum, 2011). First, as part of the E-Verify system, employers are supposed to tell workers when there has been a TNC (tentative nonconfirmation) and provide the worker with information on how to correct the TNC. This does not always happen (Barnett, 2009; Rosenblum, 2011). Another employer compliance issue is “off the books” employment. This is when an employer hires a worker without formally reporting or documenting the hire at all. This includes not reporting the hire to E-Verify. Immigrant workers contribute 700 billion dollars annually to economic activity and “off the books” employment is problematic as it jeopardizes this contribution (Bruno, 2013; Patel, 2010). E-Verify has also been associated with defensive hiring practices. Rather than “risking” hiring a person who might come back with a TNC, employers might completely avoid hiring any immigrants at all (including those who are legally eligible to work in the U.S.; Patel, 2010).

Areas of Concern Related to Social Justice

While little has been written about E-Verify in the academic literature, those who have written about it have identified a variety of areas of concern related to social justice. As we will see in the next section, a form of social justice, global distributive justice, is the overarching theoretical perspective that will inform this research. Therefore, it is important to make explicit the social justice concerns related to E-Verify implementation that have previously been identified in the literature. What follows is an overview of these concerns:

1. Exclusionary practices such as utilizing E-Verify provide the U.S. Government widespread access to undocumented labor as well as access to the tax dollars of

an undocumented labor force. In essence, this population is contributing significantly to the U.S. economy, but does not enjoy any “rights” of citizenship (Gomberg-Munoz & Nussbaum-Barberena, 2011);

2. E-Verify increases the vulnerability of an already vulnerable population. Employers have increased power over undocumented workers and these employers are free to use this power in whatever way they choose. This could include firing longtime employees to hire less-expensive, new employees or requiring employees to work in more dangerous conditions (Gomberg-Munoz & Nussbaum-Barberena, 2011);
3. E-Verify undermines organizing efforts and jeopardizes the ability of undocumented workers to negotiate their own working conditions (Gomberg-Munoz & Nussbaum-Barberena, 2011);
4. There is potential for decreased wages for employees as employers attempt to protect themselves financially against potential fines and/or sanctions. In other words, they may try to save money in case they need that money later to pay a fine (Patel, 2010);
5. It is highly burdensome and costly for an employee to try to correct a TNC. Consequently, less than .05% of those who receive a TNC follow through with the process of trying to reverse it (Barnett, 2009; Rosenblum, 2011);
6. An employee has no recourse should they receive an erroneous TNC (Barnett, 2009; Rosenblum, 2011);

7. TNCs vary widely by ethnic group, creating discriminatory outcomes and erroneous TNC rates are disproportionately high for foreign-born workers who have a legal right to work in the U.S. (Rosenblum, 2011; Westat, 2009);
8. Employers can use E-Verify as a prescreening tool and exclude potential workers based on their appearance (Barnett, 2009; Rosenblum, 2011);
9. Successful implementation of E-Verify requires a national identity system (National ID) and this is “anathema” to freedom (Harper, 2012).

Theoretical Framework

Global Distributive Justice: A Cosmopolitan Perspective

Though E-Verify does not claim to be a policy focused on achieving social justice, this dissertation uses a social justice lens because as social workers, we are committed to social justice on micro, mezzo, and macro levels of practice. We “. . . strive to ensure access to needed information, services, and resources; equality of opportunity; and meaningful participation in decision making for all people” (NASW Code of Ethics, 2008). While there are a variety of social justice perspectives including distributive justice (what a society owes an individual), legal justice (what an individual owes society), and commutative justice (what individuals owe each other), distributive justice is most aligned with social work principles. In other words, social workers concern themselves with how goods and services are distributed within a society (Van Soest & Garcia, 2003).

Specifically, the distributive justice principles of *citizenship* and *equality of opportunity* are used to evaluate the socio-economic impact of E-Verify on the workforce in the four study states and on industries that rely heavily on undocumented immigrants as workers. Further, because of the potential implications of this research for industries and

workers across the globe, it is critical to this work that the concepts of “society” and of “citizenship” are expanded beyond national borders.

In this section, I will first underscore the importance of extending principles of distributive justice beyond national borders. Next, I will provide a brief overview of three different approaches to global distributive justice (social liberalism, laissez-faire liberalism, and cosmopolitan liberalism) and highlight the reasoning behind applying a cosmopolitan approach to frame this research. Finally, I will expound on the concepts of citizenship and equality of opportunity that will be used to evaluate E-Verify in this dissertation.

Why Apply a Global Perspective to Distributive Justice?

As stated previously, because of the potential implications of this research for industries and workers across the globe, it is critical to this work that the concepts of “society” and of “citizenship” are expanded beyond national borders. Caney (2001) advocates a global application of principles of distributive justice when he says “. . . given the reasons we give to defend the distribution of resources and given our convictions about the irrelevance of people’s cultural identity to their entitlements, it follows that the scope of distributive justice should be global” (p. 977). In a later work, Caney (2008) draws on his own earlier works (2001, 2005, 2006) as well as the works of Thomas Pogge (1989, 2002) to provide three distinct arguments against state borders as determinants of principles of distributive justice:

1. *Moral Arbitrariness*: According to Caney (2008), the geographical state into which one is born is the result of luck. Therefore, “It is hard to see why something so arbitrary...should be allowed to have such normative implications” (p. 505).

2. *Incompleteness and Conservatism*: The argument here is about accepting state borders as normative without questioning the need for or the goodness of the existence of the state in the first place. Additionally, this argument points to the importance of questioning how states originally came into existence – through “. . . accidents of history and military conquests” (Caney, 2008, p. 507).
3. *Theoretical Inadequacy*: Caney (2008) uses the example of global climate change to demonstrate that both the idea and the reality of state borders fail, “. . . to cope with problems that are both inherently global in their nature and which also raise questions about the distribution of burdens and benefits” (p. 508).

Based on the concepts of moral arbitrariness, incompleteness and conservatism, and theoretical inadequacy, this dissertation does not apply principles of distributive justice that are guided by geographical boundaries.

Three Approaches to Global Distributive Justice

Within global distributive justice, there are various approaches. Beitz (1999) characterizes these approaches as (a) social liberalism; (b) laissez-faire liberalism; and (c) cosmopolitan liberalism. These approaches are outlined briefly below.

Social Liberalism

This approach is put forth by the theorists David Miller (1995), John Rawls (1993), and John Vincent (1986). Beitz (1999) says,

Social liberalism is motivated by a two-level conception of international society in which there is a division of moral labor between the domestic and international levels: state-level societies have the primary responsibility for the well-being of their people, which the international community serves mainly to establish and maintain background conditions in which just domestic societies can develop and flourish.

The agents of international justice are states and societies, not individual persons (on the one hand) or international or transnational actors (on the other). (p. 272)

There are two strands of thought that run through all approaches put forth by social liberalists. The first is that all societies should respect basic human rights. The second is that ensuring these rights is the responsibility of one's own government and people residing within that society's borders (Beitz, 1999).

While the social liberalism approach to global distributive justice provides a framework for applying distributive justice principles on a global scale, the framework is hierarchical in nature, assigning higher priority and power to one's own government as determined by geographical borders. As this research seeks to eliminate hierarchy as an element of global distributive justice, the social liberalism approach will not be used to frame this work.

Laissez-Faire Liberalism

Applied to distributive justice, laissez-faire liberalism contends that distribution of goods and services can be considered fair and just when it is derived at based on previous fair and just transactions that did not violate anyone's basic human rights (Nozick, 1974; Steiner, 1994). In other words, this approach takes into account historical realities regarding how state boundaries were developed and recognizes that those boundaries were most often derived at based on unjust actions. Therefore, "If the initial rights belong equally to all human beings and apply to all natural resources, it is hard to see why political boundaries should affect the validity or strengths of person's claims" (Beitz, 1999, p. 282).

Based on the unjust way in which goods and services are currently distributed across the globe, this approach advocates redistribution of goods and services on a global scale.

According to Beitz (1999), there are three obvious problems with implementation of this approach. First, the practicality of it is hard to imagine. Second, there is no clear course for, “. . . how to establish the value of an equal share of natural resources . . .” (p. 283). Third, there is no clear course of action for, “. . . how to administer the system of transfer required to redress inequalities” (p. 283).

The laissez-faire liberalism approach to global distributive justice is appealing from a theoretical perspective. However, it would be difficult to apply this approach to this research as this research is not focused on redistribution of resources based on historically unjust transactions. Rather, this research is focused on evaluation of a “real-world” program/policy and the aim is to be able to apply the findings in a “real-world,” meaningful way.

Cosmopolitan Liberalism and Its Application to This Research

This approach to global distributive justice is most directly applicable to the present research and has been chosen to frame this work. It is distinct from both social liberalism in which there is a division of moral labor between domestic and international levels and laissez-faire liberalism in which just-ness is based on historical context and moving forward involves impractical redistribution of resources across the globe. Cosmopolitan liberalism recognizes “. . . that every human being has a global stature as the ultimate unit of moral concern” (Pogge, 1992, p. 49). Further, Beitz (1999) says, “It applies to the whole world the maxim that choices about what we should do or what institutions we should establish should be based on an impartial consideration of the claims of each person who would be affected” (p. 287). Further, Caney (2001) identifies three presumptions associated with the cosmopolitan approach: (a) individuals have moral worth; (b) individuals have this moral worth equally; and (c) people’s equal moral worth generates moral reasons that are binding

on everyone (p. 977). Given these ethical presumptions, cosmopolitans argue, it does not make sense to apply them arbitrarily based on legal citizenship. This perspective is significant in relation to evaluating E-Verify based on concepts of global distributive justice in that based on these ethical presumptions, the notion of “citizenship” should not supersede the notion of morality.

Additionally, recognizing the increasing interdependence that individuals, institutions, and societies have on one another is another key component of the cosmopolitan approach to distributive justice. Pogge (1992) says, “It is only because all human beings are now participants in a single, global institutional scheme – involving such institutions as the territorial state and a system of international law and diplomacy as well as a world market for capital, goods, and services – that all human rights violations have come to be, at least potentially, everyone’s concern” (p. 51). Recognition of global interdependence is also central to the present research and this parallel was a significant factor in determining that a cosmopolitan approach to global distributive justice is most aligned with the goals of this work. Specifically, the works of Thomas Pogge (1989, 2002) and Simon Caney (2001, 2005, 2006, 2008) will be drawn upon to frame this research.

Cosmopolitan Global Distributive Justice Concepts Framing the Analysis: Citizenship and Equality of Opportunity

Citizenship and Cosmopolitanism

In their discussion of citizenship theory, Kymlicka and Norman (1994) say, “. . . we should expect a theory of the good citizen to be relatively independent of the legal question of what it is to be a citizen, just as a theory of the good person is distinct from the metaphysical (or legal) question of what it is to be a person” (p. 353). Further, these authors

highlight a focus on responsibilities and virtues associated with “good citizenship” versus a focus on arbitrary political boundaries. This aligns well with a cosmopolitan perspective of global distributive justice in which individual morality or “goodness” has nothing to do with political boundaries.

In 1949, T. H. Marshall advanced the notion that there are three kinds of rights associated with citizenship. These rights include civil rights, political rights, and social rights. Kymlicka and Norman (1994) summarize Marshall when they say, “By guaranteeing civil, political, and social rights to all, the welfare state ensures that every member of society feels like a full member of society, able to participate in and enjoy the common life of society” (p. 354). Kymlicka and Norman (1994) go on to explain the need for responsibilities of citizenship to go hand-in-hand with rights of citizenship. These are identified as responsibilities of economic self-reliance, political participation, and civility.

Equality of Opportunity and Cosmopolitanism

Cosmopolitan theorists Simon Caney (2001) and Thomas Pogge (1989, 1994, 2002) advocate for a global application of the equality of opportunity principle of distributive justice. Caney (2001) argues, “Persons should have the same opportunity to achieve a position, independently of what nation or state or class or religion or ethnic group they belong to” (p. 114). Further, Caney (2001) identifies two ideals of a global application of equality of opportunity: (a) it is a procedural versus an outcome-related concept - individuals cannot have worse opportunities based on their nationality and (b) it is about individuals’ entitlements or “rights” rather than responsibilities or obligations as we saw with the concept of “good citizenship.”

Expanding on this concept in a later work, Caney (2008) applies the equality of

opportunity principle to question the significance that borders play in the global scheme. More specifically, Caney argues that the arbitrary nature of which society one is born into has little moral relevance in terms of how people's opportunities should be shaped. Caney additionally highlights the fact that any society, regardless of how its boundaries are conceived, is comprised of individuals who are heterogeneous in terms of a variety of characteristics including, "... their abilities, willingness to work, neediness, contribution to the social product, and so on . . ." (p. 506). In this context then, Caney argues, borders are arbitrary and should carry no relevance in terms of equality of opportunity.

Summary of Theoretical Framework

This research will apply a cosmopolitan view of global distributive justice in which concepts of "morality" and "good citizenship" are not tied to particular borders, but rather assigned to individual human beings regardless of where they were born or choose to reside. E-Verify is a current, "real-world" program/policy that will be evaluated on the distributive justice concepts of *citizenship* and *equality of opportunity*. Specifically, E-Verify will be evaluated based on the rights (civil, political, social) and responsibilities (economic self-reliance, political participation, civility) associated with "good citizenship" and on access to economic opportunities.

MAP Article Outlines

This section outlines the individual research questions, design and methodologies, and data sets for the separate studies. In addition, this section includes information on the peer-reviewed journal to which each article will be submitted for publication. As a point of reference, IRB approval was not needed for the first study and IRB exemption was granted in the cases of the second and third studies.

Chapter 2

This study was a “scoping review” (Arksey & O’Malley, 2005) of the literature and mapped available empirical information regarding the impact of E-Verify. As this was a scoping review, the goal was not to describe research findings in detail, but rather to map the range of empirical material available on the impact of E-Verify (Arksey & O’Malley, 2005). Specifically, this study answered the following research question:

1. What is known, empirically, about the impact of E-Verify?

This article will be submitted to the *Journal for Immigrant & Refugee Studies* as both review of immigration policy and economic implications of immigration/emigration are included in the “aims and scope” of the journal.

Chapter 3

This study was a state-by-state analysis of Quarterly Workforce Indicator (QWI) data pre and post state-level implementation of E-Verify in each of the four identified states (California, Florida, Arizona, and Illinois). This study answered the following research questions:

1. What is the socio-economic impact of E-Verify, by industry, in California, Florida, Arizona, and Illinois?
2. How do the findings from research question 1 (RQ1) align with global distributive justice?

Quarterly Workforce Indicator Data Set

According to the Quarterly Workforce Indicators 101 document available through the U.S. Census website (http://lehd.ces.census.gov/doc/QWI_101.pdf), “The source data for

the Quarterly Workforce Indicator (QWI) is the Longitudinal Employer-Household Dynamics (LEHD) linked employer-employee microdata. Much of these data are collected via unique federal-state data sharing collaboration, the Local Employment Dynamics (LED) partnership.” Below is a further explanation of the data taken from the Quarterly Workforce Indicators 101 document:

The Quarterly Workforce Indicators (QWI) provide labor market statistics by industry, worker demographics, employer age and size. Unlike statistics tabulated from firm or in-person-level data, the QWI source data are unique job-level data that link workers to their employers. Because of this link, labor market data in the QWI is available by worker age, sex, educational attainment, and race/ethnicity. This allows for analysis by demographics of a particular local labor market or industry – for instance, identifying industries with aging workforces. Links between workers and firms also allow the QWI to identify worker flows – hires, separations, and turnover – as well as net employment growth. As most hiring activity is the consequence of worker turnover rather than employment growth, a focus on employment growth alone may misrepresent employment opportunity in the local labor market. Wages by industry and demographics as well as by whether the worker was newly hired are also available. QWI wages for new hires can be compared to wages for continuing workers, and wage growth for similar workers across industries can be compared to identify important local labor market trends

Study Design and Methodology

This study employed an interrupted time series design to compare the time-series pattern (trend) pre- and post – E-Verify implementation. The *independent variable* for this study was *time* with the “intervention” being *E-Verify implementation*. The *dependent variables* included changes in:

1. Total employment
2. Net job flows
3. Job creation
4. New hires

5. Separations
6. Turnover
7. Average monthly earnings
8. Average new hire earnings

This article will be submitted to the *Journal of Poverty and Social Justice* as this journal, “. . . provides a blend of research, policy and practice related to all aspects of poverty and social exclusion.”

Chapter 4

This study was a county-level analysis of Quarterly Workforce Indicator (QWI) data pre and post city-level implementation of E-Verify laws in both of the California study counties (Orange County and Riverside County). This study answered the following research question:

1. What is the socio-economic impact of E-Verify on the workforce in the California counties of Orange County and Riverside County?

Quarterly Workforce Indicator Data Set

Please refer to the article outline for Chapter 3 (above) for a description of the Quarterly Workforce Indicator (QWI) data set.

Study Design and Methodology

This study utilized an interrupted time series design to compare the time-series pattern (trend) pre- and post – E-Verify implementation. The *independent variable* for this study was *time* with the “intervention” being *E-Verify implementation*. The *dependent variables* included changes in:

1. Total employment
2. Net job flows
3. Job creation
4. New hires
5. Separations
6. Turnover
7. Average monthly earnings
8. Average new hire earnings

This article will be submitted to the *Journal of Poverty and Social Justice* as this journal, “. . . provides a blend of research, policy and practice related to all aspects of poverty and social exclusion.”

The sum of this work will contribute to the body of literature on immigration policy. In particular, it will contribute to the under-researched area of workplace enforcement of immigration policy.

Contributions to Social Work Education

There are a variety of ways in which this research will contribute to social work education. First, this research will allow social work educators to arm social work students with information and knowledge in order for them to advocate and educate against programs/policies that are not socially just and for programs that are socially just, in a global context. Next, this work emphasizes the importance of social workers’ role in policy analysis and development. Further, this work highlights the importance of researching programs/policies that have not been previously researched or tested. Additionally, it emphasizes the importance of theory-informed and tested social policy. Finally, this work

underscores the significance of developing and maintaining policy-oriented field placements for our students.

Contributions to Social Work Practice (Macro)

This research allows social workers to advocate for further research on E-Verify. It provides critical information for us to educate our policy-makers at every level (local, state, Federal) regarding the reality of what we do and more to the point, do not know about E-Verify.

Further, using this work as the underpinnings, we can better understand the contradictions in the United States' "open" trade policies and "restrictive" immigration policies, we must advocate for alignment of these policies. We must advocate for a global conceptualization of the concept of "citizenship," in which the notion of "legal" citizenship loses meaning. In this way, our immigrant clients will have the opportunity to participate in the "responsibilities" of citizenship (economic self-sufficiency and political participation) and subsequently be granted "rights" of citizenship (civil, political, and social rights).

References

- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.
- Baker, S. (2004). Agricultural guestworker programs in the United States. *Texas Hispanic Journal of Law and Policy*, 10(79), 81–114.
- Barnett, M. B. (2009). The high cost of low-cost workers: Missouri enacts new law targeting employers of unauthorized workers. *Immigration and Nationality Law Review*, 30, 801–821.
- Beitz, C. R. (1999). International liberalism and distributive justice: A survey of recent thought. *World Politics*, 51(2), 269–296.
- Bickerton, M. E. (2000–2001). Prospects for a bilateral immigration agreement with Mexico: Lessons from the Bracero program. *Texas Law Review*, 79(4), 895–919.

