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The Decentralization of Immigration Enforcement and Implications for Agriculture

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The implications of immigration legislation for U.S. agriculture have been a subject of interest for scholars and policymakers for several decades. The U.S. farm industry spends an average of 17% of its total variable production costs on hired labor. Certain farm sectors are even more labor-intensive such as vegetable, nursery, and fruit farms with hired labor expense shares of 35%, 46%, and 48%, respectively (Zahniser et al., 2012). The National Agricultural Workers Survey from the U.S. Department of Labor indicates that, over the last 15 years, about half of agricultural crop farm workers have been undocumented (Carroll, Georges and Saltz, 2011).

Most efforts to regulate immigration in the United States have been at the federal level. However, since 2003, the nation has experienced a surge of enforcement efforts at the state and sub-state levels. Pham and Van (2010) discuss the legal and economic significance of such decentralization.

For agriculture, this is unchartered territory; previous enforcement efforts at the federal level have typically employed a balanced approach, whereby measures that reduce labor were counterbalanced by measures that provide agriculture special consideration. For example, the 1986 Immigration Reform and Control Act (IRCA) imposed new sanctions on employers who knowingly hired undocumented workers and approved steps to provide legal status to around 3 million illegal workers. Due to the high reliance of agriculture on immigrant workers, IRCA also took measures designed to give special consideration for farm labor. It revised the H-2 guest worker program, which provides work visas to a limited number of immigrants (66,000 in 2013), to establish the H-2A agricultural guest worker program with no numerical limits. States and counties have newfound authority on enforcement, but little control over other tools for regulating immigration (e.g., the H2A-program), making it harder for them to follow a balanced approach.

Policy Framework for Sub-federal Law Immigration Enforcement

Estimates from the Pew Hispanic Center indicate that the number of undocumented immigrants in the United States peaked in 2007 at 12 million but had been brought down to 11.1 million by 2011 (Passel and D'Vera Cohn, 2011). This drop can be due to many factors, including tighter border controls, lower birth rates and broadened economic conditions in Mexico (Passel, D'Vera Cohn, and Gonzalez-Barrera, 2012), as well as lower supply and increasing demand for agricultural labor in Mexico (Taylor, Charlton, and Yúnez-Naude, 2012).

On the legislative side, early immigration reforms, such as IRCA (1986), have been followed by new laws and policies which have led to intensified border control, workplace raids, and use of electronic verification, among other measures undertaken by the federal government.

Some recent efforts, however, differ from those in previous years in that they afford sub-federal jurisdictions an unprecedented level of authority on immigration enforcement policy. The groundwork for the significant surge in state- and county-level enforcement efforts was laid out in 1996, when the Immigration and Nationality Act (INA), which has governed the country's immigration affairs since

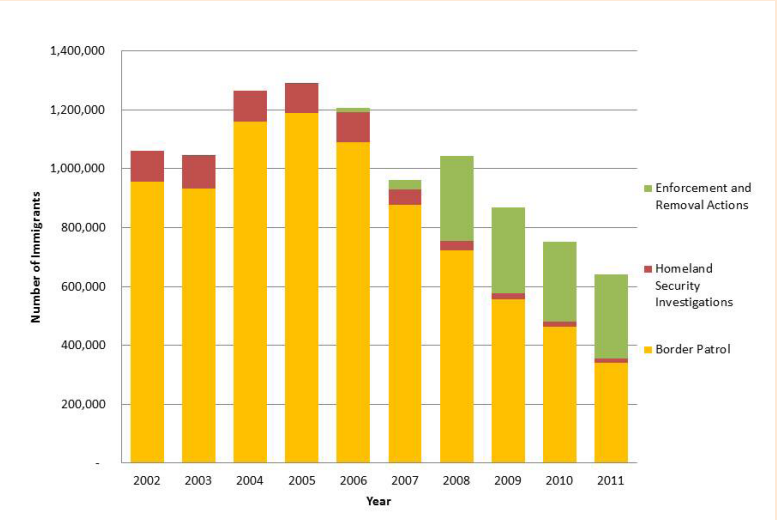
1952 (U.S. Citizenship and Immigration Services, 2010), was radically amended. This amendment was made possible by the 1996 Illegal Immigration Reform and Immigrant Responsibility Act (IRRA) that added Section 287(g) to INA. Section 287(g) allows the U.S. Immigration and Customs Enforcement (ICE) deputy director to enter into agreements with state and local law enforcement agencies to authorize designated officers to perform immigration enforcement functions (Capps et al., 2011).

