

Effects of immigration reform not as expected...

Many modern growing techniques remain relatively labor-intensive. Here, three field workers unroll plastic mulch onto a double-row of summer-planted strawberries as two more follow behind with propane-heated cutters, making openings for the strawberry plants.

# California farmers still rely on new immigrants for field labor

J. Edward Taylor 

Dawn Thilmany

Employer sanctions under the 1986 Immigration Reform and Control Act (IRCA) were intended to encourage U.S. employers to adjust to a smaller, more legal workforce. This study focuses on changing patterns of farmworker turnover and the use of farm labor contractors to test IRCA's effectiveness. The authors' findings do not support the hypothesis that IRCA would succeed in reducing California agriculture's reliance on new immigrants to meet its labor needs.

The 1986 Immigration Reform and Control Act (IRCA) was designed to deter illegal immigration into the United States by imposing penalties including possible imprisonment upon employers who knowingly hire illegal immigrants. Agriculture was considered a "special case" in IRCA because western agricultural interests testified to their heavy reliance on illegal immigrant labor, primarily for seasonal work. As a result, special provisions were included in IRCA that gave farmers more time to adjust to legal workforce requirements; legal sanctions against hiring illegal immigrants did not take effect for most agricultural employers until December 1988.

There is evidence, however, that in an-

ticipation of employer sanctions, employers made little effort to attract or retain legal workers by improving wages, benefits, or personnel practices. Instead, they continued to use farm labor contractors (FLCs), through whom they could appear to make a good-faith effort to comply with employer requirements without significantly reducing their reliance on illegal immigrant labor.

It has been argued that, traditionally, FLCs have functioned not as employment stabilizers, but rather as revolving-door employers of new, and sometimes illegal, immigrants. The price they exact for providing both employment and social services is measured in lower wages, fewer

hours, poorer working conditions, and often excessive charges for the settlement services needed by immigrant farmworkers. There is a widespread perception among workers and worker advocates that many FLCs abuse the workers they hire and undermine farm labor markets. If this image of FLCs is accurate and if IRCA does not succeed in forcing all farm employers to adjust to a more legal workforce, FLCs will continue to destabilize the farm labor market.

### Intent of IRCA

A lack of data prevents any accurate measurement of the initial impact of IRCA on the flow of immigrant labor into the California farm labor market. However, if employer sanctions and immigration law enforcement efforts have succeeded in reducing the flow of new immigrant labor into agriculture, certain trends should emerge. Farm employers should be shifting their hiring practices away from the revolving-door employment of new immigrants and toward more stable employment for a smaller, "core" workforce. This regularization of employment would be encouraged by higher wages for seasonal workers and higher recruitment costs, since farm employers would no longer be able or willing to hire from a surplus of new, illegal immigrants at the farm gate.

Where highly seasonal labor demands may discourage individual farmers from offering stable employment, labor market intermediaries (FLCs) could emerge to match groups of legal workers with a series of seasonal jobs on different farms and take on the recruitment (and paperwork) of hiring seasonal workers. (IRCA requires that employers examine documents and fill out I-9 forms for all workers hired after December 1986.) In the restricted illegalentry environment envisioned by the framers of IRCA, the FLCs' comparative advantage would be to coordinate a smaller, legal workforce to the large seasonal fluctuations in labor demand on individual farms. That is, FLCs would play an employment-stretching role something like hiring halls or labor exchanges, and thereby reduce the workers' unemployment spells between seasonal jobs.

But neither the employment patterns of farmers nor the role of FLCs is likely to change in this way if, despite the prospect of employer sanctions and increased border patrols, immigrant labor continues to be as abundant as it has been in the past if IRCA fails to effectively deter the use of unauthorized immigrant workers. If illegal immigrant workers are available despite the implementation of employer sanctions, farmers may respond to those sanctions in one of two ways:

- 1. They may hire workers directly and "invest" in reducing the probability that they will be sanctioned for knowingly hiring illegal immigrants. Checking workers' documents and filling out I-9 forms are the strongest protections growers have against apprehension. There has been a proliferation of false documents among illegal-immigrant workers, but the present law does not require that employers verify the authenticity of workers' documents.
- Farmers may hire workers through labor contractors, thereby shifting many of the costs and risks of hiring and recruitment to this labor-market intermediary. In an abundant immigrant-labor environment, FLCs' role would be as it has been in the past: recruitment of new workers from abroad for short-term work, rather than providing stable employment for a "core group" of legal farmworkers.