- Bruno, A. (2013). *Unauthorized aliens: Policy options for providing targeted immigration relief*. Washington, DC: Congressional Research Service.
- Caney, S. (2001). Cosmopolitan justice and equalizing opportunities. *Metaphilosophy*, 32, 1–2, 113–134.
- Caney, S. (2005). *Justice beyond borders: A global political theory*. Cambridge, MA: Oxford University Press.
- Caney, S. (2006). Cosmopolitan justice, rights and global climate change. *Canadian Journal of Law and Jurisprudence*, 19(2), 255–278.
- Caney, S. (2008). Cosmopolitan justice and the state. *Political Studies*, 56, 487–518.
- Grimes, M., Golob, E., Durcikova, A., & Nunamaker, J. (2013). *Reasons and resolve to cross the line: A post-apprehension survey of unauthorized immigrants along the U.S.–Mexico Border*. Tucson, AZ: National Center for Border Security and Immigration.
- Gomberg-Munoz, R., & Nussbaum, L. (2011). Is immigration policy labor policy? Immigration enforcement, undocumented worker, and the state. *Society for Applied Anthropology*, 70(4), 366–375.
- Harper, J. (2008). Electronic employment eligibility verification: Franz Kafka's solution to illegal immigration (Policy Analysis No 612). Retrieved from CATO Institute website: <http://www.cato.org/publications/policy-analysis/electronic-employment-eligibility-verification-franz-kafkas-solution-illegal-immigration?print>
- Kymlicka, W., & Norman, W. (1994). Return of the citizen: Recent work on citizenship theory. *Ethics*, 104(2), 352–381.
- Massey D. S., & Malone, N. (2002). Pathways to legal immigration. *Population Research and Policy Review*, 21, 473–504.
- Miller, D. (1995). *On nationality*. New York, NY: Oxford University Press.
- National Association of Social Workers. (1999). NASW code of ethics. Retrieved June 9, 2014 from <http://www.socialworkers.org/pubs/code/default.asp>
- Newman, B. J., Johnston, C. D., Strickland, A. A., & Citrin, J. (2012). Immigration crackdown in the American workplace explaining variation in E-Verify policy adoption across the U.S. States. *State Policy and Policy Quarterly*, 12(2), 160–182.
- Nozick, R. (1974). *Anarchy, state and utopia*. New York, NY: Basic Books.
- Passel, J. S., & Cohn, D. (2011). *Unauthorized immigrant population: National and state trends, 2010*. Washington, DC: Pew Hispanic Center.
- Passel, J. S., Cohn, D., & Gonzalez-Barrera, A. (2013). *Population decline of unauthorized immigrants stalls, may have reversed*. Washington, DC: Pew Hispanic Center.

- Patel, S. C. (2010). E-Verify: An exceptionalist system embedded in the immigration reform battle between federal and state governments. *Boston College Third World Law Journal*, 30(2), 543–574.
- Pogge, T. W. (1989). *Realizing Rawls*. Ithaca, NY: Cornell University Press.
- Pogge, T. W. (1992). Cosmopolitanism and sovereignty. *Ethics*, 103(1), 48–75.
- Pogge, T. W. (1994). An egalitarian law of peoples. *Philosophy & Public Affairs*, 23(c), 195–224.
- Pogge, T. W. (2005). Human rights and global health: A research program. *Metaphilosophy*, 36(1–2), 182–209.
- Rawls, J. (1993). *Political liberalism* (Vol. 4). New York, NY: Columbia University Press.
- Rosenblum, M. R. (2011, August). *U.S. immigration policy since 9/11: Understanding the stalemate over comprehensive immigration reform*. Retrieved from the Migration Policy Institute website: <http://www.seiu.org>
- Steiner, V. (1994). Assimilation, labor market experience, and earnings profiles of temporary workers and permanent immigrant workers in Germany. *International Review of Applied Economics*, 8, 130–156.
- Vincent, R. J. (Ed.). (1986). *Foreign policy and human rights: Issues and responses*. New York, NY: Cambridge University Press.

CHAPTER 2

ELECTRONIC EMPLOYMENT ELIGIBILITY VERIFICATION: WHAT DO WE KNOW ABOUT E-VERIFY?

Introduction

Latinos have accounted for 56% of the Nation's population growth in the past decade and in March of 2012, there were 11.7 million undocumented immigrants living in the U.S. (Passel, Cohn, & Gonzalez-Barrera, 2013). Fifty-two percent (6.05 million) of these immigrants were of Mexican origin and 8 million of the total number of undocumented immigrants were/are part of the Nation's workforce, representing 5.2% of all workers (Passel & Cohn, 2011). It is well documented that Mexicans frequently cross the border without documentation for the purpose of earning wages through employment with U.S. companies/organizations (Grimes et al., 2013; Massey et al., 2002). In response to these statistics and a public perception that foreign workers are "taking" jobs away from American workers, President Obama has said that immigration reform is a "top priority" for his administration. Further, the 113th Congress made immigration-related proposals that include making an electronic employment verification system mandatory for all employers and permitting or requiring the electronic verification of previously hired workers (Bruno et al., 2013).

Immigration reform is at the center of public debate and incorporating an electronic employment eligibility verification system is a key component of most immigration reform proposals, including the Border Security, Economic Opportunity, and Immigration

Modernization Act of 2013, a bipartisan attempt at comprehensive immigration reform (SB 68-32). E-Verify is an electronic employment eligibility verification system that aims to deter unauthorized immigration and increase job security for U.S. citizens by curbing unauthorized employment (Patel, 2010). In the context of comprehensive immigration reform, E-Verify is *the* current form of “workplace enforcement.”

E-Verify is an electronic employment eligibility verification system in which, after reviewing a new employee’s I-9 form, an employer is required to log into an online system for the purpose of verifying the identity and work eligibility of that new employee. E-Verify employs databases of the Social Security Administration (SSA) and the U.S. Citizen and Immigration Services (USCIS) to “verify” the identity and employment eligibility of new hires. The employer has 3 days from the date of hire to submit the new employee’s information (social security number, date of birth, and citizenship status) to E-Verify. If a match exists, verification is successful. If a match does not exist, a tentative nonconfirmation (TNC) is issued. In the case of a TNC, the employer is supposed to tell the employee about the TNC. The employee then has 8 days to resolve the issue. No negative actions can be taken against the employee during the time of appeal (Barnett, 2009; Patel, 2010; Rosenblum, 2011).

Participation in the program was originally on a voluntary basis determined by each employer. However, in 2007, Congress enhanced workplace enforcement of immigration laws and as part of their effort to control unauthorized employment, all federal contractors and subcontractors were required to use E-Verify (Patel, 2010). This is still the case for federal contractors and subcontractors. Outside the public sector, participation in E-Verify has remained largely voluntary with participation determined by individual employers.

Increasingly, however, E-Verify laws are being differentially implemented on a state-by-state basis (Barnett, 2009; Newman et al., 2012).

While immigration itself is a deeply polarizing issue, E-Verify is overwhelmingly supported by Democrats and Republicans in both the House and the Senate as well as by President Obama (Bruno, 2013). Since its inception, E-Verify has received unilateral support from all branches of the federal government – Executive, Legislative, and Judicial. The program has consistently received significant funding and has been extended time and time again. Most recently, the 112th Congress extended E-Verify until September 30, 2015 and allocated \$111 million towards improvement and implementation efforts (Bruno, 2013).

While Congress and the President are presently committed to E-Verify, academics have pointed to a variety of existing and potential problems with the program, both from a practical, implementation standpoint (e.g., cost to employers, erroneous nonconfirmations) and from a philosophical, social justice standpoint (e.g., furthering vulnerability of an already vulnerable population, reducing collective bargaining power, violating privacy laws). Further, while the program has been funded repeatedly and there are no signs that funding will be reduced anytime soon, there has been little research or evidence to support the notion that increasing workplace enforcement of immigration policy through strengthening employment eligibility verification (E-Verify) has in fact resulted in deterring undocumented immigration and/or “protecting” jobs for American workers.

Given the current political context and the likelihood that E-Verify will be part of any comprehensive immigration reform, the objective of this scoping review (Arksey & O’Malley, 2005) was to identify the, “. . . extent, range, and nature . . . “ (p. 6) of empirical research available on the impact of E-Verify. Specifically, this review aimed to answer the

following research question: What is known, empirically, about the impact of E-Verify?

Methods

Inclusion/Exclusion Criteria

As the purpose of this review was to broadly map what empirical research is/is not available regarding the impact of E-Verify, studies were included based on: (a) Date of publication (after January 1, 1997 –when the Basic Pilot Program was first implemented – through November 1, 2013); (b) specific assessment of E-Verify (versus other immigration-related programs/policies); and (c) empirical research. In conducting the review, specific articles, studies, reports, and other documents were subsequently excluded for two primary reasons (a) they were not empirical research and (b) they were not looking specifically at E-Verify.

Search Methods for Identifying Studies

A multimethod search was conducted to identify appropriate studies to include in this review. Database searching, hand searching of relevant journals, and searching the grey literature were techniques employed to identify appropriate studies to include in this review. These three methods are outlined below.

Database Search

Due to the policy-oriented nature of this scoping review, Proquest Databases were used to conduct this search because of the broad types of records (e.g., periodicals, dissertations, government reports) that are included in these databases. To identify documents related to the policy under review (E-Verify), the following set of search terms were used (S1): E-Verify or Basic Pilot Program or workplace enforcement or internal

enforcement or worksite enforcement (3,225 results). To identify documents related to empirical research, the following set of search terms were used (S2): `evalu*` or `assess*` or `qualitative` or `quantitative` or `mixed-methods` or `analysis` or `analyze` or `empirical` (10,216,034 results). The results of these two searches were then combined with AND. One hundred and nine (109) documents were identified through this process. Please see Figure 1 for a visual explanation.

Hand Search

Hand searches were conducted of the Journal of Ethnic and Migration Studies, American Economic Review, Industrial and Labor Relations Review, and State Politics and Policy Quarterly. These searches yielded identification of five additional articles: One from the Journal of Ethnic and Migration Studies, one from American Economic Review, two from Industrial and Labor Relations Review, and one from State Politics and Policy Quarterly. However, three of these five articles were duplicates and were therefore removed.

Grey Literature

Though some grey literature was identified through the database and the hand search, the following websites were additionally searched using terms related to empirical analysis and E-Verify: The Urban Institute (urban.org), Bloomberg Government (about.bgov.com), Government Accountability Office (gao.gov), Institute for Study of Labor (iza.org), Congressional Budget Office (cbo.gov), Center for Immigration Studies (cis.org), Migration Policy Institute (migrationpolicy.org), Pew Hispanic Center (pewhispanic.org), Council of the Americas Society (as-coa.org), Competitive Enterprise Institute (cei.org), and United States Citizenship and Immigration Services (uscis.gov). Using the inclusion criteria set for

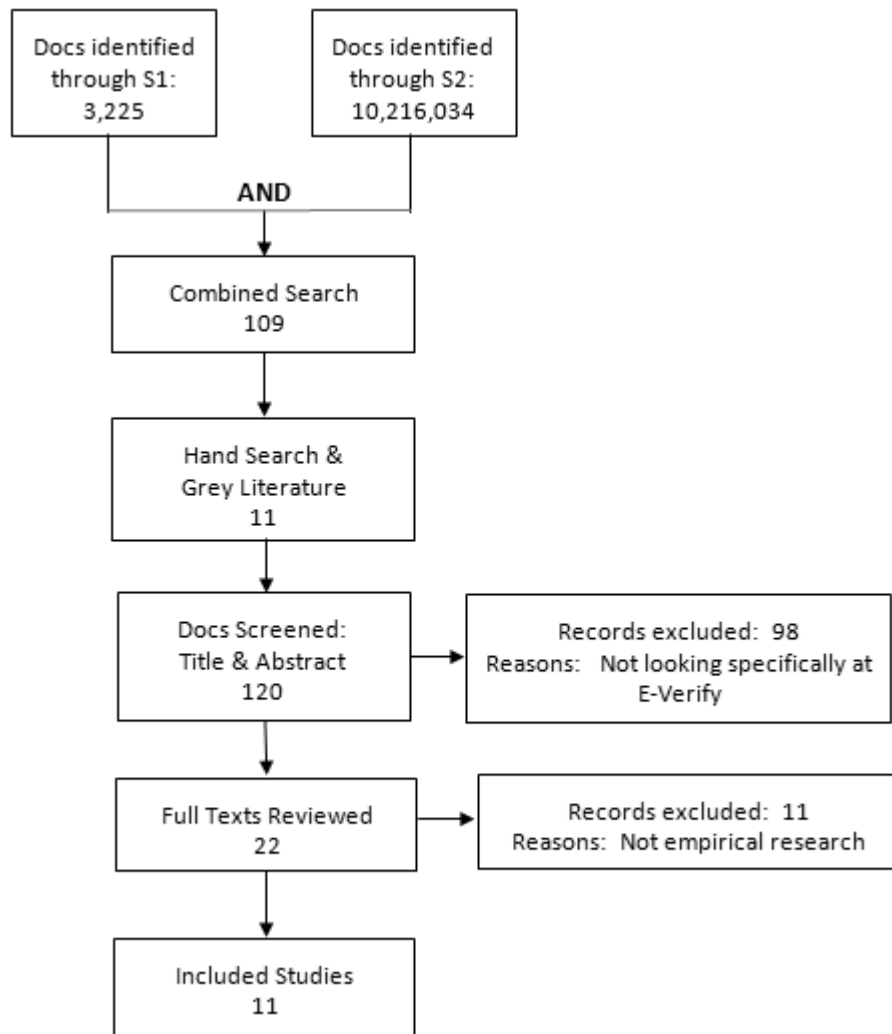


Figure 1. Data Collection Flow Chart

this review, the United States Citizen and Immigration Services (USCIS) web site produced an additional 10 reports under the “program reports” link. The other web sites did not yield additional studies for inclusion.

Explanation of Data Collection Flow Chart

This database search identified 109 potential articles for inclusion in the review. A hand search (e) and a search of the grey literature (10) revealed another 15 articles for potential inclusion in the review. Of the 15 articles identified through the hand search and the search of the grey literature, 4 proved to be duplicates. Ninety-eight records were excluded based on a review of the titles and abstracts. These exclusions were for two primary reasons: (a) the studies did not look specifically at E-Verify and/or (b) the studies were not empirical research. Of the 22 full text articles reviewed for eligibility, 11 were excluded and the number of included studies was reduced to 11.

Narrative Summary of Included Studies

Of the 11 studies included in this review, 3 were based on customer satisfaction surveys and 7 were published by the same organization (Westat). Two were journal articles published in academic journals and 9 were reports published by a combination of public and private organizations. Two of the studies were secondary data analyses of large, publicly available data sets: (a) The Current Population Survey and (b) the Bureau of Labor Statistics. Sample sizes seemingly varied greatly. However, some of the studies did not explicitly include their sample size. The studies were published between 2009 and 2013. Table 1 and Figure 2 provide a summary of the included studies.

Table 1. Summary of Included Studies

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Amuedo- Dorantes & Bansak (2012)	The Labor Market Impact of Mandated Employment Verification Systems	American Economic Review	Journal Article	Regression analysis of secondary data from the Current Population Survey (CPS).	The CPS questionnaire is a computerized document that is administered by Census Bureau field representatives across the country through both personal and telephone interviews.	Probability selected sample of $n = \sim 60,000$ occupied households. Individual, microlevel monthly data from the Current Population Survey (CPS) spanning January 2004 through December 2010.	E-Verify mandates, in particular at the state level, significantly decrease the likelihood of employment of “likely unauthorized” male and female workers. E- Verify laws have mixed effects on wages and seem to redistribute “likely unauthorized” labor towards industries such as agriculture (men) and food services (women).

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Arvelo & Litan (2013)	Early Evidence Suggests E-Verify Laws Deter Hiring of Unauthorized Workers	Bloomberg Government	Report	Time series analysis of secondary data from the U.S. Bureau of Labor Statistics’ Quarterly Census of Employment and Wages series (QCEW). The study looked at 6 states and 16 industries.	Employers that participate in unemployment insurance programs submit employment data to their state employment security agency as well as to the U.S. Bureau of Labor Statistics.	U.S. employers (and subsequently, their employees) that participate in unemployment insurance programs.	Findings from this study suggest that strict penalties for non- E-Verify compliance may lead to higher employer compliance rates. Further, this study suggests that soon after state-level E- Verify laws are enacted, “. . . unauthorized workers in specific industries appeared to drop off employer payrolls,” and that in many cases the result of this was for employers to hire authorized workers as replacement workers.

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Gomberg- Munoz & Nussbaum- Barberena (2011)	Is Immigration Policy Labor Policy?: Immigration Enforcement, Undocumented Workers, and the State	Human Org.	Journal Article	Ethnographic research with Chicago's Mexican immigrant communities and in particular within the immigrant rights movement.	Ethnographic research with Chicago's Mexican immigrant communities and in particular within the immigrant rights movement.	Ethnographic research with Chicago's Mexican immigrant communities and in particular within the immigrant rights movement.	E-Verify does not stop undocumented people from working or stop employers from employing undocumented workers. Rather, policies (E- Verify included) reinforce an extra vulnerable immigrant labor force in the U.S. Further, periods of economic crisis highlight contradictions inherent in a system that simultaneously calls for exportation of undocumented labor, while the tax dollars and cheap labor provided by an undocumented population is in high demand.

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Westat (2009)	Findings of the E-Verify Program Evaluation	Westat	Report	See http://www.uscis.gov/sites/default/files/USCIS/E-Verify/E-Verify/Final%20E-Verify%20Report%2012-16-09_2.pdf for a full description of the methodology used in the 2009 E-Verify Program Evaluation.			Findings from the 2009 E-Verify Program Evaluation can be found in Table 2.
Government Accountability Office (2010)	Federal Agencies Have Taken Steps to Improve E-Verify, but Significant Challenges Remain	Government Accountability Office	Report	See http://www.gao.gov/new.items/d11146.pdf for a full description of the methodology used in the 2010 GAO Report.			Accuracy of the E-Verify system improved between FY 2006 and FY 2009. The appearance of discrimination is still a concern. E-Verify remains vulnerable to identity theft and employer fraud. Finally, there has not been a good assessment of the cost of mandating E-Verify for all employers nationwide.

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Westat (2010a)	The Practices and Opinions of Employers Who Do Not Participate in E-Verify	Westat	Report	Quantitative & Qualitative	National survey of nonusers supplemented by focus groups with the same group. Treated as a case study after such a low response rate on original survey.	511 non- E-Verify users	The number one reason for nonparticipation cited by study participants was lack of awareness about E-Verify. The second most cited reason for nonparticipation is not thinking that the benefits would outweigh the risks of time and money. Participants generally opposed making E-Verify mandatory for all employers, citing lack of resources to operate the program, especially for small business owners.