Even though the IRRA was signed in 1996, the first actual contract between ICE and a state authority wasn't signed until 2002. The Florida Department of Public Safety was the first signee of the 287(g) program. As of October 2012, 57 entities, including states (such as Alabama, Florida, Arizona, and Georgia) and localities (such as Georgia's Cobb County, City of Mesa in Arizona, among many others) have enlisted under the 287(g) program (Immigration Policy Center, 2012). By 2011, 186,000 illegal immigrants were deported under the program (Parrado, 2011).

Figure 1 shows the contributions to total apprehensions of undocumented individuals by enforcement method. The largest share of the apprehensions has historically been and is still attributed to border patrols, but "enforcement and removal actions," which include those initiated by state or county agencies, were virtually nonexistent until 2005. Starting in 2006, such actions have gained momentum and they comprised almost one-third of apprehensions in 2011.

The original intention of the 287(g) program was to deport illegal immigrants with criminal charges. However, records of immigration detentions indicate that about half of the apprehensions under the program involved immigrants with no felony offenses, but, rather, with mere misdemeanor and traffic offenses (Capps et al., 2011). Some academics and advocacy groups would contend that many, if not most, of these arrests and deportations are not consistent with the intent of the 287(g) program, but, rather, were undertaken in pursuit of local immigrant reduction goals (Lacayo, 2010).

Figure 1: Apprehensions of Unauthorized Individuals in the United States by Program, 2002-2011.



Source: Office of Immigration Statistics, 2012

State and local level enforcement of 287(g) laws vary widely in intensity. For example, at the state level, Georgia's Department of Public Safety, which signed the 287(g) agreement in July 2007, had only 13 arrests in 2008 while Cobb County in Georgia, which signed the agreement in February 2007, had 3,679 arrests in 2008 (Vaughan and Edwards, 2009). Most arrests under 287(g) program authority have taken place at the county level.

More recently, several states passed stronger immigration laws that target undocumented immigrants directly, rather than under the umbrella of crime control. These laws, known as Arizona-style laws, make it a misdemeanor crime for an undocumented person not to carry the necessary documents, and require that state law enforcement officers attempt to determine an individual's immigration status during a "lawful stop, detention or arrest" when there is "reasonable suspicion that the individual is an illegal immigrant."

The first of such laws, signed by the governor of Arizona in April 2010, also imposed high penalties for those who shelter and hire illegal immigrants. Similar immigration laws were subsequently passed in 2011 in Georgia (HB 87), South Carolina (SB 20), and Alabama (HB 56) with Colorado trying to pass similar laws in 2013. Although portions of Arizona, Georgia, and South Carolina state laws have been blocked and are being contested in state courts as wells as the U.S. Supreme Court, these are, by far, the strongest immigration enforcement laws in the United States.

The 287(g) Program Enforcement Adoption and Agriculture

Sub-federal enforcement is a product of local rather than national politics. In particular, it is reasonable to expect that agricultural interests may play a role in determining policy. We gain a better understanding of

the relationship between the importance of the agricultural sector and the adoption of 287(g) programs by examining the trends in certain variables that could be associated with a county's or a state's decision to participate under the 287(g) program. We use county-level data from the 2002 Census of Agriculture and the County Business Patterns from the U.S. Census Bureau. State-level data are obtained from 2007-2011 annual surveys conducted by the U.S. Department of Agriculture, Bureau of Economic Analysis, and the U.S. Department of Homeland Security.