According to our analysis of unemployment insurance (UI) data from the California Employment Development Department (EDD), the share of all agricultural workers hired through FLCs increased 25% between January 1984 and December 1988. In fact, FLCs accounted

for nine-tenths of the increase in total seasonal farm employment in California during that period.

## **How FLCs work**

Farm labor contractors are independent intermediaries who, for a fee, recruit and supervise approximately one-third of the workers employed in California agriculture. But they are more than employers. They often transport, house, feed, and train new arrivals; in effect, they are oneperson shops taking care of newcomers. Traditionally, labor contractors have reached across a porous U.S.-Mexico border to recruit large numbers of new, mostly unauthorized immigrant workers for short-term farm jobs. According to recent studies, many farmers appear to perceive FLCs as a buffer between themselves and the immigration and labor laws that regulate farmworker employment.

# Turnover patterns

We analyzed farmworker turnover patterns to test the hypothesis that farmers and FLCs began to offer more stable employment to workers during the adjustment period granted them by IRCA's agricultural provisions. Specifically, we tested the hypotheses that (1) worker turnover in farm jobs decreased as farmers took steps

Variables	FLC workers	Non-FLC workers
	average	
Share of workers whose principal employer is in:		
Central Coast	6%	7°6
North Coast	1%	3%
Sacramento Valley	4%	3%
San Joaquin Valley	74%	20%
South Coast	14%	18%
Share of workers in:		
Berry production	NA *	2%
Dairy production	NA	1%
Deciduous tree fruits	NA	2%
General crop farms	NA	4%
Grapes	NA	4%
Vegetable production	NA	7%
Worker characteristics:		
Quarterly earnings with current employer	\$989	\$3.735
Quarters with same employer since 1984	2.205	5.296
Consecutive quarters with same employer	1.095	4.659
Ouarters since 1984		
in same region	3.563	5.991
in seasonal agricultural services (SAS) work	4.895	2.988
in farm work	0.095	0.707
in nonfarm work	1.195	4.303
without UI earnings	4.521	3.122
Total payroll of current employer	\$431,990	\$258,750

to retain core groups of legal workers while shifting seasonal employment to farm labor contractors, and (2) turnover rates were relatively low for farm labor contractors who, like farmers, have an incentive to retain legal workers if IRCA's employer sanctions are effective.

We tested the turnover hypotheses by estimating changes over time in the probability that individual workers changed principal employers. We also tested for differences in probabilities of turnover between FLC workers and other farmworkers. In our estimation, we control for characteristics of workers and of workers' principal employers that are likely to influence turnover.

# Compiling data

Data for our study are from a matched 5year time series on a random sample of 3,792 individual farmworkers assembled from California UI records. Unemployment Insurance data provide the best available census of people employed on farms. The units of observation are individual workers (identified by social security numbers) at different points in time (annual quarters) from January 1, 1984 to December 31, 1988.

For each worker drawn in a given year, information on all farm and nonfarm jobs held by the worker over the 5-year period was placed into the worker data file. This information includes the commodity (Standard Industrial Classification [or SIC] code) and the region (county) in which each job was held and the worker's total earnings in each job. For each worker-job combination, the UI data include an employer identification number. Employer identification numbers were used to assemble data on the characteristics of the workers' employers from a parallel UI employer file. These worker and employer characteristics were used as controls in our estimates.

Table 1 contrasts FLC workers and other workers in our sample according to their regional distribution, wages, size of employer, and work experience from 1984 through 1988. (The commodity [crop] in which FLC workers are employed is not available from UI data.) FLC workers are concentrated in the San Joaquin Valley (74%). Overall, FLC workers have significantly lower earnings and fewer quarters of experience with their employer than do other (non-FLC) workers.