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Westat (2010b)	Arizona Mandatory E-Verify Experience Evaluation Findings	Westat	Report	Case Study	In-person interviews	<i>n</i> = 126 employer participants & <i>n</i> = 160 worker participants who had previously received a TNC	The “mandatory” requirement to participate in E-Verify did not have a negative impact on employer satisfaction with the program. Employers complained that they could not use E-Verify to prescreen job applicants. Some employers thought that when workers contest TNCs, it was burdensome for their company in terms of time and cost. Arizona employers reported that they were not using E-Verify as a pre-screening tool. It seems like mandatory E-Verify has reduced

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
							unauthorized employment and the size of the undocumented population in Arizona.
Westat (2011a)	Findings of the E-Verify User Survey	Westat	Report	Descriptive statistics and tests of significance.	The 2010 survey aimed to collect employers' opinions and experiences using E-Verify	<i>n</i> = 2,928 employers or 83% of those surveyed responded	Employers expressed a high level of satisfaction with E-Verify. Employers were motivated to use E-Verify to improve their ability to verify work authorization. The majority of employers (79%) reported no direct costs. There was an increase in the number of employers who were using E-Verify to prescreen. Mandated users were more compliant with E-Verify

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Westat (2011b)	2011 Customer Satisfaction Survey: Overall Findings and Recommendations	Westat	Report	Descriptive statistics and tests of significance.	The 2011 survey aimed to collect employers' opinions and experiences using E-Verify	Not available	<p>procedures than were voluntary users. Employers reported positively regarding the photo matching tool.</p> <p>Satisfaction is high amongst E-Verify employers. New areas highlighted since last year's survey are that overall satisfaction went up, the photo tool is still highly useful, and satisfaction with the tutorial went up. There was no comment made regarding pre-screening in this year's summary.</p>

Table 1. Continued

Author(s) (year)	Title	Publisher	Publication type	Methods	Data collection	Participants/ sample	Findings
Westat (2012a)	2012 Customer Satisfaction Survey: Overall Findings and Recommendations	Westat	Report	Descriptive statistics and tests of significance.	The 2012 survey aimed to collect employers' opinions and experiences	Not available	Satisfaction was held high in most areas. There was a slight decrease in satisfaction with the integrity of the E-Verify system.
Westat (2012b)	Evaluation of the Accuracy of E-Verify Findings	Westat	Report	Quantitative & Qualitative Methods	E-Verify Transaction Database (FY 2009) & semistructured interviews	Quantitative: <i>n</i> = 8.2 million E-Verify cases submitted in FY2009 Qualitative: Semistructured interviews with Federal staff & contractors	Accuracy has been steadily increasing over time. There are 4 main reasons for TNCs: (a) Inability to confirm citizenship (35%); (b) SSA name mismatch (33%); (c) Inability to locate workers' Form I-94 number; and (d) USCIS name mismatch (5%).

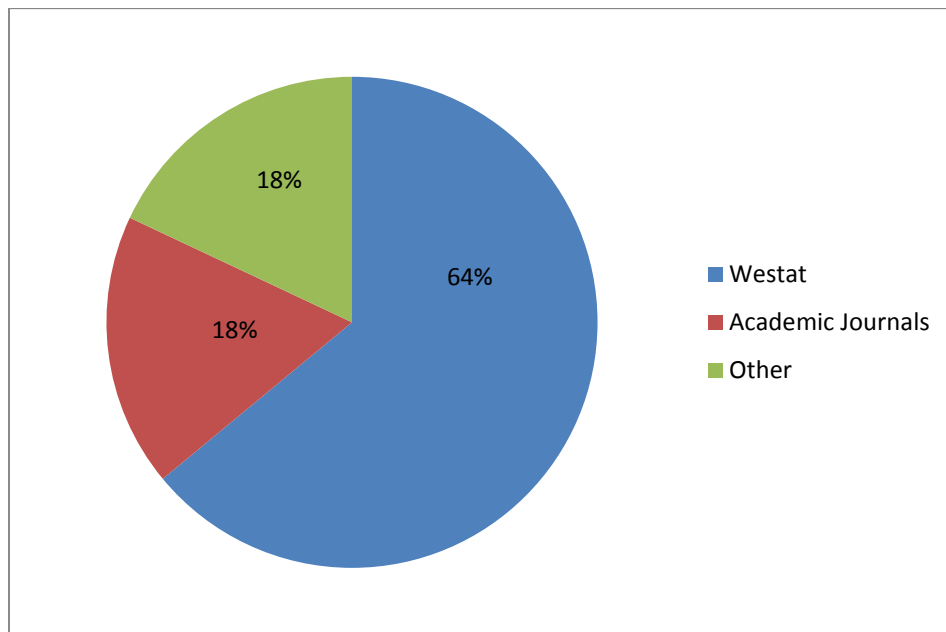


Figure 2. Publishers of Empirical Research on E-Verify

Summary of Findings from the 2009 E-Verify Program Evaluation

As the most comprehensive study conducted on E-Verify to date has been the 2009 Westat study, Table 2 describes the study's major findings and separates them into the following five categories: (a) Unauthorized employment, (b) Privacy Protection and Civil Liberties; (c) Verification-Related Discrimination; (d) Employer Burden and Satisfaction; and (e) Program Efficiency.

Narrative Assessment of Included Studies

Interpretation of the findings from the included studies must be mitigated by first assessing the strengths and/or weaknesses of the studies' methods. Of the two studies published in academic journals (American Economic Review and Human Organization), both demonstrated a need for approaching any "mandatory" E-Verify legislation with caution. While Amuedo-Dorantes and Bansak (2012) use a sophisticated method of analysis to show that E-Verify may meet its goal of reducing unauthorized employment, the authors also use their research to explain that this finding is not as simple as it may seem and in fact, employment may simply be shifting to alternative industries such as food service for women and agriculture for men. The Gomberg-Munoz and Nussbaum-Barberena (2011) study makes strong arguments against mandatory participation in E-Verify for all employers. However, this article does not clearly explain its methodology. Its explanation that the findings were based on "ethnographic research" does not allow for assessment of the strength or weakness of the design and thus, the findings. The description of the methods utilized in the Arvelo and Litan (2013) Bloomberg Government Report is weak, again making difficult assessment of their findings regarding the seeming success of E-Verify.

Westat has utilized many methodological approaches to its research work with

Table 2. Findings from the 2009 E-Verify Program Evaluation

Employment	Privacy protection & civil liberties	Verification-related discrimination	Employer burden & satisfaction	Program efficiency
Effective in identifying many workers who are not work authorized	SSA and USCIS have taken care to protect the privacy of the workers with information submitted to E-Verify	E-Verify apparently reduces discrimination against foreign-born workers in the hiring process	Employers were generally satisfied with E-Verify and indicated that it was not burdensome	USCIS staff report that they have undertaken a number of efforts to improve E-Verify
Does not detect most identity fraud cases for workers who use information about real employment-authorized persons	Concern has been raised about the potential for a nonemployer to gain access to E-Verify or for an authorized user to use E-Verify for purposes other than employment-eligibility verification	The accuracy of the USCIS database, as measured by the erroneous TNC rate for workers ever found authorized, has improved considerably	Perceived employer burden does prevent some employers from using E-Verify	One of the most frequent employer complaints was that communication between E-Verify users and SSA and USCIS was not optimal
Time to process cases submitted to E-Verify has decreased	Employers did not consistently inform employees of TNC findings in private	Employers believe that E-Verify is accurate	Some employers were dissatisfied with aspects of E-Verify and/or made recommendations about possible improvements to E-Verify	

Table 2. Continued

Employment	Privacy protection & civil liberties	Verification-related discrimination	Employer burden & satisfaction	Program efficiency
Most workers receiving TNCs received their TNC notices promptly	Employers generally do not single out either citizens or noncitizens for verification	The gap between the erroneous TNC rates for U.S.-born and foreign-born workers has decreased substantially	Employer satisfaction appeared to be somewhat lower in 2008 than in 2006	
Employers do not always follow the requirement to terminate employment when E-Verify is not able to confirm that an employee is work authorized	Not all employers consistently comply with E-Verify procedures	Almost half of interviewed workers who discussed their costs for resolving TNCs reported that they had no costs		
E-Verify has been growing rapidly since its inception		Foreign-born workers with employment authorization are more likely to incorrectly receive TNCs than are U.S.-born workers		

Table 2. Continued

Employment	Privacy protection & civil liberties	Verification-related discrimination	Employer burden & satisfaction	Program efficiency
Most U.S. workers are not processed through E-Verify		Workers attesting to being work-authorized noncitizens on the Form I-9, especially those who are not lawful permanent residents, are more likely than those attesting to being U.S. citizens to receive erroneous TNCs		
		The erroneous TNC rate for naturalized citizens remains well above the rate for U.S.-born workers		
		Some workers reported costs of more than \$50 to resolve TNCs		

Note. As Reported by Westat.

regard to evaluating the E-Verify program, including review of the Transaction Database, document review, employer surveys, employer interviews, employee interviews, interviews with Federal staff and contractors, and focus groups. While each of these approaches can be strong, many of these techniques rely on self-report and in this case, it is difficult to control for a variety of confounding factors such as power dynamics in an interview or fear that survey responses could be linked to employers. Additionally, in the few instances where workers have been interviewed, there is no mention of attempts to mitigate (a) fear of employer repercussions should they not give “correct” answers or (b) power dynamics between the interviewer and the worker. Table 3 provides a description of the strengths and limitations of the included studies.

Findings

Though the purpose of this scoping review was not to describe research findings in detail, but rather to map the range of empirical material available on the impact of E-Verify (Arksey & O’Malley, 2005), there are a few “key findings” worth mentioning:

1. It is very unclear as to whether E-Verify actually impacts the labor market/workforce in the way it is intended to - deterring unauthorized employment;
2. Database accuracy seems to be improving;
3. Erroneous TNC rates are still disproportionately high for foreign-born workers who have a legal right to work in the U.S.;
4. The program is still vulnerable to document fraud and identity theft.

Table 3. Assessment of Included Studies

Author(s)	Year of publication	Participants/ sample size	Geography	Independent researcher(s)	Type of data	When data collected	Major strengths	Major limitations
Amuedo-Dorantes & Bansak	2012	<i>n</i> = ~60,000 Individuals	United States	Yes	Current Population Survey: Self-Report	January 2004 – December 2010	Strong methodology; independent researchers	No explanation for a “likely unauthorized” individual is identified; self-report data
Arvelo & Litan	2013	<i>n</i> = 6 states <i>n</i> = 16 industries	Arizona Alabama South Carolina Tennessee Utah Mississippi	No	U.S. Bureau of Labor Statistics; Quarterly Census of Employment and Wages series: Employer self-report	Varied by state, depending on when E-Verify mandate took effect	Looking at multiple pre/post data points; situates the research well	Brevity – not enough explanation of methodology or findings; with such dramatic differences in state-level implementation of E-Verify, only looking at 6 states is limiting; does not capture “off-the-books” employment

Table 3. Continued

Author(s)	Year of publication	Participants/ sample size	Geography	Independent researcher(s)	Type of data	When data collected	Major strengths	Major limitations
Gomberg- Munoz & Nussbaum- Barberena	2011	Not stated	Chicago	Yes	Not clearly stated, reference to ethnographic interactions / observations	2009-2011	First-person accounts; qualitative examples; depth	No clear study design is articulated or explained; no sense of sample size; limited geographical area; breadth is lacking
Westat	2009	This varied for each section of the comprehensive evaluation. Please see http://www.uscis.gov/sites/default/files/USCIS/E-Verify/E-Verify/Final%20E-Verify%20Report%2012-16-09_2.pdf for a complete description of sample sizes,	United States	No	Focus groups; online survey; in person interviews; observation of employers; worker interviews; review of worker records; E-Verify transaction and employer databases	Varied for each section of the comprehensive evaluation, but the outside parameters were July 2004 – July 2008	Multiple kinds of data; multiple kinds of participants – employers, workers, federal staff; strength in survey development	Lots of the data collected is employer self-report; no mention of how inherent power dynamics between evaluators and participants were addressed

Table 3. Continued

Author(s)	Year of publication	Participants/ sample size	Geography	Independent researcher(s)	Type of data	When data collected	Major strengths	Major limitations
Government Accountability Office	2010	Not stated precisely, but this was a comprehensive study with a variety of methodological approaches	United States	No	In-person interviews with Federal staff; document review; review of E-Verify and USCIS manuals; process analyses; site visits; telephone interviews	June 2009-December 2010	Extensive kinds of data collected; various kinds of participants; very clear objectives; alternative perspectives	Because such specific objectives, not an overall evaluation of the program; not enough worker participants
Westat	2010a	$n = 511$	United States	No	Survey & Focus Groups: Employer Self-Report	June 2009-August 2009	Quantitative and qualitative data; strong survey development process; good sampling procedure	Low response rate from original survey; very small sample size
Westat	2010b	$n = 126$ employers $n = 160$ workers	Arizona	No	Review of transaction database; In-person, semi-structured interviews; Employer self-report, worker self-report	Transaction database: January 2006-January 2010 and Interviews: January 2009-May 2009	Data collected from both employers and workers; solid sampling procedures	No mention in methodology of how power dynamics were addressed with workers

Table 3. Continued

Author(s)	Year of publication	Participants/ sample size	Geography	Independent researcher(s)	Type of data	When data collected	Major strengths	Major limitations
Westat	2011a	<i>n</i> = 2,928	United States	No	Survey: Employer self-report	2010	Solid survey development procedures	No triangulated data; questions do not vary based on state of residence (whether participation is “mandatory” or not); very simple design
Westat	2011b	Not stated	United States	No	Survey: Employer self-report	2011	Solid survey development procedures	No triangulated data; questions do not vary based on state of residence (whether participation is “mandatory” or not); very simple design

Table 3. Continued

Author(s)	Year of publication	Participants/ sample size	Geography	Independent researcher(s)	Type of data	When data collected	Major strengths	Major limitations
Westat	2012a	Not stated	United States	No	Survey: Employer self-report	2012	Solid survey development procedures	No triangulated data; questions do not vary based on state of residence (whether participation is “mandatory” or not); very simple design
Westat	2012b	Not stated	Unites States	No	In-person interviews with Federal contractors; review of transaction database; employer registration data; system testing; document review	Varied for each section of the comprehensive evaluation, but the outside parameters were July 2004 – May 2011	Multiple kinds of data; data sources are well-aligned with purpose of this study	This is an extremely challenging thing to accurately measure - sources of data for this study are vulnerable to have collected misinformation or incomplete information

Summary of Gaps in Research

There is an abundance of gaps in the empirical research related to E-Verify. The following is a list of suggestions for future research in this area to address the current gaps:

(a) More of the same research – there are not enough research studies that use the same or even similar methodologies in order to conduct a “proper” systematic review; (b) more independent research – most of the empirical research on E-Verify has been conducted by one organization, an organization that could have a vested interest in the findings; (c) more recent/current research; (d) more research with workers – the research that exists currently relies heavily on employers and government employees; (e) more measures – the current available research relies heavily on self-report data; and (f) more research on variation in E-Verify implementation – because states and cities within states have implemented E-Verify differently since its inception, it makes good sense to examine the program’s impact in those places before making it mandatory for all U.S. employers.

Limitations

The most challenging limitation with this scoping review was the lack of empirical research available on E-Verify. Additionally, only about half of the included studies had strong methods or articulated their methods clearly enough so that they could be properly assessed. Another limitation was that it is surmised that those who work inside government organizations or affiliated organizations may have access to relevant reports and/or analyses that this review was unable to obtain through traditional searching methods.

Conclusion

This scoping review clearly revealed the need for more empirical research to be conducted on E-Verify before the Federal government contemplates making it mandatory for all employers across-the-board. To underscore what this review found, of the 11 studies included in this review, 3 were based on customer satisfaction surveys and 7 were published by the same organization (Westat), which is contracted by USCIS to evaluate E-Verify. While this is not necessarily a conflict of interest, it is problematic when close to the *only* research available on E-Verify has been produced by an organization that would lose significant funding should the E-Verify program be discontinued.

The last time there was a large-scale evaluation of the E-Verify program was in 2010 (4 years ago) and there were ongoing concerns identified by that evaluation performed by the Government Accountability Office, including the E-Verify's appearance of being discriminatory and its continued vulnerability to identity theft and employer fraud. While both the Government Accountability Office study and the Westat 2012 study, "*Evaluation of the Accuracy of E-Verify Findings*," indicated that accuracy continues to improve, that's just not enough. There needs to be much, much more empirical research conducted before mandating that E-Verify, a largely unproven program, be used by all employers across the United States. There are currently too many unanswered questions regarding its effectiveness and overall influence that simply must be answered.

References

Amuedo-Dorantes, C., & Bansak, C. (2012). The labor market impact of mandated employment verification systems. *The American Economic Review*, 102(3), 543–548.

- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.
- Arvelo J., & Litan, R. (2013). *Early evidence suggests E-Verify laws deter hiring of unauthorized workers* (Bloomberg Government Study). Retrieved from the Numbers USA website: <https://www.numbersusa.com/content/files/BGovEVerifyStudy.pdf>
- Barnett, M. B. (2009). The high cost of low-cost workers: Missouri enacts new law targeting employers of unauthorized workers. *Immigration and Nationality Law Review*, 30, 801– 821.
- Bruno, A. (2013). *Unauthorized aliens: Policy options for providing targeted immigration relief*. Washington, DC: Congressional Research Service.
- Gomberg-Munoz, R., & Nussbaum, L. (2011). Is immigration policy labor policy? Immigration enforcement, undocumented worker, and the state (Report to Subcommittee on Social Security, Committee on Ways and means, House of Representatives). *Society for Applied Anthropology*, 70(4), 366–375.
- Grimes, M., Golob, E., Durcikova, A., & Nunamaker, J. (2013). *Reasons and resolve to cross the line: A post-apprehension survey of unauthorized immigrants along the U.S.–Mexico Border*. Tucson, AZ: National Center for Border Security and Immigration.
- Massey D. S., & Malone, N. (2002). Pathways to legal immigration. *Population Research and Policy Review*, 21, 473–504.
- Passel, J. S., & Cohn, D. (2011). *Unauthorized immigrant population: National and state trends, 2010*. Washington, DC: Pew Hispanic Center.
- Passel, J. S., Cohn, D., & Gonzalez-Barrera, A. (2013). *Population decline of unauthorized immigrants stalls, may have reversed*. Washington, DC: Pew Hispanic Center.
- Patel, S. C. (2010). E-Verify: An exceptionalist system embedded in the immigration reform battle between federal and state governments. *Boston College Third World Law Journal*, 30(2), 543–574.
- Rosenblum, M. R. (2011, August). *U.S. immigration policy since 9/11: Understanding the stalemate over comprehensive immigration reform*. Retrieved from the Migration Policy Institute website: <http://www.seiu.org>
- U.S. Government Accountability Office. (2010). *Employment verification: Federal agencies have taken steps to improve E-Verify, but significant challenges remain*. Retrieved from USGAO website: <http://www.gao.gov/new.items/d11146.pdf>
- Westat. (2009). *Findings of the E-Verify program evaluation*. Retrieved from U.S. Citizenship and Immigration Services website: http://www.uscis.gov/sites/default/files/USCIS/E-Verify/E-Verify/Final%20E-Verify%20Report%202012-16-09_2.pdf

- Westat. (2010a). *Arizona mandatory E-Verify experience evaluation findings*. Retrieved from U.S. Citizenship and Immigration Services website: http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/EVerify%20Studies/The%20Arizona%20Mandatory%20EVerify%20Experience_Evaluation%20Findings.pdf
- Westat. (2010b). *The practices and opinions of employers who do not participate in E-Verify*. Retrieved from U.S. Citizenship and Immigration Services website: <http://www.uscis.gov/sites/default/files/USCIS/Resources/Reports/E-Verify/e-verify-non-user-dec-2010.pdf>
- Westat. (2011a). *2011 Customer satisfaction survey: Overall findings and recommendations*. Retrieved from U.S. Citizenship and Immigration Services website: http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/UCSIC_E-VerifyCustomerSatisfactionSurveyFinalReport2012.pdf
- Westat. (2011b). *Findings of the E-Verify user survey*. Retrieved from U.S. Citizenship and Immigration Services website: http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/EVerify%20Studies/Web_User_Summary.pdf
- Westat. (2012a). *2011 Customer satisfaction survey: Overall findings and recommendations*. Retrieved from U.S. Citizenship and Immigration Services website: http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/UCSIC_EVerifyCustomerSatisfactionSurveyFinalReport2012.pdf
- Westat. (2012b). *Evaluation of the accuracy of E-Verify findings*. Retrieved from the U.S. Citizenship and Immigration Services website: http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/EVerify%20Studies/Evaluation%20of%20the%20Accuracy%20of%20EVerify%20Findings.pdf

CHAPTER 3

GLOBAL DISTRIBUTIVE JUSTICE AND E-VERIFY:

AN ANALYSIS OF STATE-LEVEL

WORKFORCE OUTCOMES

Introduction

The United States currently has free trade agreements (FTAs) in place with 20 countries and is presently working on the Trans-Pacific Partnership Agreement (TPP), which would increase the total number of countries with whom the U.S. has free trade agreements with to 24 (Office of the United State Trade Representative, 2013). The mission of the United States Trade Representative, an Executive Office of the President, includes “. . . opening markets throughout the world to create new opportunities and higher living standards for families, farmers, manufacturers, workers, consumers, and businesses” (retrieved from <http://www.ustr.gov/about-us/mission>). In the context of an ever-increasing globalized economy, does the concept of being a “legal” citizen as a prerequisite to participation in the workforce make sense? Gomberg-Munoz and Nussbaum-Barberena (2011) say,

Over the past four decades, United States economic policies have aggressively pursued the globalization of all aspects of production except for labor, further undermining subsistence practices in regions such as México and mobilizing a massive transmigrant labor force. Paradoxically, United States immigration policies have become increasingly restrictive and punitive, subjecting transmigrant workers to draconian control in their places of work and residence. (p. 373)

I argue that in the context of a globalized and further globalizing economy, it is illogical to

apply the prerequisite of “legal” citizenship before allowing a person to participate in the workforce. And further, restrictive employment policies have negative impacts on everyone in the workforce, not just undocumented immigrants.