Table 1 presents the average values of the variables collected at the county and state levels. The county-level values were collected for 3,066 available observations and are presented as cross-sectional averages for different categories: counties that adopted the 287(g) program and several classes of non-adopters (those from states with at least one county adopter, those from states without any adopter, and all available non-adopters).

At the county level, vegetable cash receipts are a larger share of total cash receipts for those that adopted the 287(g) program and we know that vegetable production is a relatively more labor-intensive enterprise than other farm enterprises. The adopting counties also showed that a higher share of their population was immigrants compared to all classes of non-adopting counties. The trends in the mean unemployment rates do not indicate employment concerns as an apparent motive for 287(g) adoption.

At the state level, Arizona and Florida have relatively larger vegetable sectors, more serious unemployment concerns, and larger immigrant population shares than most states in the country, as well, compared to agricultural states. These facts apparently could be among these two states' major sources of motivation for adopting the 287(g) program. Georgia's immigrant population is below the national average but could possibly be concerned about unemployment. Alabama, on the other hand, is an interesting case. The state's unemployment situation is slightly better than most states and has neither a strong immigrant presence nor a dominant vegetable industry compared to most states in the country (as well as vis-à-vis agricultural and non-agricultural states).

Impacts of Sub-federal Immigrant Enforcement on Farm Businesses

Given agriculture's dependence on undocumented immigrant workers, a retrospective analysis of the effects of the enforcement of the 287(g) program provides important insights on farm labor supply conditions and corresponding impacts on farm business conditions. The basic premise is that the enforcement of 287(g) agreements would have made such localities less attractive for undocumented workers in two ways. First, the fear of deportation would have made undocumented immigrants consider leaving such jurisdictions and moving to jurisdictions not covered by the program. Second, potential new undocumented residents might have been deterred from migrating into 287(g) jurisdictions given the higher risk of apprehension by law enforcement authorities. Both of these effects may cause a reduction of labor availability in counties that implemented the 287(g) program and could result in an increase in agricultural wages and may adversely affect local farm businesses. In fact, Kostandini, Mykerezi, and Escalante (2013), use data from the American Community Survey (ACS) to show that counties that adopted 287(g) programs were experiencing relative increases in immigrant populations prior to adoption and experienced disproportionate decreases after adoption.

Anecdotal evidence establishes that undocumented farm workers are often underpaid (Smith, 2005). Hence, 287(g) jurisdictions could possibly be paying higher wages when they resort to their existing pool of domestic residents. In a 2008 study funded by the Southern Sustainable Agriculture Research and Education (SARE), interviews with small farm operators in South Georgia revealed the farmers' hiring predicament. Higher wages were used by these operators to lure local workers to provide much needed assistance during the harvest season, but there were usually very few takers (Escalante, Perkins, and Santos, 2011). Local resident workers who showed up at the farm either had to quit before the tasks were completed because of intolerance for the inconvenience of

Table 1: Mean Values of Economic and Demographic Variables, U.S. Counties and States

County/State Group	Vegetable Cash Receipts Share (percent)	Unemployment Rate (percent)	Immigrant Share of Population (percent)	No. of Observations
A. County-Level (2002)				
Adopting Counties	2.97	5.18	10.54	47
Non-Adopting Counties, All	1.01	5.73	3.27	3,019
Non-Adopting Counties, Adopting States	1.31	5.96	4.35	1,314
Non-Adopting Counties, Non-Adopting States	0.78	5.55	2.44	1,705
B. State-Level (2007-2011)				
Adopting States				
Alabama	0.16	7.24	3.5	5
Arizona	27.48	7.86	13.4	5
Florida	21.75	8.46	19.4	5
Georgia	7.57	8.16	9.7	5
Agricultural States	2.46	6.75	6.92	105
Non-Agricultural States	4.99	7.06	9.87	130
United States	4.55	7.64	12.9	255