# **Findings**

Our econometric findings did not support the hypothesis that farmworker turnover decreased from January 1984 to December 1988, the end of agriculture's allotted period to adjust to IRCA's employer sanc-

TABLE 2. Estimated effects of explanatory variables on the probability of employer change

Time trend (quarters 1–20) 3.07  Share of FLC workers: 12.06  Share of workers whose principal employer is in: Central Coast -14.26 North Coast -20.90 Sacramento Valley -9.06 San Joaquin Valley -14.06 South Coast -18.01  Share of workers in: Berry production -6.56 Dairy production -10.72 Deciduous tree fruits 5.03 General crop farms 0.08 Grapes 6.39 Vegetable production -8.84  Worker characteristics: Quarterly earnings with current employer -0.42 Quarters with same employer since 1984 consecutive quarters with same employer -2.70 Quarters since 1984 in same region in seasonal agricultural services (SAS) work in farm work in nonfarm work 0.59	Variable	Estimated effect on probability of turnover*
(quarters 1–20)         3.07           Share of FLC workers:         12.06           Share of workers whose principal employer is in:         ————————————————————————————————————		%
Share of FLC workers: 12.06  Share of workers whose principal employer is in:  Central Coast -14.26  North Coast -20.90  Sacramento Valley -9.06  San Joaquin Valley -14.06  South Coast -18.01  Share of workers in:  Berry production -6.56  Dairy production -10.72  Deciduous tree fruits 5.03  General crop farms 0.08  Grapes 6.39  Vegetable production -8.84  Worker characteristics:  Quarterly earnings with current employer -0.42  Quarters with same employer -2.70  Quarters with same employer -2.70  Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work in farm work -0.67 in nonfarm work -0.59	Time trend	
Share of workers whose principal employer is in: Central Coast -14.26 North Coast -20.90 Sacramento Valley -9.06 San Joaquin Valley -14.06 South Coast -18.01  Share of workers in: Berry production -6.56 Dairy production -10.72 Deciduous tree fruits 5.03 General crop farms 0.08 Grapes 6.39 Vegetable production -8.84  Worker characteristics: Quarterly earnings with current employer -0.42 Quarters with same employer with same employer since 1984 Consecutive quarters with same employer -2.70 Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work in farm work -0.67 in nonfarm work -0.59	(quarters 1-20)	3.07
whose principal employer is in:  Central Coast	Share of FLC workers:	12.06
employer is in:	Share of workers	
Central Coast	whose principal	
North Coast	employer is in:	
Sacramento Valley	Central Coast	-14.26
San Joaquin Valley         -14.06           South Coast         -18.01           Share of workers in:         Berry production           Berry production         -6.56           Dairy production         -10.72           Deciduous tree fruits         5.03           General crop farms         0.08           Grapes         6.39           Vegetable production         -8.84           Worker characteristics:         Quarterly earnings with current employer           Quarters with same employer since 1984         -0.08           Consecutive quarters with same employer         -2.70           Quarters since 1984 in same region in seasonal agricultural services (SAS) work in farm work         -0.48           in farm work in nonfarm work         -0.67           in nonfarm work         0.59	North Coast	-20.90
South Coast	Sacramento Valley	-9.06
Share of workers in:   Berry production	San Joaquin Valley	-14.06
Berry production	South Coast	-18.01
Dairy production         -10.72           Deciduous tree fruits         5.03           General crop farms         0.08           Grapes         6.39           Vegetable production         -8.84           Worker characteristics:         Quarterly earnings with current employer         -0.42           Quarters with same employer since 1984         -0.08           Consecutive quarters with same employer swith same employer         -2.70           Quarters since 1984 in same region in seasonal agricultural services (SAS) work in farm work in farm work in nonfarm work         0.48           in nonfarm work in nonfarm work         0.59	Share of workers in:	
Deciduous tree fruits	Berry production	-6.56
General crop farms   0.08		-10.72
Grapes 6.39 Vegetable production -8.84  Worker characteristics: Quarterly earnings with current employer -0.42 Quarters with same employer since 1984 -0.08 Consecutive quarters with same employer -2.70 Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	Deciduous tree fruits	5.03
Vegetable production -8.84  Worker characteristics: Quarterly earnings with current employer -0.42  Quarters with same employer since 1984 -0.08  Consecutive quarters with same employer -2.70  Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	General crop farms	0.08
Worker characteristics: Quarterly earnings with current employer -0.42 Quarters with same employer since 1984 -0.08 Consecutive quarters with same employer -2.70 Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	Grapes	6.39
Quarterly earnings with current employer -0.42  Quarters with same employer since 1984 -0.08  Consecutive quarters with same employer -2.70  Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	Vegetable production	-8.84
current employer         -0.42           Quarters with same employer since 1984         -0.08           Consecutive quarters with same employer         -2.70           Quarters since 1984 in same region same region in seasonal agricultural services (SAS) work in farm work in nonfarm work o.59         -0.67	Worker characteristics:	
Quarters with same employer since 1984         -0.08           Consecutive quarters with same employer with same employer -2.70         -2.70           Quarters since 1984 in same region in seasonal agricultural services (SAS) work in farm work -0.67 in nonfarm work -0.59         0.48		
employer since 1984 -0.08  Consecutive quarters with same employer -2.70  Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	current employer	-0.42
Consecutive quarters with same employer —2.70 Quarters since 1984 in same region —1.55 in seasonal agricultural services (SAS) work —0.67 in nonfarm work —0.59	Quarters with same	
with same employer -2.70  Quarters since 1984 in same region -1.55 in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	employer since 198	-0.08
Quarters since 1984           in same region         -1.55           in seasonal agricultural           services (SAS) work         0.48           in farm work         -0.67           in nonfarm work         0.59	Consecutive quarters	
in same region -1.55 in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	with same employe	er -2.70
in seasonal agricultural services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	Quarters since 1984	
services (SAS) work 0.48 in farm work -0.67 in nonfarm work 0.59	in same region	-1.55
in farm work -0.67 in nonfarm work 0.59	in seasonal agricult	tural
in nonfarm work 0.59	services (SAS) w	ork 0.48
		-0.67
without III corpings 0.20	in nonfarm work	0.59
without of earnings =0.50	without UI earnings	-0.30
Total payroll of current	Total payroll of current	
employer -0.06		-0.06