Through a lens of global distributive justice, which is in stark contrast to the current American approach to undocumented immigrants in the workforce, this paper examines E-Verify, an anti-immigrant program that exists for the sole purpose of excluding those without “legal” citizenship from the United States Workforce. E-Verify is an electronic employment eligibility verification system in which, after reviewing a new employee’s I-9 form, an employer is required to log into an online system for the purpose of verifying the identity and work eligibility of that new employee. E-Verify employs databases of the Social Security Administration (SSA) and the U.S. Citizen and Immigration Services (USCIS) to “verify” the identity and employment eligibility of new hires. The employer has 3 days from the date of hire to submit the new employee’s information (social security number, date of birth, and citizenship status) to E-Verify. If a match exists, verification is successful. If a match does not exist, a tentative nonconfirmation (TNC) is issued. In the case of a TNC, the employer is supposed to tell the employee about the TNC. The employee then has 8 days to resolve the issue. No negative actions can be taken against the employee during the time of appeal (Barnett, 2009; Patel, 2010; Rosenblum, 2011). Clearly, the purpose of E-Verify is to restrict employment to “legal” citizens of the United States.

This paper is divided into three sections. First, there is a discussion of a cosmopolitan approach to global distributive justice and its appropriateness as a lens through which to evaluate E-Verify, an exclusionary program based on the notion of “legal” citizenship. The discussion expands upon two concepts associated with a cosmopolitan

approach to global distributive justice, citizenship and equality of opportunity, and their relevance for evaluating E-Verify. Next, there is an examination of variation in state-level implementation of E-Verify, categorized as being either weakly—or strongly—aligned with a cosmopolitan approach to global distributive justice, and how this variation may have predicted important workforce outcomes in four states. Finally, there is a discussion regarding the socio-economic implications and relevance of the findings from the second section within the framework of cosmopolitan global distributive justice.

Review of Literature

Global Distributive Justice: A Cosmopolitan Approach

With an ever-increasing globalized economy, it is my assertion that it is illogical to apply the prerequisite of “legal” citizenship before allowing a person to participate in the workforce. Further, using the distributive justice paradigm, I will show that the concepts of “society” and of “citizenship” should be expanded beyond national borders to better align with the economic priorities of the Nation. Distributive justice is chosen to guide this work because it addresses how goods and services are distributed within a society (Van Soest & Garcia, 2003). Caney (2001) advocates a global application of principles of distributive justice when he says “. . . given the reasons we give to defend the distribution of resources and given our convictions about the irrelevance of people’s cultural identity to their entitlements, it follows that the scope of distributive justice should be global” (p. 977). I will now describe the distributive justice framework that demonstrates the coherence of my argument.

Global distributive justice is concerned with the equitable and “socially just” allocation of goods and services that reach beyond national borders. Cosmopolitan

liberalism is a form of global distributive justice that calls for just allocation of goods and services based on recognizing, “. . . that every human being has a global stature as the ultimate unit of moral concern” (Pogge, 1992, p. 49). Further, Beitz (1999) says, “It applies to the whole world the maxim that choices about what we should do or what institutions we should establish should be based on an impartial consideration of the claims of each person who would be affected” (p. 287).

Caney (2001) identifies three presumptions associated with the cosmopolitan approach: (a) individuals have moral worth; (b) individuals have this moral worth equally; and (c) people’s equal moral worth generates moral reasons that are binding on everyone (p. 977). Given these ethical presumptions, cosmopolitans argue, it does not make sense to apply them arbitrarily based on legal citizenship.

Additionally, recognizing the increasing interdependence that individuals, institutions, and societies have on one another is another key component of the cosmopolitan approach to distributive justice. Pogge (1992) says, “It is only because all human beings are now participants in a single, global institutional scheme – involving such institutions as the territorial state and a system of international law and diplomacy as well as a world market for capital, goods, and services – that all human rights violations have come to be, at least potentially, everyone’s concern” (p. 51).

To summarize, in this work I apply a cosmopolitan approach to global distributive justice to evaluate the E-Verify program. The program’s very existence is an example of problematic contradictions in U.S. trade policy in which the U.S. moves increasingly towards opening global markets and U.S. immigration policy in which participation in the U.S. workforce continues to move in an increasingly exclusive direction. What follows is a

brief discussion of two key concepts associated with a cosmopolitan approach to global distributive justice, citizenship and equality of opportunity, and their appropriateness for framing this work.

Citizenship and E-Verify

To reiterate, the entire purpose of E-Verify is to authenticate the “legal” citizenship status of individuals before allowing them to participate in the workforce. Kymlicka and Norman (1994) say, “. . . we should expect a theory of the good citizen to be relatively independent of the legal question of what it is to be a citizen, just as a theory of the good person is distinct from the metaphysical (or legal) question of what it is to be a person” (p. 353). Further, these authors highlight a focus on responsibilities and virtues associated with “good citizenship” versus a focus on arbitrary political boundaries. This supports a cosmopolitan perspective of global distributive justice in which individual morality or “goodness” has nothing to do with political boundaries.

In 1949, T. H. Marshall advanced the notion that there are three kinds of rights associated with citizenship. These rights include civil rights, political rights, and social rights. Kymlicka and Norman (1994) summarize Marshall when they say, “By guaranteeing civil, political, and social rights to all, the welfare state ensures that every member of society feels like a full member of society, able to participate in and enjoy the common life of society” (p. 354). Kymlicka and Norman (1994) go on to explain the need for responsibilities of citizenship to go hand-in-hand with rights of citizenship. These are identified as responsibilities of economic self-reliance, political participation, and civility. E-Verify’s use of “legal” citizenship to determine which “rights” are afforded to individuals has a direct impact on the ability of individuals to assume “responsibilities” associated with

citizenship (economic self-reliance, political participation) and subsequently, individuals are systematically excluded from meeting criteria for being a “good citizen.”

Equality of Opportunity and E-Verify

Cosmopolitan theorists Simon Caney (2001) and Thomas Pogge (1989, 1994, 2002) advocate for a global application of the equality of opportunity principle of distributive justice. Caney (2001) argues, “Persons should have the same opportunity to achieve a position, independently of what nation or state or class or religion or ethnic group they belong to” (p. 114). Further, Caney (2001) identifies two ideals of a global application of equality of opportunity: (a) it is a procedural versus an outcome-related concept - individuals cannot have worse opportunities based on their nationality and (b) it is about individuals’ entitlements or “rights” rather than responsibilities or obligations as we saw with the concept of “good citizenship.”

Expanding on this concept in a later work, Caney (2008) applies the equality of opportunity principle to question the significance that borders play in the global scheme. More specifically, Caney argues that the arbitrary nature of which society one is born into has little moral relevance in terms of how people’s opportunities should be shaped. Caney additionally highlights the fact that any society, regardless of how its boundaries are conceived, is comprised of individuals who are heterogeneous in terms of a variety of characteristics including, “. . . their abilities, willingness to work, neediness, contribution to the social product, and so on . . .” (p. 506). In this context then, Caney argues, borders are arbitrary and should carry no relevance in terms equality of opportunity. E-Verify, with its purpose of excluding individuals from the workforce based entirely upon which geographical borders they were born into, is clearly in opposition to the cosmopolitan

distributive justice approach to the equality of opportunity concept.

Study Overview

Contrasting a cosmopolitan approach to global distributive justice with the current American approach to undocumented immigrants in the workforce, this study utilizes secondary data from the U.S. Census and an interrupted time series design to examine how variation in state-level implementation of E-Verify, categorized as being either weakly or strongly aligned with a cosmopolitan approach to global distributive justice, predicted important workforce outcomes in four U.S. states: (a) Arizona; (b) Illinois; (c) California; and (d) Florida. Figure 3 is a visual description of the study.

Method for Classifying States

Though E-Verify itself is distinctly not aligned with a cosmopolitan approach to global distributive justice, for the purpose of this study, states were classified as strongly or weakly aligned with global distributive justice based on how they have implemented their E-Verify legislation. Arizona is strict in their mandate that all employers “must” use E-Verify and is therefore classified as having weak alignment with global distributive justice while Illinois’ legislation is clear in that participation in E-Verify is “voluntary.” What follows is a brief overview of the history of state-level E-Verify legislation in each of the four states under study. Table 4 summarizes implementation in each state and alignment with global distributive justice.

Study States

Arizona, Illinois, California, and Florida were the states chosen for this study for three reasons: (a) They have large populations of Latino immigrants (Passel & Cohn, 2011)

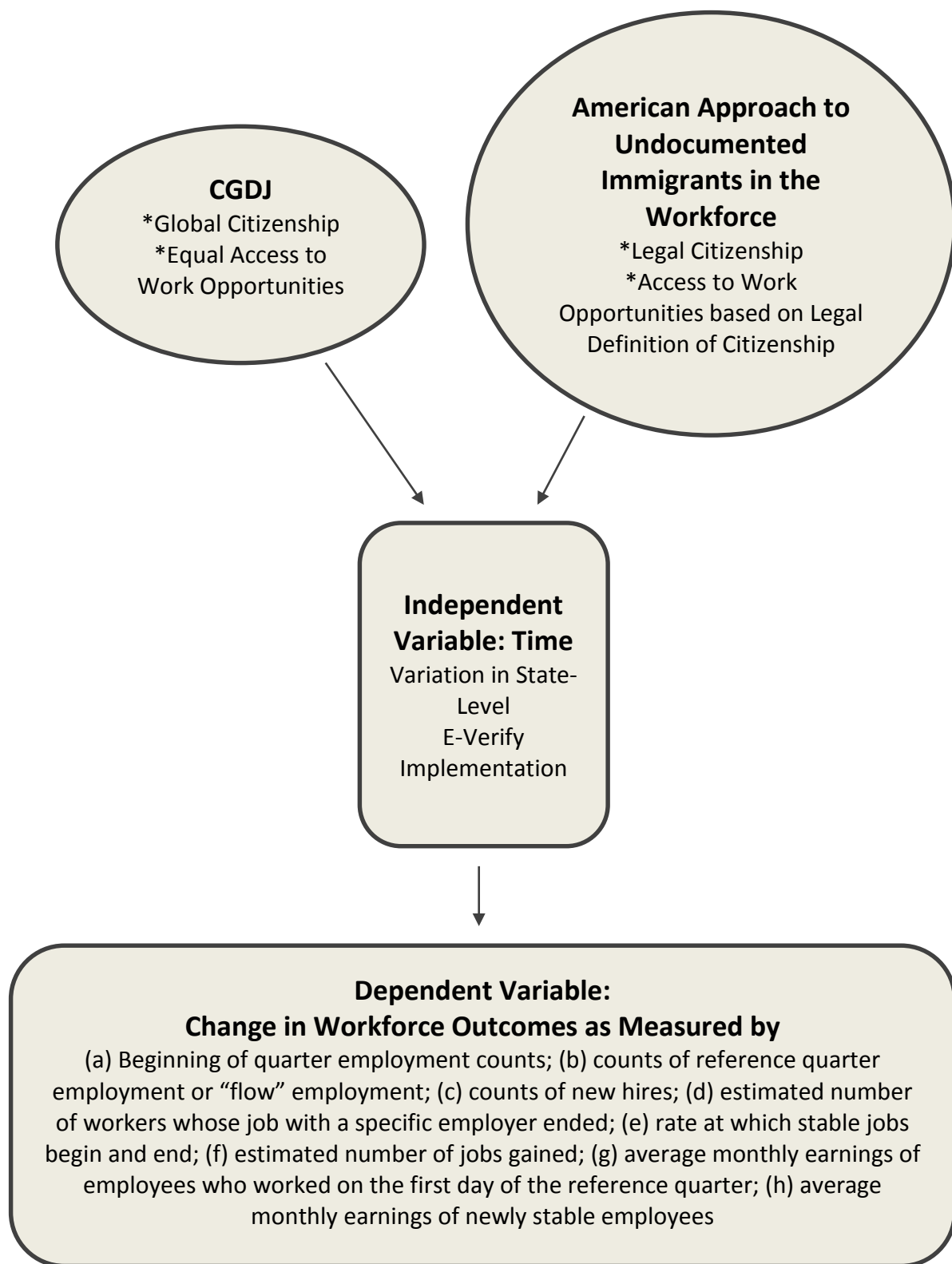


Figure 3. Visual Description of the Study

Table 4. State-Level E-Verify Legislation and Alignment with Global Distributive Justice

State	Legislation	Implementation date	Alignment with global distributive justice
Arizona	All Arizona employers must participate in E-Verify to verify the identity and work eligibility of new hires. (HB 2745)	January 1, 2008	Weak
Illinois	E-Verify utilization in the state of Illinois is not prohibited and is voluntary. (Act 096-0623)	January 1, 2010	Strong
California	The state of California and any of its cities, counties, or special districts are prohibited from requiring an employer (other than a government entity) to use E-Verify as a condition of receiving a government contract, applying for or maintaining a business license, or as a penalty for violating licensing or other similar laws. Employers in California are free to use E-Verify on a voluntary basis or as required by federal contracts. (AB 1236)	October 9, 2011	Strong
Florida	All public employers must use E-Verify and all contractors and subcontractors with public contracts must use E-Verify during the contract period. (Executive Order 11-116)	May 27, 2011	Semiweak

(b) each of these states has implemented E-Verify differently; and (c) they represent extremes (Arizona and Illinois in particular) in terms of state-level E-Verify legislation and alignment with a cosmopolitan approach to global distributive justice.

Arizona and E-Verify

Under the Legal Arizona Workers Act (LAWA), Arizona's E-Verify law is simple and sweeping: As of January 1, 2008, all Arizona employers must participate in E-Verify to verify the identity and work eligibility of new hires (HB 2745). While there have been attempts to challenge LAWA in the courts (Arizona Contractors Association v. Candelaria and Chicanos Por La Causa v. Napolitano), LAWA has been upheld with the explanation that these law suits are challenging employment law (state regulated) versus immigration law (federally regulated). Therefore, it is within the state's purview to enact and enforce such laws (Barnett, 2009). For purposes of this study, Arizona is classified as "weakly-aligned" with a cosmopolitan approach to global distributive justice.

Illinois and E-Verify

Illinois is the only state that in 2007 actively tried to prevent private employers from using E-Verify to verify the identity and employment eligibility of new hires, citing privacy violations and inaccurate databases associated with the system (Gomberg-Munoz & Nussbaum-Barberena, 2011). However, the Department of Homeland Security (DHS) challenged this law in federal court and won. Therefore, as of January 1, 2010, E-Verify utilization in the state of Illinois is not prohibited and it remains voluntary (Act 096-0623). For purposes of this study, Illinois is classified as "strongly-aligned" with a cosmopolitan approach to global distributive justice.

California and E-Verify

Between July 1, 2007 and September 1, 2011, 13 California localities passed their own E-Verify ordinances (Mission Viejo, Temecula, Murrieta, Menifee, Lancaster, Lake Elsinor, Escondido, Hemet, Hesperia, San Bernadino, and Wildomar, Simi Valley, and Palmdale). However, each of these local ordinances was nullified on October 9, 2011 when, in an effort to “help businesses and grow and provide jobs, not set-up barriers that cost jobs” (Assemblyman Paul Fong) Governor Brown signed into law Assembly Bill 1236 – otherwise known as the Employment Acceleration Act of 2011 (AB 1236). This law “. . . prohibits the state of California and any of its cities, counties, or special districts from requiring an employer (other than a government entity) to use E-Verify as a condition of receiving a government contract, applying for or maintaining a business license, or as a penalty for violating licensing or other similar laws” (AB 1236). Employers in California are still free to use E-Verify on a voluntary basis or as required by federal contracts. For purposes of this study, California is classified as “strongly-aligned” with a cosmopolitan approach to global distributive justice.

Florida and E-Verify

On May 27, 2011, Governor Scott signed into law Executive Order 11-116, which specified that all public employers must use E-Verify to verify the identity and work eligibility of new hires. Additionally, all contractors with public contracts must use E-Verify to verify the identity and work eligibility of their new hires during the contract period. Finally, all contractors with public contracts must require their subcontractors to use E-Verify to verify the identity and work eligibility of new hires during the contract period (Executive Order 11-116). For purposes of this study, California is classified as “semi-

weakly-aligned” with a cosmopolitan approach to global distributive justice.

Methods

This study was an interrupted time series analysis of secondary data, using publicly available data from the U.S. Census. An interrupted time series design estimates the causal effect of an intervention by mapping the time series’ both pre and post intervention (Cook & Campbell, 1979). Specifically, this study analyzed Quarterly Workforce Indicator (QWI) data, which is the Longitudinal Employer-Household Dynamics (LEHD) linked employer-employee microdata (retrieved from <http://lehd.ces.census.gov/>). Indicated by the name of the data set, QWI data are collected on a quarterly basis. Where possible, this study collected state-level pre-E-Verify implementation data beginning in the first quarter of 2000. However, this was not always possible. For example, Arizona data were only available beginning in the first quarter of 2004.

The North American Industry Classification System (NAICS) is used by U.S. Census and other Federal statistical agencies in, “. . . classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy” (retrieved from www.census.gov/eos/www/naics/). The four industry categories chosen for this study were: (a) All Industries; (b) Accommodation and Food Service; (c) Agriculture, Forestry, Hunting and Fishing; and (d) Construction. These industry categories were chosen because they align with the Pew Hispanic Center’s 2009 report on which industries unauthorized workers represent a disproportionate share of the labor force (Passel & Cohn, 2009).