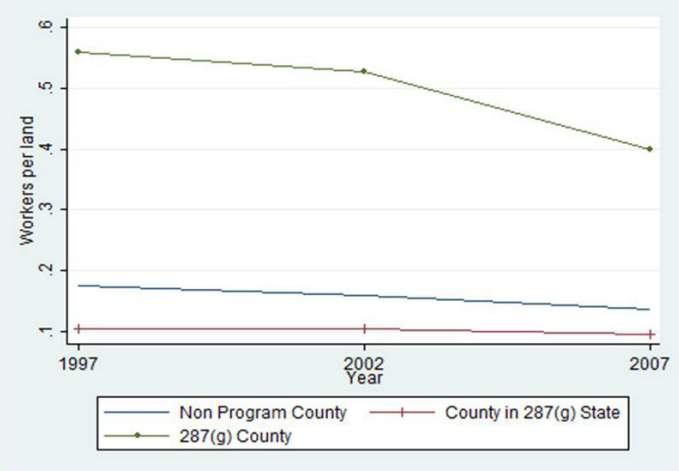
Source: U.S. Census of Agriculture (USDA), U.S. Census Bureau, Bureau of Economic Analysis and Department of Homeland Security.

Table 2: Summary of Farmers' Strategies for Coping with Farm Labor Hiring Difficulty, 2008

Organic Farms	Conventional Farms
i. Change Production Plans	i. Mechanization
ii. Family Labor	ii. Downsizing
iii. Downsizing	iii. Family Labor
iv. Reduce Off-Farm Work Time	iv. Change Production Plans

Source: Escalante, Perkins, and Santos, 2011

Figure 2: Number of Workers Hired Per Unit of Land



Source: Census of Agriculture, USDA, 2010

farm work or completed their tasks at productivity levels significantly below the undocumented workers' rates. Thus, we would expect an increase in wages and a decrease in the number of workers in adopting jurisdictions.

The study's survey also asked farmer respondents to rank several business strategies in dealing with farm labor hiring challenges. The results in Table 2 indicate that organic farm respondents preferred to modify their production plans involving either their crop choices or adopting alternative less labor-intensive production practices.

Conventional farms preferred to adopt mechanization, which was more feasible and justifiable for these larger farms. Mechanization remains a challenge for smaller farms that need to deal with implementation costs where the size of the required investment is either unaffordable or less optimal for the relatively smaller scale operations. Beyond costs, farmers also have to deal with agronomic issues involved in implementing mechanization such as extent of fruit damage, preferred planting styles, plant growth requirements, and chemical application issues. Thus, when labor becomes scarce, as might be the case in high-enforcement jurisdictions, farmers could resort to input-substitution strategies or modifications in their production plans.

The impact of 287(g) programs can be better understood by analyzing a number of farm economic factors prevailing in 287(g) adopting jurisdictions vis-à-vis non-program counties using data from the Census of Agriculture for 1997, 2002, and 2007, in a similar manner to Kostandini, Mykerezi, and Escalante (2013). The authors examined the impact on the share of hired labor expense on total production expense, expense per hired worker, number of workers hired, share of fuel expenses, machinery value, share of vegetable acres, and farm income. The authors found evidence consistent with labor shortages for county adoptions.

Here, we synthesize some of the statistics which show whether the number of workers, expense per worker, and the share of vegetable acres has changed disproportionally in counties adopting 287(g) and counties in states that adopted 287(g) before (1997-2002) and after adoption (2002-2007) compared to the same periods in all other non-program counties.

Figure 2 presents a comparison of the trends in the share of hired workers per acre in adopting counties (287(g) (County), counties in adopting states (County in 287(g) State), and all non-adopters (Non-Program Counties). In these plots, 287(g) counties indicate that, prior to adoption (1997–2002), they were following the same trends as non-adopters. Then, after adoption, the number of hired workers in 287(g) counties decreased disproportionally compared to non-adopters and the changes are statistically different. This could possibly suggest that farmers in 287(g) counties may have had relatively more difficulties in finding and hiring seasonal farm workers. Counties in states that adopted 287(g) do not show any significant changes in the number of hired workers compared to the never adopters; they appear to follow the same trends throughout.