The eight indicators chosen for this study were: (a) Beginning of quarter employment counts; (b) counts of reference quarter employment or “flow” employment; (c)

counts of new hires (d) estimated number of workers whose job with a specific employer ended; (e) rate at which stable jobs begin and end (f) estimated number of jobs gained; (g) average monthly earnings of employees who worked on the first day of the reference quarter; and (h) average monthly earnings of newly stable employees (defined in Appendix A). Taken together, these indicators paint a picture of what changes, if any, E-Verify has caused in the workforce. Data from the LEHD are frequently used by industry government as indicators of economic strength and to guide economic decision making (Erica Groshen, Commissioner of Labor Statistics, LED Partnerships Workshop, June 12, 2013). For consistency, when given a choice, “beginning of quarter” counts were chosen.

For each time series, an interrupted autoregressive integrated moving average (ARIMA) model was applied (Cook & Campbell, 1979). Autocorrelations (ACF) and partial autocorrelations (PACF) in addition to the residuals from each model were used to identify evidence of seasonality as well as to test model fit. Autoregressive and difference adjustments were made accordingly in order to ensure time series’ with normal distribution and stability in level and variance. As timing of state-level implementation of E-Verify legislation varied, each time series was coded accordingly. Specifically, timing of implementation of the legislation for each state was represented as a dummy variable which was coded 0 through the quarter just prior to implementation of the legislation and 1 thereafter.

Findings

Arizona

Findings indicate that the 2008 state-level legislation (LAWA) requiring “mandatory” participation in E-Verify for all Arizona employers has distinctly impacted

employment trends in each of the four industry categories under study. Findings demonstrate that the number of workers who started new jobs decreased, with $p \leq 0.05$ in All Industries ($M = -224,066.85$, $SE = 18,708.08$), Accommodation and Food Services ($M = -28,859.28$, $SE = 2,325.39$), Agriculture, Forestry, Fishing and Hunting ($M = -4,947.48$, $SE = 2,089.28$) and Construction ($M = -38,547.63$, $SE = 3,283.00$). The estimated number of jobs gained (job growth) decreased in three of the four industry categories under study ($p \leq 0.05$), including All Industries ($M = -58,081.53$, $SE = 12,144.87$), Accommodation and Food Services ($M = -3,339.41$, $SE = 1,170.14$) and Construction ($M = -10,202.32$, $SE = 888.08$). Average monthly earnings of employees who worked on the first day of the quarter increased in All Industries ($M = 280.74$, $SE = 87.07$, $p < 0.005$) and in Construction ($M = 279.74$, $SE = 71.75$, $p < 0.005$), while it decreased in Accommodation and Food Services ($M = -27.14$, $SE = 10.14$, $p < 0.015$). Separations decreased in All Industries ($M = -213,474.39$, $SE = 26,059.15$, $p < 0.001$) and in Construction ($M = -36,219.30$, $SE = 3,536.63$, $p < 0.001$). Turnover also decreased in All Industries ($M = -0.033$, $SE = 0.003$, $p < 0.001$), Accommodation and Food Services ($M = -0.042$, $SE = 0.004$, $p < 0.001$), and Construction ($M = -0.031$, $SE = 0.004$, $p < 0.001$). Overall, of the four industry categories under study in Arizona, Construction appears to be the most impacted by state-level implementation of “mandatory” E-Verify legislation. Complete findings from the Arizona analyses can be found in Table 5.

Illinois

Illinois findings indicate that the 2010 implementation of state-level “voluntary” E-Verify legislation had a significant impact in two of the four industry categories under study – All Industries and Accommodation and Food Service. In both categories, beginning of

Table 5. Arizona Findings

		Arizona				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	p	Lower	Upper
All Industries (NAICS Industries)	Emp	(1,0,0)	-30,324.98	57,206.33	0.6	-142,449.38	81,799.43
	EmpTotal	(1,0,0)	-78,411.48	124,354.10	0.533	-322,145.51	165,322.56
	HirN	(0,0,0)	-224,066.85	18,708.08	0.000*	-260,734.68	-187,399.02
	Sep	(0,0,0)	-213,474.39	26,059.15	0.000*	-264,550.33	-162,398.45
	TurnOvrS	(0,0,0)	-0.033	0.003	0.000*	-0.04	-0.03
	FrmJbGn	(0,0,0)	-58,081.53	12,144.87	0.000*	-81,885.47	-34,277.58
	EarnBeg	(1,0,0)	280.74	87.07	0.003*	110.09	451.39
	EarnHirNS	(0,0,0)	100.61	46.63	0.039*	9.21	192.01
Accommodation & Food Service	Emp	(1,0,0)	5,463.50	4,326.16	0.215	-3,015.76	13,942.77
	EmpTotal	(0,1,0)	-4,693.14	4,384.06	0.292	-13,285.89	3,899.61
	HirN	(0,0,0)	-28,859.28	2,325.39	0.000*	-33,417.04	-24,301.53
	Sep	(0,1,0)	-1,595.03	3,111.92	0.612	-7,694.39	4,504.34
	TurnOvrS	(0,0,0)	-0.042	0.004	0.000*	-0.05	-0.03
	FrmJbGn	(0,0,0)	-3,339.41	1,170.14	0.007*	-5,632.89	-1,045.92
	EarnBeg	(1,0,0)(0,1,0)	-27.14	10.14	0.012*	-47.01	-7.26
	EarnHirNS	(0,0,0)	34.84	17.43	0.055	0.67	69.01
Agriculture, Forestry, Fishing & Hunting	Emp	(1,0,0)(0,1,0)	58.68	880.86	0.947	-1,667.80	1,785.15
	EmpTotal	(1,0,0)(0,1,0)	-716.03	2,152.08	0.742	-4,934.10	3,502.05
	HirN	(1,0,0)	-4,947.48	2,089.28	0.025*	-9,042.46	-852.50
	Sep	(1,0,0)(0,1,0)	8.09	1,429.06	0.996	-2,792.86	2,809.04
	TurnOvrS	(1,0,0)(0,1,0)	-0.01	0.01	0.551	-0.02	0.01
	FrmJbGn	(1,0,0)(0,1,0)	-201.73	470.45	0.671	-1,123.81	720.35
	EarnBeg	(1,0,0)(0,1,0)	-36.33	39.09	0.360	-112.94	40.28
	EarnHirNS	(0,0,0)	172.60	57.68	0.006*	59.54	285.65

Table 5. Continued

		Arizona				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	<i>p</i>	Lower	Upper
Construction	Emp	(0,1,0)	-5,194.42	3,025.19	0.095	-11,123.78	734.95
	EmpTotal	(0,1,0)	-6,898.96	5,232.09	0.196	-17,153.86	3,355.93
	HirN	(0,0,0)	-38,547.63	3,283.00	0.000*	-44,982.31	-32,112.95
	Sep	(0,0,0)	-36,219.30	3,536.63	0.000*	-43,151.11	-29,287.50
	TurnOvrS	(0,0,0)	-0.031	0.004	0.000*	-0.04	-0.02
	FrmJbGn	(0,0,0)	-10,202.32	888.08	0.000*	-11,942.95	-8,461.69
	EarnBeg	(0,0,0)	279.74	71.75	0.000*	139.11	420.37
	EarnHirNS	(0,0,0)	344.80	77.68	0.000*	192.54	497.06

* $p \leq .05$.

quarter employment counts increased (All Industries: $M = 126,628.95$, $SE = 46,709.21$, $p < .01$; Accommodation and Food Service: $M = 7,520.15$, $SE = 3,732.60$, $p \leq .05$). The number of people employed also increased in both industry categories (All Industries: $M = 215,281.74$, $SE = 76,394.50$, $p < .01$; Accommodation and Food Service: $M = 19,024.32$, $SE = 7,497.54$, $p < .02$). Additionally, the number of workers who started a new job increased in both industry categories (All Industries: $M = 90,858.62$, $SE = 40,734.34$, $p < .05$; Accommodation and Food Service: $M = 10,426.82$, $SE = 5,102.01$, $p < .05$). In the All Industry industry category, both separations (Sep) and turnovers (TurnOvrS) increased (Sep: $M = 90,163.19$, $SE = 34,138.50$, $p < .02$; TurnOvrS: $M = 0.006$, $SE = .003$, $p < .02$). Complete findings from the Illinois analyses can be found in Table 6.

California

The California analysis showed one indicator in one industry category that was significantly impacted by the 2011 implementation of state-level E-Verify legislation. In the industry category of Accommodation and Food Service, beginning of quarter employment counts (Emp) increased ($M = 24,577.97$, $SE = 11,841.81$, $p < .05$). Complete findings from the California analyses can be found in Table 7.

Florida

The Florida analysis also showed one indicator in one industry category that was significantly impacted by the 2011 implementation of state-level E-Verify legislation. In the industry category of Accommodation and Food Service, average monthly earnings of employees who worked on the first day of the quarter (EarnBeg) decreased ($M = -35.65$, $SE = 14.33$, $p < .02$). Complete findings from the Florida analyses can be found in Table 8.

Table 6. Illinois Findings

		Illinois				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	p	Lower	Upper
All Industries (NAICS Industries)	Emp	(1,0,0)(0,1,0)	126,628.95	46,709.21	0.009*	35,078.91	218,178.99
	EmpTotal	(1,0,0)(0,1,0)	215,281.74	76,394.50	0.007*	65,548.52	365,014.97
	HirN	(1,0,0)(0,1,0)	90,858.62	40,734.34	0.031*	11,019.33	170,697.92
	Sep	(1,0,0)(0,1,0)	90,163.19	34,138.50	0.011*	23,251.73	157,074.65
	TurnOvrS	(1,0,0)(0,1,0)	0.006	0.003	0.018*	0.00	0.01
	FrmJbGn	(1,0,0)(0,1,0)	15,442.70	11,429.58	0.183	-6,959.28	37,844.67
	EarnBeg	(1,0,0)(0,1,0)	23.40	30.08	0.441	-35.55	82.35
	EarnHirNS	(1,0,0)(0,1,0)	52.31	43.18	0.232	-32.32	136.94
Accommodation & Food Service	Emp	(1,0,0)(0,1,0)	7,520.15	3,732.60	0.05*	204.26	14,836.05
	EmpTotal	(1,0,0)(0,1,0)	19,024.32	7,497.54	0.015*	4,329.14	33,719.49
	HirN	(1,0,0)(0,1,0)	10,426.82	5,102.01	0.047*	426.88	20,426.76
	Sep	(1,0,0)(0,1,0)	9,994.46	5,067.01	0.055	63.13	19,925.78
	TurnOvrS	(1,0,0)(0,1,0)	0.01	0.006	0.079	0.00	0.02
	FrmJbGn	(1,0,0)(0,1,0)	1,548.60	837.35	0.071	-92.60	3,189.80
	EarnBeg	(1,0,0)(0,1,0)	9.37	7.94	0.244	-6.19	24.92
	EarnHirNS	(1,0,0)(0,1,0)	30.18	17.74	0.096	-4.59	64.95
Agriculture, Forestry, Fishing & Hunting	Emp	(2,0,0)(1,0,0)	3,011.51	2,495.98	0.234	-1,880.60	7,903.62
	EmpTotal	(1,0,0)(0,1,0)	430.66	505.79	0.399	-560.69	1,422.02
	HirN	(1,0,0)(0,1,0)	245.39	362.65	0.502	-465.41	956.18
	Sep	(1,0,0)(1,0,0)	94.10	369.39	0.800	-629.91	818.10
	TurnOvrS	(1,0,0)(0,1,0)	-0.002	0.003	0.606	-0.01	0.00
	FrmJbGn	(1,0,0)(0,1,0)	-15.89	121.51	0.897	-254.05	222.28
	EarnBeg	(1,0,0)(0,1,0)	7.79	33.46	0.817	-57.79	73.37
	EarnHirNS	(1,0,0)(2,0,0)	112.22	116.41	0.34	-115.95	340.38

Table 6. Continued

		Illinois				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	<i>p</i>	Lower	Upper
Construction	Emp	(1,0,0)(0,1,0)	8,585.46	5,507.09	0.126	-2,208.44	19,379.35
	EmpTotal	(1,0,0)(0,1,0)	13,474.92	9,403.80	0.159	-4,956.53	31,906.37
	HirN	(1,0,0)(0,1,0)	4,202.69	2,501.07	0.100	-699.41	9,104.79
	Sep	(1,0,0)(0,1,0)	1,977.79	2,833.58	0.489	-3,576.03	7,531.60
	TurnOvrS	(1,0,0)(0,1,0)	0.001	0.003	0.660	0.00	0.01
	FrmJbGn	(1,0,0)(0,1,0)	588.56	1,067.82	0.584	-1,504.36	2,681.49
	EarnBeg	(1,0,0)(0,1,0)	-48.70	55.36	0.384	-157.21	59.81
	EarnHirNS	(1,0,0)(0,1,0)	-160.23	83.65	0.062	-324.18	3.73

* $p \leq .05$.

Table 7. California Findings

		California				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	<i>p</i>	Lower	Upper
All Industries (NAICS Industries)	Emp	(1,0,0)(0,1,0)	164,166.66	152,150.03	0.286	-134,047.40	462,380.73
	EmpTotal	(1,0,0)(0,1,0)	256,020.67	265,995.72	0.341	-265,330.93	777,372.28
	HirN	(1,0,0)(0,1,0)	76,271.33	155,036.08	0.625	-227,599.39	380,142.06
	EarnBeg	(1,0,0)(0,1,0)	25.52	72.14	0.725	-115.87	166.90
Accommodation & Food Service	Emp	(1,0,0)(1,0,0)	24,577.97	11,841.81	0.043*	1,368.03	47,787.92
	EmpTotal	(1,0,0)(0,1,0)	36,786.38	24,621.02	0.142	-11,470.81	85,043.57
	HirN	(1,0,0)(0,1,0)	15,249.96	15,591.89	0.333	-15,310.15	45,810.06
	EarnBeg	(1,0,0)(0,1,0)	28.06	26.80	0.301	-24.47	80.60
Agriculture, Forestry, Fishing & Hunting	Emp	(1,0,0)(0,1,0)	8,038.99	6,919.41	0.252	-5,523.05	21,601.03
	EmpTotal	(1,0,0)(0,1,0)	17,636.88	18,018.86	0.305	-17,680.08	52,953.84
	HirN	(1,0,0)(1,0,0)	10,501.93	10,645.32	0.329	-10,362.90	31,366.76
	EarnBeg	(1,0,0)(0,1,0)	-2.34	25.89	0.928	-53.08	48.39
Construction	Emp	(2,0,0)(1,0,0)	2,055.34	15,969.55	0.898	-29,244.97	33,355.65
	EmpTotal	(1,0,0)(0,1,0)	10,922.75	31,142.25	0.727	-50,116.07	71,961.56
	HirN	(1,0,0)(0,1,0)	2,846.19	12,906.08	0.826	-22,449.73	28,142.10
	EarnBeg	(1,0,0)(0,1,0)	27.87	95.97	0.773	-160.24	215.98

* $p \leq .05$.

Table 8. Florida Findings

		Florida				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	<i>p</i>	Lower	Upper
All Industries (NAICS Industries)	Emp	(2,0,0)(2,0,0)	-84,114.93	51,951.22	0.112	-185,939.31	17,709.45
	EmpTotal	(1,0,0)(0,1,0)	-93,237.62	210,624.74	0.66	-506,062.10	319,586.87
	HirN	(0,1,0)	36,396.48	34,532.23	0.297	-31,286.69	104,079.66
	Sep	(2,0,0)(0,1,0)	31,341.51	113,147.33	0.783	-190,427.25	253,110.27
	TurnOvrS	(1,0,0)(0,1,0)	0.009	0.005	0.118	0.00	0.02
	FrmJbGn	(0,1,0)	18,570.00	52,038.03	0.723	-83,424.54	120,564.54
	EarnBeg	(1,0,0)(0,1,0)	-51.35	46.06	0.271	-141.63	38.93
	EarnHirNS	(1,0,0)(0,2,0)	-47.37	43.59	0.284	-132.81	38.07
Accommodation & Food Service	Emp	(1,0,0)(0,1,0)	11,402.93	12,266.24	0.357	-12,638.89	35,444.75
	EmpTotal	(2,0,0)(0,1,0)	-8,528.86	23,422.28	0.717	-54,436.53	37,378.80
	HirN	(1,0,0)(0,1,0)	-343.03	16,034.39	0.983	-31,770.44	31,084.38
	Sep	(1,0,0)(0,1,0)	5,383.30	13,515.25	0.692	-21,106.59	31,873.19
	TurnOvrS	(1,0,0)(0,1,0)	0.012	0.007	0.087	0.00	0.03
	FrmJbGn	(1,0,0)(0,1,0)	3,186.80	7,027.45	0.652	-10,586.99	16,960.59
	EarnBeg	(1,0,0)(0,1,0)	-35.65	14.33	0.017*	-63.74	-7.56
	EarnHirNS	(2,0,0)(2,0,0)	41.71	41.81	0.324	-40.24	123.66
Agriculture, Forestry, Fishing & Hunting	Emp	(2,0,0)(1,0,0)	3,011.51	2,495.98	0.234	-1,880.60	7,903.62
	EmpTotal	(1,0,0)(1,0,0)	825.29	4,730.47	0.862	-8,446.43	10,097.01
	HirN	(1,0,0)(0,1,0)	534.94	1,786.83	0.766	-2,967.24	4,037.13
	Sep	(1,0,0)(1,0,0)	-150.53	2,789.98	0.957	-5,618.90	5,317.83
	TurnOvrS	(1,0,0)(0,1,0)	0.001	0.007	0.861	-0.01	0.01
	FrmJbGn	(1,0,0)(0,1,0)	167.38	1,712.56	0.923	-3,189.24	3,524.00
	EarnBeg	(1,0,0)(0,1,0)	9.61	52.03	0.854	-92.37	111.59
	EarnHirNS	(1,0,0)(0,1,0)	77.09	49.70	0.128	-20.31	174.50

Table 8. Continued

		Florida				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	<i>p</i>	Lower	Upper
Construction	Emp	(2,0,0)(1,0,0)	-6,785.87	12,567.77	0.592	-31,418.70	17,846.97
	EmpTotal	(1,0,0)(0,2,0)	-21,027.12	31,674.55	0.51	-83,109.23	41,054.99
	HirN	(1,0,0)(0,1,0)	3,423.09	11,115.51	0.760	-18,363.31	25,209.49
	Sep	(1,0,0)(0,1,0)	-3,655.15	11,984.54	0.762	-27,144.85	19,834.56
	TurnOvrS	(1,0,0)(0,1,0)	0.013	0.008	0.107	0.00	0.03
	FrmJbGn	(1,0,0)(0,1,0)	5,942.57	7,233.12	0.416	-8,234.35	20,119.48
	EarnBeg	(1,0,0)(0,1,0)	-23.37	69.95	0.74	-160.48	113.73
	EarnHirNS	(1,0,0)(0,1,0)	-62.42	64.38	0.337	-188.61	63.77

* $p \leq .05$.

Limitations

Number of Observations

The number of observations both pre- and post-state-level E-Verify implementation varied by state. In Arizona, there were many more post-E-Verify implementation observations than there were preimplementation observations. The limited number of preimplementation observations in Arizona hindered the process of effectively modeling the preintervention portion of the analysis. The opposite was true in California and Florida.

These states had many more preimplementation observations than they had postimplementation observations. Therefore, it was hard to identify “significance” in the analyses for these two states. Illinois had the most complete data for effective preimplementation modeling and postintervention analysis. Finally, California did not have enough postintervention observations in four of the eight indicator categories (Sep, TurnOvrS, FrmJbGn, and EarnHirNS). Therefore, these were left out of the analysis.

History

History is considered the main threat to internal validity with time-series designs (Cook & Campbell, 1979). State-level E-Verify implementation occurred in the study states between January, 2008 and October, 2011. This period of time included other economic and workforce stressors, including the nationwide economic downturn that began in 2008. Such confounding factors could have influenced the study findings.

Industry Categories

This study was limited by the way in which The North American Industry Classification System (NAICS) classifies industries. In particular, the grouping of

Agriculture, Forestry, Fishing and Hunting did not allow for evaluation of the impact of E-Verify legislation on Agriculture as a sole industry. Agriculture as an industry employs many foreign workers (Passel & Cohn, 2011) and would therefore likely show greater sensitivity to E-Verify legislation than it did in the present study if it were able to be differentiated from Forestry, Fishing and Hunting.

Number of States

While this study included states that varied in their E-Verify implementation, including more states with similar “weak” or “strong” alignment with a cosmopolitan approach to global distributive justice would strengthen the findings here. Future research should include a “grouping” of states with similar approaches to implementation of E-Verify legislation.

Discussion

Findings suggest that in terms of state-level E-Verify implementation, the more strongly a state aligns with a cosmopolitan approach to global distributive justice, the more growth that state saw in the area of overall employment growth, including beginning-of-quarter employment, flow employment, number of new hires, and overall number of jobs gained. Conversely, findings suggest that the more weakly a state aligns with a cosmopolitan approach to global distributive justice in terms of E-Verify implementation, that state saw a decrease in overall employment growth as assessed by those same indicators. Findings also suggest that stronger alignment with global distributive justice may predict increases in turnover and separations, while weaker alignment may predict decreases in turnover and separations. In essence then, this study found that both overall job growth and overall

instability in the workforce were associated with stronger alignment with global distributive justice, while overall job loss as well as overall stability in the workforce were associated with weaker alignment with global distributive justice.

Common across the states included in this study, Accommodation and Food Service was the industry most impacted by E-Verify implementation, with Construction also significantly impacted in Arizona. Consistent with the pattern described above, the stronger a state's alignment was with a cosmopolitan approach to global distributive justice, the more growth that state's Accommodation and Food Service Industry saw in the areas of beginning-of-quarter employment, flow employment, number of new hires, and overall number of jobs gained. Also consistent with the pattern described above, findings suggest that the weaker a state's alignment was with a cosmopolitan approach to global distributive justice, that state's Accommodation and Food Service Industry saw a decrease in those same areas. Divergent from the above pattern, however, there is no indication in the findings that stronger alignment with global distributive justice negatively impacts stability factors (separations and turnovers) in the Accommodation and Food Service industry.

Given that the four study indicators that measured employment growth showed significant growth in these areas when E-Verify implementation strongly aligned with a cosmopolitan approach to global distributive justice and that the reverse was also true – these indicators showed significant loss when E-Verify implementation was weakly aligned with a cosmopolitan approach to global distributive justice, it is important that we consider why this might be so. It is especially important, given that immigration reform is a policy area rife with both current relevance and extreme controversy.

There are two obvious possibilities for explaining the employment outcomes found

in this study. The first is that following implementation of weakly-aligned with global distributive justice state-level E-Verify legislation, many previously “on-the-books” employers go “off-the-books,” essentially operating outside the radar of any governing bodies. The second is that following implementation of weakly-aligned with global distributive justice state-level E-Verify legislation, employers and/or employees choose to leave the state in search of a place to conduct business/participate in the workforce that has more strongly-aligned with global distributive justice E-Verify laws.

“Off-the-Books” Employment

“Off-the-books” employment is problematic for various reasons. First, in the context of cosmopolitan global distributive justice, “off-the-books” employment prevents workers and employers alike from participating legitimately in the “rights” and “responsibilities” associated with being a “good citizen.” In particular, the “responsibility” of political participation is not an option for employees and/or employers working “off-the-books.” According to the framework set forth in this paper, when individuals do not participate in the “responsibilities” associated with “good citizenship,” they are not entitled to the “rights” that go along with “good citizenship” (civil, political, social rights). As we know, inability to participate legitimately in society can lead to mayhem (Wilson, 1996).

From an economic standpoint, when employers go “off-the-books,” they are not subject to the same taxes and fees that “on-the-books” employers must pay in order to stay in business. When this happens, governments are not able to collect needed revenue. Additionally, Patel (2010) and Bruno (2013) point out that immigrant workers contribute 700 billion dollars annually to economic activity. “Off-the-books” employment is problematic as it jeopardizes this contribution (Bruno, 2013; Patel, 2010). Further, when an

employer goes “off-the-books,” legal employment options decrease for both citizens and noncitizens, again hurting the workforce, therefore the economy, and inevitably, the social fabric of that society.

Relocation

Other than “off-the-books” employment, another possible explanation for significant employment loss when E-Verify implementation was weakly aligned with a cosmopolitan approach to global distributive justice is that following implementation of weakly-aligned with global distributive justice state-level E-Verify legislation, employers and/or employees choose to leave the state (relocate) in search of a place to conduct business/participate in the workforce that has more strongly-aligned with global distributive justice E-Verify laws. If this is the case, the economic concerns outlined above remain a concern.

E-Verify is not a good policy, especially when its implementation is “mandatory.” In this study, I demonstrate that strict implementation of the policy not only hurts many of our immigrant clients by systematically excluding them from the workforce, thereby restricting their ability to achieve economic self-sufficiency and political participation, two of the “responsibilities” of citizenship; but its “mandatory” implementation also hurts the state itself by resulting in “off-the-books” employment and/or relocation of businesses. This research must be taken into account before moving forward with any immigration reform efforts that include “mandatory” E-Verify legislation.

References

Baker, S. (2004). Agricultural guestworker programs in the United States. *Texas Hispanic Journal of Law and Policy*, 10(79), 81–114.

- Barnett, M. B. (2009). The high cost of low-cost workers: Missouri enacts new law targeting employers of unauthorized workers. *Immigration and Nationality Law Review*, 30, 801–821.
- Beitz, C. R. (1999). International liberalism and distributive justice: A Survey of recent thought. *World Politics*, 51(2), 269–296.
- Bruno, A. (2013). *Unauthorized aliens: Policy options for providing targeted immigration relief*. Washington, DC: Congressional Research Service.
- Caney, S. (2001). Cosmopolitan justice and equalizing opportunities. *Metaphilosophy*, 32(1–2), 113–134.
- Caney, S. (2008). Cosmopolitan justice and the state. *Political Studies*, 56, 487–518.
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Chicago, IL: Rand McNally.
- Gomberg-Munoz, R., & Nussbaum, L. (2011). Is immigration policy labor policy? Immigration enforcement, undocumented worker, and the state. *Society for Applied Anthropology*, 70(4), 366–375.
- Kymlicka, W., & Norman, W. (1994). Return of the citizen: Recent work on citizenship theory. *Ethics*, 104(2), 352–381.
- Massey D. S., & Malone, N. (2002). Pathways to legal immigration. *Population Research and Policy Review*, 21, 473–504.
- Passel, J. S., & Cohn, D. (2011). *Unauthorized immigrant population: National and state trends, 2010*. Washington, DC: Pew Hispanic Center.
- Patel, S. C. (2010). E-Verify: An exceptionalist system embedded in the immigration reform battle between federal and state governments. *Boston College Third World Law Journal*, 30(2), 543–574.
- Pogge, T. W. (1989). *Realizing Rawls*. Ithaca, NY: Cornell University Press.
- Pogge, T. W. (1992). Cosmopolitanism and sovereignty. *Ethics*, 103(1), 48–75.
- Pogge, T. W. (1994). An egalitarian law of peoples. *Philosophy & Public Affairs*, 23(3), 195–224.
- Pogge, T. W. (2005). Human rights and global health: A research program. *Metaphilosophy*, 36(1–2), 182–209.
- Rosenblum, M. R. (2011, August). *U.S. immigration policy since 9/11: Understanding the stalemate over comprehensive immigration reform*. Retrieved from the Migration Policy Institute website: <http://www.seiu.org>

Van Soest, D., & Garcia, B. (2003). *Diversity education for social justice: Mastering teaching skills*. Alexandria, VA: Council on Social Work Education.

Wilson, J. W. (1998). *When work disappears: New implications for race and urban poverty in the global economy*. London, UK: Center for Analysis of Social Exclusion.

CHAPTER 4

THE IMPACT OF VARIATION IN E-VERIFY IMPLEMENTATION ON WORKFORCE OUTCOMES IN TWO CALIFORNIA COUNTIES

Introduction

Immigration reform is at the center of public debate and a top priority for Congress and for President Obama (Bruno, 2013). The 113th Congress has made many immigration-related proposals, including making an electronic employment verification system “mandatory” for all employers and permitting or requiring electronic verification of previously hired workers (Bruno, 2013). Further, federal legislation that mandates use of an electronic employment eligibility verification system for all employers is a key component (sometimes referred to as the “lynchpin”) of immigration reform efforts. In the context of comprehensive immigration reform, E-Verify is *the* current form of “workplace enforcement.” This study evaluated the impact of E-Verify implementation in two California counties (i.e., Orange County and Riverside County) on key economic indicators such as total employment, job creation, turnover, and new hires.

Overview of Paper

First, I will describe E-Verify and provide a brief summary of the limited empirical knowledge available on the program. Next, I will trace a history of E-Verify, both Federally

and California State-wide followed by a history of County-wide E-Verify implementation in the study counties. In the next sections, I will use time series analysis to determine how E-Verify implementation influenced workforce outcomes in Orange and Riverside Counties and discuss the implications of the findings.

Description of E-Verify

E-Verify is an electronic employment eligibility verification system in which, after reviewing a new employee's I-9 form, an employer is required to log into an online system for the purpose of verifying the identity and work eligibility of that new employee. E-Verify employs databases of the Social Security Administration (SSA) and the U.S. Citizen and Immigration Services (USCIS) to “verify” the identity and employment eligibility of new hires. The employer has 3 days from the date of hire to submit the new employee's information (social security number, date of birth, and citizenship status) to E-Verify. If a match exists, verification is successful. If a match does not exist, a tentative nonconfirmation (TNC) is issued. In the case of a TNC, the employer is supposed to tell the employee about the TNC. The employee then has 8 days to resolve the issue. No negative actions can be taken against the employee during the time of appeal (Barnett, 2009; Patel, 2010; Rosenblum, 2011).

E-Verify Evaluations to Date

In a previous study, Galvin (2014) found that between 2009 and 2013, there were only 11 studies that conducted empirical research on E-Verify. Of the 11 studies, 3 were based on customer satisfaction surveys and 7 were published by the same organization (Westat). Two were journal articles published in academic journals and 9 were reports

published by a combination of public and private organizations. Two of the studies were secondary data analyses of large, publicly available data sets: (a) The Current Population Survey and (b) the Bureau of Labor Statistics. Sample sizes varied greatly.

The evaluations have shown improvements in database accuracy (Westat, 2009; Government Accountability Organization, 2010). However, they continue to show discrimination, compliance, and privacy remain areas of significant concern (Bruno, 2013; Government Accountability Office, 2010). For example, Westat (2009) found that not all employers consistently comply with E-Verify procedures. The same study also found that foreign-born workers with employment authorization are more likely to incorrectly receive TNCs than are U.S.-born workers. Further, the Government Accountability Office (2010) found that E-Verify remains vulnerable to identity theft and employer fraud.

Literature Review

Given the limited research available on the impact of E-Verify and in light of the very real possibility that E-Verify could soon be made mandatory for all U.S. employers, this study aimed to evaluate the possible influence that E-Verify had on key economic workforce indicators in California, a state that prior to state-level E-Verify legislation (October 9, 2011), had many localities implement their own E-Verify laws. Orange County was chosen as a study county because it was the first county in which a city (Mission Viejo) implemented its own E-Verify law. Riverside County was chosen as a study county because it was the California County in which the most cities (Menifee, Lake Elsinor, Wildomar, Temecula, Murrieta, Hemet) implemented their own E-Verify laws.

Federal History of E-Verify

Immigration Reform and Control Act (1986)

In 1986, with 3.2 million undocumented immigrants from México living and working inside the U.S., the Immigration Reform and Control Act (IRCA) was passed by Congress and signed into law by President Reagan (Barnett, 2009; Bruno, 2013; Gomberg-Munoz & Nussbaum-Barberena, 2011; Patel, 2010). This law was an attempt to reduce the magnet of employment for those migrating without proper documentation from México to the US (Barnett, 2009; Bruno, 2013; Gomberg-Munoz & Nussbaum-Barberena, 2011; Patel, 2010). For the first time in U.S. history, it became illegal for an employer to hire someone who was unable to provide proof of identity and authorization to work in the U.S. The three primary provisions included in the IRCA were (a) making it unlawful to knowingly hire, recruit, refer for a fee, or continue to employ an unauthorized alien; (b) requiring all employers to examine documents presented by new hires to verify identity and work authorization; and (c) requiring employers to complete and retain eligibility verification forms, I-9 forms. These three provisions are collectively referred to as “employer sanctions” (Bruno, 2013).

The expectation was that employers would inspect documents presented by new hires and subsequently, the employer would complete an I-9 form. The two major problems with this system were (a) documents used to verify identity and work authorization were prone to fraud and (b) employers were largely protected from prosecution if they were not in compliance with any part of IRCA (Barnett, 2009; Patel, 2010). Consensus in the literature (Barnett, 2009; Harper, 2012; Patel, 2010) is that the Immigration Reform and Control Act failed to meet its goal of reducing the magnet of employment for those migrating without

proper documentation from México to the U.S. and Immigration and Naturalization Services (INS) reports that by 1996, there were an estimated five million undocumented immigrants from México living in the U.S.

Illegal Immigration Reform and Immigration Responsibility Act (1996)

Given the attempt to curb unauthorized employment in the U.S. with IRCA was considered a failure and amid the still increasing number of undocumented immigrants from México entering the U.S., Congress enacted the Illegal Immigration Reform and Immigration Responsibility Act (IIRIRA) in 1996. The passing of IIRIRA was a direct effort to strengthen the employment verification process. Its purpose was to (a) reduce false claims of U.S. citizenship and document fraud; (b) reduce discrimination against employees; and (c) reduce the burden on employers to verify employees' work eligibility (Barnett, 2009; Bruno, 2013; Gomberg-Munoz & Nussbaum-Barberena, 2011; Patel, 2010). In order to accomplish these goals, the Attorney General was responsible for conducting three voluntary pilot projects in which an employer could verify the identity and employment eligibility of their new hires after examining their documents and completing an I-9 form.

The first of these three voluntary pilot projects began in 1997 and was called the Basic Pilot Program. It was available in the five states with the largest populations of undocumented immigrants: California, Florida, Illinois, New York, and Texas. In 2003, the program became available nationwide. In 2005, the program became internet-based and was re-named E-Verify in 2007. As of September 8, 2009, all employers with federal contracts over \$3,000 were (and still are) mandated to use E-Verify (Executive Order, 13465).

The Department of Justice (DOJ) and Immigration and Naturalization Services (INS)

were originally responsible for operating the program. However, in the aftermath of the terrorist acts of September 11, 2001, George W. Bush established the Department of Homeland Security (DHS) and administration of the Basic Pilot Program came under DHS's Immigration and Customs Enforcement (ICE) unit on March 1, 2003 (Bruno, 2013; Gomberg-Munoz & Nussbaum-Barberena, 2011; Patel, 2010). This shift, combined with an economic crisis in the U.S., created a situation in which undocumented immigrants were now associated with terrorism and their act of being in the U.S. without proper documentation was considered criminal (Gomberg-Munoz & Nussbaum-Barberena, 2011).

State Involvement in Immigration Policy

Although through IRCA and IIRIRA, regulating the citizenship and naturalization status of individuals clearly falls to the federal government, the U.S. Constitution does not exclude states from regulating undocumented populations (Barnett, 2009). Pointing to the events of September 11, 2001, and in the context of struggling state economies, to varying degrees, states have become involved in workplace enforcement of immigration policy as a way to “protect” American jobs in individual states and to deter undocumented immigrants from entering and staying within state boundaries (Patel, 2010). Further, after September 11, 2001, state-level assistance in enforcing immigration laws was encouraged by the federal government and states are now permitted to investigate, arrest, and detail suspected violators (Patel, 2010). The following section summarizes California's history with E-Verify.

History of E-Verify in California

On July 1, 2007, Mission Viejo, California was the first California locality to pass an E-Verify law. The city ordinance (Ordinance 07-247) required that the city and certain

employers with city contracts use the E-Verify system to verify identity and work eligibility of new hires. Between July 1, 2007 and September 1, 2011, 12 California localities followed suit and passed similar ordinances. Some local ordinances required all employers within the locality's boundaries to utilize E-Verify to verify the identity and work eligibility of new hires (e.g., Temecula, Murrieta, Menifee, Lancaster, and Lake Elsinor). Other local ordinances (e.g., Escondido, Hemet, Hesperia, San Bernadino, and Wildomar) required employers working with the city and/or county to utilize E-Verify to verify the identity and work eligibility of new hires. Still other local ordinances (Simi Valley and Palmdale) required certain employers doing business with the city/county to utilize E-Verify to verify the identity and work eligibility of new hires.

These local ordinances were nullified on October 9, 2011 when Governor Brown signed into law Assembly Bill 1236. This law, “. . . prohibits the state of California and any of its cities, counties, or special districts from requiring an employer (other than a government entity) to use E-Verify as a condition of receiving a government contract, applying for or maintaining a business license, or as a penalty for violating licensing or other similar laws” (AB 1236). California employers remain free to use E-Verify on a voluntary basis or as required by federal contracts.

Study Counties

Orange County

Orange County is one of the wealthiest counties in the state of California, with Mission Viejo being one of its wealthiest cities (U.S. Census, 2012). The U.S. Census (2012) reports Orange County's population to be 43.1% White, 18.9% Asian, and 34.1% Hispanic/Latino. Mission Viejo's population is reported as being 68.9% White, 9.1% Asian,

and 17% Hispanic/Latino. Orange County's median household income is \$75,000 with Mission Viejo's median household income at \$96,088. Eleven-point-seven percent of Orange County residents live below the poverty line whereas 5.3% of Mission Viejo's residents live below the poverty line. Finally, while 59.3% of Orange County residents own their homes, 77.6% of Mission Viejo residents own their homes (U.S. Census, 2012).

Though the Orange County city of Mission Viejo was the first city in the state of California to pass its own E-Verify law on July 1, 2007, it remained the only city within the county to pass an E-Verify law before the California state-level E-Verify law was passed on October 9, 2011. The Mission Viejo ordinance (City Ordinance 07-274) that required all city agencies and contractors to use E-Verify for its new employees does not seem extremely strict, given the highly strict E-Verify laws that we are familiar with today in places such as Arizona that call for all employers within the boundaries of the state to participate in E-Verify to verify the identity and work eligibility of new hires. However, in 2007 in California, any E-Verify legislation was considered "strict" as it was another full year before any other city in the state passed E-Verify legislation (Palmdale) and another 2 years after that before any more city-level E-Verify legislation was passed in the state. Table 9 provides an overview of E-Verify laws enacted in Orange County prior to state-level legislation.