Figure 3 explores another alternative that farmers might adopt to reduce their use of labor--modifying cropping choices. As vegetable enterprises are typically labor-intensive,

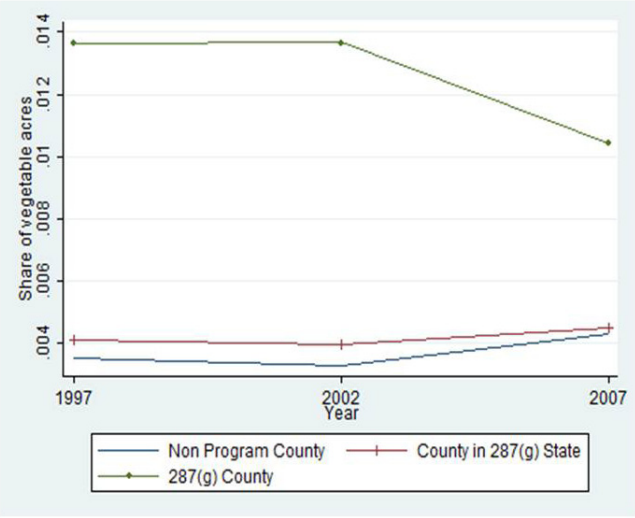
the premise is that farm labor shortages will drive farmers to shift some vegetable acres to other less labor-intensive crops. Thus a drop in the share of vegetable acres after 287(g) may be an indication of difficulties of hiring agricultural workers. Figure 3 provides some support to this claim by showing that vegetable acres indeed decreased in the more recent year in adopting counties relative non-adopters. Post adoption changes in the share of vegetable acres in 287(g) counties are statistically different from those in non-adopting counties. There is no indication that counties in adopting states have changed their share of vegetable acres after adoption as they seem to follow trends similar to non-adopters.

Overall, the evidence suggests that county-level 287(g) programs have reduced immigrants, put upward pressure on wages, and, in response, farmers are adjusting workers hired and crop choices. State programs, on the other hand, do not appear to have had an effect, consistent with county programs. Kostandini, Mykerezi, and Escalante (2013) find no effect of state adoptions on immigrant presence or wages.

However, states that adopted 287(g) programs are not remaining idle. As noted, several of these states (Arizona and Georgia, for example) have gone on to pass legislation that does not require a criminal record as a pre-requisite for an immigration detainer, but rather make it a crime to be undocumented.

These Arizona-type laws are very recent so it is difficult to collect rigorous evidence of their impacts, but recent surveys may suggest that there might be an adverse effect. For example, a joint study conducted during fall 2011 by the Center for Agribusiness and Economic Development at the University of Georgia and the Georgia Fruit and Vegetable Association accounted for the financial conditions of about 46.4% of the state's fruit and vegetable industry. The study estimated that 80.3% of their respondents reported labor sourcing problems and 5,244 unfilled positions compared to 2010. These all translated to about $75 million in crop losses in 2011 alone. Georgia passed strong immigration laws in May 2011 and perhaps this is one of the causes for the large increase in unfilled positions and crop losses. On the other hand, such increases in labor costs could have also happened in other states which did not adopt strict legislation.

Figure 3: Share of Vegetable Acres in Total Farming Acreage



Source: Census of Agriculture, USDA, 2010

Summary

Sub-federal laws may have diverse effects on the agricultural sector. Evidence suggests that the vegetable sector—one of the more labor-intensive components of local agricultural economies—in those counties that do adopt stricter enforcement has experienced reductions in labor supply, and that farmers have started to adopt some measures to adjust to the impact of these laws (e.g., changing cropping patterns). At the state level, there is no evidence that states which adopted stricter enforcement via 287(g) programs are experiencing difficulties in their agricultural labor supply. However, as noted, states have just begun shaping their immigration legislation. As stronger immigration laws, such as those in Arizona and Georgia, continue to be implemented, we may see additional, more drastic changes in the farm sector.

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