Riverside County

The number of Hispanic/Latinos who reside in Riverside County is high, suggesting that E-Verify could be impactful in this county. U.S. Census (2012) reported 46.5% of Riverside County residents are Hispanic/Latino compared to 38.2% for the state of California overall. In terms of median household income and percent of residents living below the poverty level, Riverside County mirrored the state of California with the median

Table 9. History of E-Verify Legislation in Orange County and Riverside County

County	City	Legislation	Implementation date	Expiration date
Orange County	Mission Viejo	Required all city agencies and contractors to use E-Verify for its new employees. (City Ord. 07-274)	July 1, 2007	October 9, 2011
Riverside County	Menifee	All employers applying for a business license had to affirm their intent to use E-Verify for new employees. (City of Menifee City Council Meeting: June 15, 2010)	June 15, 2010	October 9, 2011
	Lake Elsinor	Required all employers in the city use E-Verify for new employees. (City Ord. 1279)	June 15, 2010	October 9, 2011
	Wildomar	All city contractors were required to use E-Verify for new employees and provide the city documentation affirming its enrollment and participation. (City Ord. 57)	December 8, 2010	October 9, 2011

Table 9. Continued

County	City	Legislation	Implementation date	Expiration date
	Temecula	Required all businesses in the city to use E-Verify for new employees. (City Ord. 10)	January 1, 2011	October 9, 2011
	Murrieta	Required all employers to use E-Verify as a condition of obtaining a business license. (City Ord. amending Chapter 5.04 of Municipal Code)	March 21, 2011	October 9, 2011
	Hemet	Required city employers use E-Verify for all new employees. (City Ord. 11-017)	June 9, 2011	October 9, 2011

household income being \$57,096 (\$61,400 CA) and percent of residents living below the poverty level at 15.6% (15.3% CA). By comparison to California overall, Riverside County had a high homeownership rate at 67.5% (56% CA; U.S. Census, 2012).

In mid-2010, Menifee and Lake Elsinor became the first two cities in Riverside County to enact their own E-Verify legislation. Both of these cities passed strict E-Verify laws, requiring all employers within the cities' boundaries to use E-Verify to verify the identity and work eligibility of new hires (Menifee: City of Menifee City Council Meeting, June 15, 2010; Lake Elsinor: City Ordinance 1279). Between June 15, 2010 and June 9, 2011, four additional Riverside County cities passed their own E-Verify legislations. Temecula and Murietta passed similar laws to the laws in Menifee and Lake Elsinor, requiring all employers within the cities' boundaries to use E-Verify to verify the identity and work eligibility of new hires (Temecula: City Ordinance 10; Murietta: City Ord. amending Chapter 5.04 of Municipal Code). Wildomar and Hemet passed less-stringent legislation, requiring employers working with the city to use E-Verify to verify the identity and work eligibility of new hires (Wildomar: City Ordinance 57; Hemet: City Ordinance 11-017). Table 9 provides an overview of E-Verify laws enacted in Riverside County prior to state-level legislation.

Methods

This study utilized secondary data to conduct an interrupted time series design and compared the time-series pattern pre- and post – E-Verify implementation in both Orange and Riverside Counties. Quarterly Workforce Indicator (QWI) data are a publicly available data set accessed through the U.S. Census. It is the employer-employee-linked microdata from the Longitudinal Employer-Household Dynamics (LEHD) program. Quarterly

Workforce Indicator data provides “. . . labor market statistics by industry, worker demographics, employer age and size . . .” (<http://lehd.ces.census.gov/>) and is collected on a quarterly basis. For this study, county-level data was collected, including pre-E-Verify implementation data, beginning in the first quarter of 2000 through the fourth quarter of 2011, which is when state-level legislation took effect.

The U.S. Census and other Federal statistical agencies use The North American Industry Classification System (NAICS) to “. . . classify(ing) business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy” (retrieved from www.census.gov/eos/www/naics/). The five industry categories chosen for this study were (a) All Industries; (b) Accommodation and Food Service; (c) Agriculture, Forestry, Hunting and Fishing; (d) Construction; and (e) Manufacturing. These industry categories were chosen because they align with the Pew Hispanic Center’s 2009 report on which industries unauthorized workers represent a disproportionate share of the labor force (Passel & Cohn, 2009).

The eight indicators chosen for this study were: (a) Beginning of quarter employment counts; (b) counts of reference quarter employment or “flow” employment; (c) counts of new hires (d) estimated number of workers whose job with a specific employer ended; (e) rate at which stable jobs begin and end (f) estimated number of jobs gained; (g) average monthly earnings of employees who worked on the first day of the reference quarter; and (h) average monthly earnings of newly stable employees (defined in appendix A). Taken together, these indicators paint a picture of what changes, if any, E-Verify has caused in the workforce. Data from the LEHD is frequently used by industry government as indicators of economic strength and to guide economic decision making (Erica Groshen,

Commissioner of Labor Statistics, LED Partnerships Workshop, June 12, 2013). For consistency, when given a choice, “beginning of quarter” counts were chosen.

For each time series, an interrupted autoregressive integrated moving average (ARIMA) model was applied (Cook & Campbell, 1979). Autocorrelations (ACF) and partial autocorrelations (PACF) in addition to the residuals from each model were used to identify evidence of seasonality as well as to test model fit. Autoregressive and difference adjustments were made accordingly in order to ensure time series’ with normal distribution and stability in level and variance. Though timing of E-Verify legislation varied by city, this study considered the first implementation date within the county as the first date of possible change and each time series was coded accordingly. In specific, timing of E-Verify legislation implementation for each county was represented as a dummy variable which was coded 0 through the quarter just prior to implementation of the legislation and 1 thereafter.

Findings

Orange County

Findings indicate that the 2007 Mission Viejo E-Verify law requiring all city agencies and contractors to use E-Verify for its new employees (City Ordinance 07-274) showed significant impact on workforce trends in Orange County in three of the five industry categories under study, including (a) All Industries, (b) Agriculture, Forestry, Hunting, and Fishing, and (c) Manufacturing. Findings demonstrate that while “flow” employment (count of people employed at some point during the quarter) increased in the All Industries category ($M = 42,918.51$, $SE = 19,530.12$, $p < .05$), the overall number of jobs lost (FrmJbGn) in the All Industries category was significant ($M = -17,289.28$, $SE = 2,236.40$, $p < .001$). Decrease in overall job growth was also significant in the Manufacturing

industry category ($M = -2,158.44$, $SE = 433.08$, $p < .001$). Agriculture, Forestry, Fishing and Hunting saw a decrease in the average monthly earnings of employees who worked on the first day of the quarter (EarnBeg) ($M = -134.21$, $SE = 54.33$, $p < .02$). Complete findings from the Orange County analyses can be found in Table 10.

Riverside County

This research revealed no significant findings in Riverside County. Though cities in Riverside County passed some of the strictest E-Verify laws in the state of California, the first law was passed in mid-2010, which gave only five quarters of data to be collected before state-level legislation took effect on October 9, 2011. Complete findings from the Riverside County analysis can be found in Table 11.

Limitations

Number of Observations

The number of county-level observations post-E-Verify implementation was not as many as was desirable. This was particularly the case in Riverside County, which had only five observations of post-city-level E-Verify legislation and pre-state-level E-Verify legislation (Quarter 3, 2010 through Quarter 3, 2011). The Orange County data were stronger, as there were 16 observations (Quarter 3, 2007 through Quarter 3, 2011). With more observations in Riverside County, I suspect that significance may have been detected, given the strict nature of some of the city-level E-Verify laws passed in this county.

History

Time-series designs are highly vulnerable to history. History is considered the main threat to internal validity in these designs (Cook & Campbell, 1979). City-level E-Verify

Table 10. Orange County Findings

		Orange County				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	p	Lower	Upper
All Industries (NAICS Industries)	Emp	(1,0,0)(0,1,0)	-730.99	16,816.09	0.966	-33,690.52	32,228.54
	EmpTotal	(2,0,0)(1,0,0)	42,918.51	19,530.12	0.034*	4,639.48	81,197.54
	HirN	(1,0,0)(0,1,0)	9,943.61	16,830.23	0.558	-23,043.64	42,930.85
	Sep	(1,0,0)(0,1,0)	22.54	15,376.57	0.999	-30,115.53	30,160.61
	TurnOvrS	(2,0,0)(1,0,0)	0.000	0.003	0.91	-0.01	0.01
	FrmJbGn	(0,0,0)	-17,289.28	2,236.40	0.000*	-21,672.61	-12,905.94
	EarnBeg	(1,0,0)(0,1,0)	-41.00	38.45	0.293	-116.35	34.36
	EarnHirNS	(1,0,0)(0,1,0)	-0.039	0.32	0.904	-0.67	0.59
Accommodation & Food Service	Emp	(1,0,0)(0,1,0)	-1,886.75	1,471.00	0.207	-4,769.91	996.42
	EmpTotal	(1,0,0)(0,1,0)	-2,608.31	2,925.70	0.378	-8,342.67	3,126.06
	HirN	(1,0,0)(0,1,0)	-1,217.78	1,780.30	0.498	-4,707.17	2,271.61
	Sep	(1,0,0)(0,1,0)	-1,939.29	1,552.12	0.219	-4,981.44	1,102.87
	TurnOvrS	(1,0,0)(1,0,0)	0.002	0.006	0.755	-0.01	0.01
	FrmJbGn	(1,0,0)(0,1,0)	-234.65	335.83	0.489	-892.87	423.57
	EarnBeg	(1,0,0)(0,1,0)	-14.62	24.22	0.549	-62.10	32.86
	EarnHirNS	(2,0,0)(0,1,0)	-13.397	22.95	0.563	-58.38	31.59
Agriculture, Forestry, Fishing & Hunting	Emp	(2,0,0)(1,0,0)	1,531.02	1,601.55	0.345	-1,608.02	4,670.06
	EmpTotal	(2,0,0)(1,0,0)	-2,674.23	4,337.21	0.541	-11,175.15	5,826.69
	HirN	(2,0,0)(1,0,0)	-976.10	1,627.28	0.552	-4,165.57	2,213.37
	Sep	(1,0,0)(0,1,0)	-1,907.08	1,275.57	0.143	-4,407.19	593.03
	TurnOvrS	(2,0,0)(1,0,0)	0.001	0.004	0.744	-0.01	0.01
	FrmJbGn	(1,0,0)(0,1,0)	-379.57	528.08	0.476	-1,414.61	655.47
	EarnBeg	(1,0,0)(0,1,0)	-134.21	54.33	0.018*	-240.69	-27.74
	EarnHirNS	(1,0,0)(0,1,0)	1.745	97.63	0.986	-189.60	193.09

Table 10. Continued

		Orange County				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	<i>p</i>	Lower	Upper
Construction	Emp	(1,0,0)(0,1,0)	267.24	259.02	0.308	-240.44	774.91
	EmpTotal	(1,0,0)(0,1,0)	264.87	361.55	0.468	-443.77	973.51
	HirN	(1,0,0)(0,1,0)	46.79	164.50	0.778	-275.64	369.21
	Sep	(1,0,0)(1,0,0)	2.75	340.84	0.994	-665.29	670.79
	TurnOvrS	(1,0,0)(0,1,0)	-0.003	0.01	0.786	-0.02	0.02
	FrmJbGn	(1,0,0)(0,1,0)	-48.08	95.82	0.619	-235.89	139.73
	EarnBeg	(1,0,0)(0,1,0)	-97.25	69.49	0.169	-233.45	38.96
	EarnHirNS	(1,0,0)(0,1,0)	-0.486	0.66	0.465	-1.78	0.81
Manufacturing	Emp	(1,0,0)(0,1,0)	-623.08	3,352.58	0.854	-7,194.14	5,947.97
	EmpTotal	(1,0,0)(0,1,0)	-2,220.19	5,508.93	0.689	-13,017.69	8,577.32
	HirN	(2,0,0)(1,0,0)	-1,842.98	2,264.92	0.42	-6,282.21	2,596.26
	Sep	(1,0,0)(0,1,0)	453.02	2,095.31	0.83	-3,653.78	4,559.82
	TurnOvrS	(1,0,0)(0,1,0)	0.001	0.004	0.897	-0.01	0.01
	FrmJbGn	(0,0,0)	-2,158.44	433.08	0.000*	-3,007.27	-1,309.60
	EarnBeg	(1,0,0)(0,1,0)	-5.85	86.27	0.946	-174.94	163.25
	EarnHirNS	(1,0,0)(0,1,0)	7.333	76.26	0.924	-142.13	156.80

* $p \leq .05$.

Table 11. Riverside County Findings

		Riverside County				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	p	Lower	Upper
All Industries (NAICS Industries)	Emp	(1,0,0)(0,1,0)	6,645.21	7,189.41	0.361	-7,446.03	20,736.45
	EmpTotal	(1,0,0)(0,1,0)	4,330.55	13,269.14	0.746	-21,676.97	30,338.07
	HirN	(1,0,0)(0,1,0)	2,783.30	7,637.90	0.717	-12,186.99	17,753.60
	Sep	(1,0,0)(0,1,0)	4,678.18	7,316.04	0.526	-9,661.26	19,017.63
	TurnOvrS	(1,0,0)(0,1,0)	0.005	0.005	0.244	0.00	0.01
	FrmJbGn	(1,0,0)(0,1,0)	2,538.25	2,115.01	0.237	-1,607.18	6,683.67
	EarnBeg	(1,0,0)(0,1,0)	-27.83	37.52	0.463	-101.38	45.71
	EarnHirNS	(1,0,0)(0,1,0)	14.694	54.45	0.789	-92.02	121.41
Accommodation & Food Service	Emp	(1,0,0)(0,1,0)	1,302.06	994.02	0.198	-646.22	3,250.33
	EmpTotal	(1,0,0)(1,0,0)	1,197.59	1,529.16	0.438	-1,799.57	4,194.75
	HirN	(3,0,0)(1,0,0)	27.03	845.03	0.975	-1,629.22	1,683.28
	Sep	(1,0,0)(0,1,0)	698.71	978.55	0.479	-1,219.25	2,616.66
	TurnOvrS	(1,0,0)(0,1,0)	0.014	0.007	0.072	0.00	0.03
	FrmJbGn	(1,0,0)(1,0,0)	479.46	264.62	0.077	-39.19	998.11
	EarnBeg	(1,0,0)(0,1,0)	2.07	81.75	0.98	-158.15	162.29
	EarnHirNS	(1,0,0)(0,1,0)	-10.635	48.36	0.827	-105.42	84.15
Agriculture, Forestry, Fishing & Hunting	Emp	(1,0,0)(0,1,0)	891.92	733.82	0.231	-546.38	2,330.21
	EmpTotal	(1,0,0)(0,1,0)	1,562.63	1,145.35	0.18	-682.26	3,807.52
	HirN	(1,0,0)(0,1,0)	392.41	733.01	0.595	-1,044.29	1,829.10
	Sep	(1,0,0)(0,1,0)	1,136.09	890.10	0.209	-608.51	2,880.68
	TurnOvrS	(1,0,0)(0,1,0)	0.004	0.015	0.764	-0.03	0.03
	FrmJbGn	(1,0,0)(0,1,0)	-100.85	354.44	0.777	-795.56	593.86
	EarnBeg	(1,0,0)(0,1,0)	-16.07	69.85	0.819	-152.98	120.84
	EarnHirNS	(1,0,0)(0,1,0)	80.35	90.08	0.378	-96.20	256.90

Table 11. Continued

		Riverside County				95% CI	
Industry	Indicator	ARIMA Model	Estimate	SE	<i>p</i>	Lower	Upper
Construction	Emp	(1,0,0)(2,0,0)	-1,261.88	1,477.16	0.398	-4,157.11	1,633.35
	EmpTotal	(1,0,0)(0,1,0)	-720.06	3,787.25	0.85	-8,143.08	6,702.95
	HirN	(1,0,0)(0,1,0)	611.39	1,840.96	0.742	-2,996.89	4,219.66
	Sep	(1,0,0)(0,1,0)	-691.76	1,605.94	0.669	-3,839.41	2,455.89
	TurnOvrS	(1,0,0)(0,1,0)	0.001	0.006	0.878	-0.01	0.01
	FrmJbGn	(1,0,0)(0,1,0)	729.80	694.35	0.3	-631.12	2,090.72
	EarnBeg	(1,0,0)(0,1,0)	45.17	77.67	0.564	-107.06	197.40
	EarnHirNS	(1,0,0)(0,1,0)	207.60	122.63	0.098	-32.76	447.95
Manufacturing	Emp	(1,0,0)(1,0,0)	1,413.45	979.02	0.156	-505.42	3,332.32
	EmpTotal	(1,0,0)(0,1,0)	1,804.74	1,811.40	0.325	-1,745.61	5,355.09
	HirN	(1,0,0)(0,1,0)	81.66	736.77	0.912	-1,362.41	1,525.72
	Sep	(1,0,0)(0,1,0)	881.75	710.23	0.222	-510.30	2,273.80
	TurnOvrS	(1,0,0)(0,1,0)	0.006	0.006	0.259	-0.01	0.02
	FrmJbGn	(1,0,0)(0,1,0)	-152.63	338.07	0.654	-815.25	509.99
	EarnBeg	(2,0,0)(1,0,0)	121.62	111.33	0.281	-96.58	339.82
	EarnHirNS	(2,0,0)	-27.75	193.83	0.887	-407.66	352.16

**p* ≤ .05.

implementation occurred in the study counties between July 1, 2007 and June 9, 2011. This period of time included economic and workforce stressors beyond what is captured in this study and these confounding factors could have influenced the study findings.

Industry Categories

This study was limited by the way in which The North American Industry Classification System (NAICS) classifies industries. Specifically, the grouping of Agriculture, Forestry, Fishing and Hunting did not allow for evaluation of the impact of E-Verify legislation on Agriculture as a sole industry. Agriculture as an industry employs many foreign workers (Passel & Cohn, 2011) and would therefore likely show greater sensitivity to E-Verify legislation than it did in this study if it could have been differentiated from Forestry, Fishing and Hunting.

Comparison Counties

To test the theory that an explanation for decreased job creation in the study county (Orange County) means that employers and/or employees left the area in search of a place to do business/participate in the workforce that did not require participation in E-Verify, it would have been helpful to study counties bordering Orange County during the same timeframe. This would allow for assessment of the likelihood that this migration was occurring.

County-Level Data, City-Level Legislation

Though the E-Verify laws implemented in Orange and Riverside Counties between July 1, 2007 and June 9, 2011 were implemented at the city-level, it was not possible to access Quarterly Workforce Indicator data for each of these cities. Therefore, this study used

the “next-best” level of observation, county-level data, in an attempt to assess the impact of E-Verify on the workforce.

Discussion

Orange County

The most significant finding in this study was in the Orange County industry categories of All Industry and Manufacturing. With $p < .001$ in both cases, loss in estimated jobs gained was significant. In other words, firms in those categories lost jobs at a significant rate after E-Verify went into effect; firm growth declined. This is important as it points to two possible reasons for this outcome: (a) When Mission Viejo implemented their E-Verify law requiring all city agencies and contractors to use E-Verify for its new employees, employers who were “on-the-books” went “off-the-books” and began running their businesses without any government oversight and/or (b) when Mission Viejo implemented their E-Verify law, employers and/or employees chose to leave the area in search of a place without an E-Verify law to conduct business/participate in the workforce. Either/both of these possibilities are problematic from both an economic as well as a human rights perspective.

Implications

Economics Implications

Economically, when employers go “off-the-books,” they are not subject to the same taxes and fees that “on-the-books” employers must pay in order to stay in business. When this happens, governments are not able to collect needed revenue which is typically used in a variety of ways to support local residents (i.e., libraries, schools). Additionally, Patel (2010)

and Bruno (2013) point out that immigrant workers contribute 700 billion dollars annually to economic activity and “off the books” employment is problematic as it jeopardizes this contribution (Bruno, 2013; Patel, 2010). Further, if employers/employees were leaving the area in search of opportunities that did not involve mandatory participation in E-Verify, the threat to the local economy would be the same as described above.

Another significant finding in Orange County was in the industry category of Agriculture, Forestry, Fishing and Hunting. In this category, the average monthly earnings of a worker who worked on the first day of the quarter (EarnBeg) decreased after E-Verify implementation. This finding supports Patel’s (2010) hypothesis that E-Verify could bring with it potential for decreased wages for employees as employers attempt to protect themselves against potential fines and/or sanctions (Patel, 2010).

This study also had a significant finding in overall employment, or the number of people employed at some time during the quarter (EmpTotal). Surprisingly, given the previous findings, this number increased in the All Industry category after E-Verify implementation. This could indicate that while stable jobs are lost as overall firm growth decreases, more temporary jobs become available.

Human Rights Implications

In addition to increasing economic vulnerability, “off-the-books” employment is also concerning from a human rights perspective. Gomberg-Munoz and Nussbaum-Barberena (2011) point to unregulated employment as increasing the vulnerability of an already vulnerable population. Without regulation and oversight, employers have increased power over workers and are free to use this power in whatever way they choose. This could include firing longtime employees to hire less-expensive, new employees or requiring employees to

work in more dangerous conditions. Further, “off-the-books” employment undermines organizing efforts and jeopardizes the ability of workers to negotiate their own working conditions (Gomberg-Munoz & Nussbaum-Barberena, 2011).

Riverside County

Though this study did not find that E-Verify legislation had an impact on the workforce in Riverside County, it is suspected that significance would have been detected if there were more observations available in this county. As it was, there were only five observations post-city-level E-Verify legislation and pre-state-level E-Verify legislation (Quarter 3, 2010 through Quarter 3, 2011). Given the strict nature of some of the city-level E-Verify laws passed in Riverside County and the fact that previous research has shown strict E-Verify legislation to be associated with overall employment loss, including in the categories of beginning-of-quarter employment, flow employment, number of new hires, and overall number of jobs gained (Galvin, 2014), it is hypothesized that similar findings would have been revealed in Riverside County had there been more observations available. The number of available observations is important to keep in mind when designing future research projects aimed at evaluating E-Verify.

Conclusion

Similar to what Galvin (2014) found, this study underscores that E-Verify is a highly unproven policy and has detrimental economic outcomes, for individuals and for communities. Further, when employers go “off-the-books,” the repercussions can be devastating from both an economic and a human rights perspective. As social workers who concern ourselves with the social and economic well-being of our clients and our

communities, we need to educate our policy-makers about the negative effects of restrictive, anti-immigrant policies such as E-Verify.

References

- Barnett, M. B. (2009). The high cost of low-cost workers: Missouri enacts new law targeting employers of unauthorized workers. *Immigration and Nationality Law Review*, 30, 801–821.
- Bruno, A. (2013). *Unauthorized aliens: Policy options for providing targeted immigration relief*. Washington, DC: Congressional Research Service.
- Cook, T. D., & Campbell, D. T. (1979). *Quasi-experimentation: Design and analysis issues for field settings*. Chicago, IL: Rand McNally.
- Galvin, K. C. (n.d.). Electronic employment eligibility verification: What do we know about E-Verify? (Manuscript under review)
- Gomberg-Munoz, R., & Nussbaum, L. (2011). Is immigration policy labor policy? Immigration enforcement, undocumented worker, and the state. *Society for Applied Anthropology*, 70(4), 366–375.
- Harper, J. (2012). *Internal enforcement, E-Verify, and the road to a national ID*. Retrieved from Cato Institute website: <http://object.cato.org/sites/cato.org/files/serials/files/cato-journal/2012/1/cj32n1-9.pdf>
- Passel, J. S., & Cohn, D. (2011). *Unauthorized immigrant population: National and state trends, 2010*. Washington, DC: Pew Hispanic Center.
- Patel, S. C. (2010). E-Verify: An exceptionalist system embedded in the immigration reform battle between federal and state governments. *Boston College Third World Law Journal*, 30(2), 543–574.
- Rosenblum, M. R. (2011, August). *U.S. immigration policy since 9/11: Understanding the stalemate over comprehensive immigration reform*. Retrieved from the Migration Policy Institute website: <http://www.seiu.org>

CHAPTER 5

SUMMARY, IMPLICATIONS, AND CONCLUSION

Summary

This dissertation followed a Multiple Article Path (MAP) format and resulted in three articles for publication. The overarching goal of this work was to contribute to the literature in a greatly under-researched area of immigration policy, workplace enforcement and specifically, E-Verify. In this dissertation, I first conducted a scoping review to map empirical knowledge currently available on E-Verify. Subsequently, I conducted two quasi-experiments utilizing interrupted time series designs to evaluate how variation in implementation of E-Verify influenced key workforce indicators. The timing of this work is especially important, given the immediacy with which some advocate that E-Verify be made “mandatory” for all U.S. employers.

Chapter 2

Chapter 2 was a scoping review of the literature (Arksey & O’Malley, 2005) and mapped the, “. . . extent, range, and nature . . . “ (p. 6) of empirical research available on the impact of E-Verify. The most significant finding from this study was that there is very little empirical research available on E-Verify. After a systematic review of the literature, including a comprehensive database search, hand search, and search of the grey literature, there were only 11 studies included. Of the 11 studies, 3 were based on customer satisfaction surveys and 7 were published by the same organization (Westat). Two were journal articles

published in academic journals and 9 were reports published by a combination of public and private organizations. Two of the studies were secondary data analyses of large, publically available data sets: (a) The Current Population Survey and (b) the Bureau of Labor Statistics. There were a wide range of sample sizes and some of the studies did not explicitly include their sample size. The studies were published between 2009 and 2013.

This review also uncovered that the quality and consistency of research available on E-Verify varied, making it difficult to derive an overall picture of the impact of the program. Of the two studies published in academic journals (*American Economic Review* and *Human Organization*), both demonstrated a need for approaching any “mandatory” E-Verify legislation with caution. While Amuedo-Dorantes and Bansak (2012) use a sophisticated method of analysis to show that E-Verify may meet its goal of reducing unauthorized employment, the authors also use their research to explain that this finding is not as simple as it may seem and in fact, employment may simply be shifting to alternative industries. The Gomborg-Munoz and Nussbaum-Barberena (2011) study makes strong arguments against mandatory participation in E-Verify for all employers. However, this article does not clearly explain its methodology. Its explanation that the findings were based on “ethnographic research” does not allow for assessment of the strength or weakness of the design and therefore, the findings. The description of the methods utilized in the Arvelo and Litan (2013) Bloomberg Government Report is weak, again making difficult assessment of their findings regarding the seeming success of E-Verify.

Given the lack of available research on E-Verify, Chapter 2 calls for future research in this area to address the following gaps: (a) More of the same research – there are not enough research studies that use the same or even similar methodologies in order to conduct

a “proper” systematic review; (b) more independent research – most of the empirical research on E-Verify has been conducted by one organization, an organization that could have a vested interest in the findings; (c) more recent/current research; (d) more research with workers – the research that exists currently relies heavily on employers and government employees; (e) more measures – the current available research relies heavily on self-report data; and (f) more research on variation in E-Verify implementation – because states and cities within states have implemented E-Verify differently since its inception, it makes good sense to examine the program’s impact in those places before making it mandatory for all U.S. employers.

Chapter 3

Chapter 3 evaluated E-Verify through the lens of cosmopolitan global distributive justice. This chapter asked the following question: In the context of an ever-increasing globalized economy, does the concept of being a “legal” citizen as a prerequisite to participation in the workforce make sense? I argue in this chapter that it is illogical to apply the prerequisite of “legal” citizenship before allowing a person to participate in the workforce. The first part of this chapter frames the study around a cosmopolitan approach to global distributive justice. The second part of this chapter conducts an analysis, utilizing an interrupted time series design and state-level Quarterly Workforce Indicator data. The analysis demonstrates that it is detrimental to not align immigration policies, in this case approaches to E-Verify implementation, with cosmopolitan global distributive justice.

Findings from Chapter 3 show significant job loss occurred when E-Verify implementation strategies were not aligned with cosmopolitan global distributive justice. “Off-the-books” employment and/or leaving the area are two likely explanations for this

outcome.

“Off-the-books” employment is problematic for various reasons. First, in the context of cosmopolitan global distributive justice, “off-the-books” employment prevents workers and employers alike from participating legitimately in the “rights” and “responsibilities” associated with being a “good citizen.” In particular, the “responsibility” of political participation is not an option for employees and/or employers working “off-the-books.” According to the framework set forth in this chapter, when individuals do not participate in the “responsibilities” associated with “good citizenship,” they are not entitled to the “rights” that go along with “good citizenship” (civil, political, social rights). In Chapter 3, I demonstrated that by restricting legitimate participation in the “responsibilities” of citizenship leads to lower economic prosperity for that society as a whole.

From an economic standpoint, when employers go “off-the-books,” they are not subject to the same taxes and fees that “on-the-books” employers must pay in order to stay in business. When this happens, governments are not able to collect needed revenue. Additionally, Patel (2010) and Bruno (2013) point out that immigrant workers contribute 700 billion dollars annually to economic activity. “Off-the-books” employment is problematic as it jeopardizes this contribution (Bruno, 2013; Patel, 2010). Further, when an employer goes “off-the-books,” legal employment options decrease for both citizens and noncitizens, again hurting the workforce, therefore the economy, and inevitably, the social fabric of that society. When an employer leaves the area, many of the same economic outcomes described above ensue.

Chapter 4

In the context of the immediacy with which some advocate “mandatory” implementation of E-Verify for all employers, Chapter 4 evaluated the impact of E-Verify on the workforce in two California counties: Orange County and Riverside County. Specifically, this study looked at the possible impact of E-verify implementation on key economic indicators such as total employment, job creation, turnovers, and new hires. California offers a unique landscape through which to evaluate E-Verify because prior to state-level E-Verify legislation (October 9, 2011), many localities in California implemented their own E-Verify laws. Orange County was chosen as a study county because it was the first county in which a city (Mission Viejo) implemented its own E-Verify law. Riverside County was chosen as a study county because it was the California County in which the most cities (Menifee, Lake Elsinor, Wildomar, Temecula, Murrieta, Hemet) implemented their own E-Verify laws.

After tracing the history of E-Verify at the Federal, state, and county levels, in this chapter, I conduct an interrupted time series analysis, utilizing county-level data from the Quarterly Workforce Indicator data set. In alignment with the findings from Chapter 3, firm growth declined in Orange County after E-Verify went into effect, particularly in the All Industry and the Manufacturing industry categories. This reinforced the theory that E-Verify mandates caused employers to either go “off-the-books” or leave the area.

In addition to the concerns discussed in Chapter 3, Chapter 4 also discussed the fact that “off-the-books” employment is concerning from a human rights perspective. Gomberg-Munoz and Nussbaum-Barberena (2011) point to unregulated employment as increasing the vulnerability of an already vulnerable population. Without regulation and oversight,

employers have increased power over workers and are free to use this power in whatever way they choose. This could include firing longtime employees to hire less-expensive, new employees or requiring employees to work in more dangerous conditions. Further, “off-the-books” employment undermines organizing efforts and jeopardizes the ability of workers to negotiate their own working conditions (Gomberg-Munoz & Nussbaum-Barberena, 2011).

Another significant finding in Orange County was in the industry category of Agriculture, Forestry, Fishing and Hunting. In this category, the average monthly earnings of a worker who worked on the first day of the quarter decreased after E-Verify implementation. This finding supports Patel’s (2010) hypothesis that E-Verify could bring with it potential for decreased wages for employees as employers attempt to protect themselves against potential fines and/or sanctions (Patel, 2010).

This study’s final significant finding was in overall employment, or the number of people employed at some time during the quarter. Surprisingly, given the previous findings, this number increased in the All Industry category after E-Verify implementation. This could indicate that while stable jobs are lost as overall firm growth decreases, more temporary jobs become available.

Though this study did not find that E-Verify legislation had an impact on the workforce in Riverside County, it is suspected that significance may have been detected if there were more observations available in Riverside County. This is especially the suspicion given the strict nature of some of the city-level E-Verify laws passed in Riverside County and the fact that previous research has shown strict E-Verify legislation to be associated with overall employment loss, including in the categories of beginning-of-quarter employment, flow employment, number of new hires, and overall number of jobs gained

(Galvin, 2014).

Implications

Implications for Practice

Given the macrofocus of this dissertation, implications for social work practice are at the macropractice level. First, we must advocate for further research on E-Verify. There simply is not enough empirical research available on the program to make any definite determinations as to whether the program is useful and should be pursued on a large scale. Next, we must educate our policy-makers at every level (local, state, Federal) regarding the reality of what we do and more to the point, do not know about E-Verify. As I described in Chapters 1 and 2, E-Verify has received support from Democrats and Republicans in both the House and the Senate as well as by President Obama (Bruno, 2013). However, this dissertation demonstrates that this support is not based on empirical knowledge. We need to make sure that our policy-makers are educated about what research still needs to be conducted before they participate in legislating vast implementation mandates.

We know that E-Verify policies directly impact the ability of many of our immigrant clients to find and sustain gainful employment. As we saw in Chapters 1 and 3, economic self-sufficiency is a “responsibility” of “good” citizenship. As social workers, with an understanding of the contradictions in the United States’ “open” trade policies and “restrictive” immigration policies, we must advocate for alignment of these policies. Further, we must advocate for a global conceptualization of the concept of “citizenship,” in which the notion of “legal” citizenship loses meaning. In this way, our immigrant clients will have the opportunity to participate in the “responsibilities” of citizenship (economic self-sufficiency and political participation) and subsequently be granted “rights” of

citizenship (civil, political, and social rights).

Implications for Social Work Education

There are a variety of ways in which this research will contribute to social work education. First, this research will allow social work educators to arm social work students with information and knowledge in order for them to advocate and educate against programs/policies that are not socially just and for programs that are socially just, in a global context. Next, this work emphasizes the importance of social workers' role in policy analysis and development. Further, this work highlights the importance of researching programs/policies that have not been previously researched or tested. Additionally, it emphasizes the importance of theory-informed and tested social policy. Finally, this work underscores the significance of developing and maintaining policy-oriented field placements for our students.

Implications for Future Research

Based on a comprehensive review of the empirical research currently available on E-Verify, Chapter 2 outlines implications for future research including: (a) More of the same research – there are not enough research studies that use the same or even similar methodologies in order to conduct a “proper” systematic review; (b) more independent research – most of the empirical research on E-Verify has been conducted by one organization, an organization that could have a vested interest in the findings; (c) more recent/current research; (d) more research with workers – the research that exists currently relies heavily on employers and government employees; (e) more measures – the current available research relies heavily on self-report data; and (f) more research on variation in E-

Verify implementation – because states and cities within states have implemented E-Verify differently since its inception, it makes good sense to examine the program’s impact in those places before making it mandatory for all U.S. employers.

Conclusion and Policy Recommendations

Those who lobby for strict, “mandatory” implementation of anti-immigrant policies such as E-Verify have argued that undocumented immigrants take jobs away from legal citizens. One anti-immigrant organization, the Federation for American Immigration Reform, in a self-authored 2013 report states, “. . . unrestrained immigration is not the sole cause of America’s economic and fiscal misfortunes, but it is a major contributing factor,” and later goes on to say,

American workers are denied the opportunity for gainful employment by proponents of amnesty and increased legal admissions, who disguise their position under the pretense of economic or humanitarian efforts. the current call for ‘comprehensive immigration reform’ is a euphemism for legislation that will grant blanket amnesty for more than 10 million illegal aliens while generously rewarding unscrupulous employers who are willing to put short-term profits above the long-term interests of America. (p. 3)

Though this opinion has strong proponents, there has been little empirical research conducted that evaluates the socio-economic impact of policies such as E-Verify that aim to restrict employment opportunities for undocumented immigrants.

While more research needs to be conducted, I found in this dissertation that the politically-driven narrative that undocumented immigration leads to lower overall economic prosperity for “legal” citizens is not supported by the research. I did not find at either the state-level or at the county-level that strict implementation of E-Verify resulted in jumps in economic indicators. Rather, in many instances, I found significant decreases in important areas of the economy at both the state and county-levels when E-Verify legislation was

“mandatory.” In still other instances, when states took steps to ensure E-Verify was not mandatory, they showed statistically significant increases in important economic indicators.

The overarching policy recommendation that I assert, based on the work of this dissertation, is that as social workers we must involve ourselves in political processes and advocate for inclusive rather than exclusive immigration policies – this research supports that when immigration policies are inclusive, everyone is better off.

References

- Amuedo-Dorantes, C., & Bansak, C. (2012). The labor market impact of mandated employment verification systems. *The American Economic Review*, 102(3), 543–548.
- Arksey, H., & O’Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.
- Arvelo J., & Litan, R. (2013). *Early evidence suggests E-Verify laws deter hiring of unauthorized workers* (Bloomberg Government Study). Retrieved from the Numbers USA website: <https://www.numbersusa.com/content/files/BGovEVerifyStudy.pdf>
- Bruno, A. (2013). *Unauthorized aliens: Policy options for providing targeted immigration relief*. Washington, DC: Congressional Research Service.
- Galvin, K. C. (n.d.). Electronic employment eligibility verification: What do we know about E-Verify? (Manuscript under review)
- Gomberg-Munoz, R., & Nussbaum, L. (2011). Is immigration policy labor policy? Immigration enforcement, undocumented worker, and the state. *Society for Applied Anthropology*, 70(4), 366–375.
- Patel, S. C. (2010). E-Verify: An exceptionalist system embedded in the immigration reform battle between federal and state governments. *Boston College Third World Law Journal*, 30(2), 543–574.

APPENDIX

INDICATOR DEFINITIONS

1. Emp – Beginning of Quarter Employment: Counts
Estimate of the total number of jobs on the first day of the reference quarter.
Beginning-of-quarter employment counts are similar to point-in-time measures.
2. EmpTotal – Reference Quarter: Counts
This is a count of people in a firm at any time during the quarter. It is not a count of jobs. This measure may also be referred to as “flow” employment.
3. HirN – Hires New: Counts
Estimated number of workers who started a new job. More specifically, total hires that, while they worked for an employer in the specified quarter, were not employed by that employer in any of the previous four quarters.
4. Sep – Separations: Counts
Estimated number of workers whose job with a given employer ended in the specified quarter.
5. TurnOvrs – Turnovers (stable)
The rate at which stable jobs begin and end. It is calculated by summing the number of stable hires in the reference quarter and stable separations in the next quarter, and dividing by the average full-quarter employment.
6. FrmJbGn – Firm Job Gains: Counts (Job Creation)
Estimated number of jobs gained at firms throughout the quarter. This measure counts total employment increase at firms that grew over the course of the quarter.
7. EarnBeg – Beginning-of-Quarter Employment: Average Monthly Earnings
Average monthly earnings of employees who worked the first day of the reference quarter.
8. EarnHirNS – Hires New (Stable): Average Monthly Earnings
Average monthly earnings of newly stable employees (i.e., full-quarter employees who were new hires with a firm in the previous quarter).