Source: Taylor and Thilmany, "Worker Turnover, Farm Labor Contractors and IRCA's Impact on the Farm Labor Market," Department of Agricultural Economics, University of California, Davis, Working Paper No. 91-4, 1991.

Evaluated at means of all other explanatory variables. For dummy (i.e., region and commodity) variables D<sub>j</sub>, the Effect at Means is the percentage difference in expected turnover probabilities between  $D_j = 1$  and  $D_j = 0$ . For SAMEE, CONS, SFIP, SASQ, FARMQ, NFARMQ, NOWORK, and TIME, the numbers in this column are the effects of 1-year changes on expected probabilities. For EWAG and QPAY, the numbers in the column are elasticities at means

tions. Instead, the data indicated that farmworker turnover increased over that period approximately 3% per quarter for the average farmworker in the average farm job (see table 2). These findings contradict the scenario that farm employers, including FLCs, began managing a smaller, more stable workforce during the adjustment period.

There is also evidence that FLCs are not employment stabilizers. Employment with an FLC significantly increases the probability that a worker will change employers from one quarter to the next. Controlling for all other worker and employer characteristics at their means, FLC workers have a 12% higher probability of turnover than non-FLC workers.

Our control variables offer additional insight into which workers would be expected to change employers from one quarter to the next and which would not. Workers' earnings with their principal employers in the current quarter are negatively related to the probability that workers will change primary employers in the next quarter — the more they are paid, the less likely they will leave. Employment changes are also discouraged by workers' number of consecutive quarters of experience with the same employer and by their experience in the same region, although not necessarily working in the same commodity. Those working for large employers exhibit significantly lower turnover rates than those working for small employers. Quarterly changes in a grower's number of employees reflect the degree to which those jobs are seasonal, and the more seasonal the work is, the greater the rate of turnover.

The difference in the probabilities of turnover between FLC workers and other workers generally is larger than the 12% difference for the otherwise average worker reported above. This is because FLC workers are not "average" workers, and FLCs are not "average" employers. For example, FLC workers have significantly lower earnings than non-FLC workers, and low earnings encourage high turnover.

### Conclusions

The findings from our turnover model do not support the hypotheses that IRCA was initially effective at curtailing the supply of new immigrant labor to agriculture or that farmers used the extra time granted to them by IRCA to adjust to a smaller, more legal workforce. Use of FLCs was increasing in the wake of IRCA, and farmworker turnover was increasing, not decreasing, as both FLCs and other seasonal agricultural service (SAS) employers appeared to be offering less-stable employment opportunities to workers over time. This analysis paints a picture of a farm labor market that was still being fed by streams of new immigrants, and in which farm labor contracting was on the rise, as employer sanctions took effect.

J. E. Taylor is Associate Professor and D. Thilmany is a Graduate Student in the Department of Agricultural Economics, UC Davis.

The authors gratefully acknowledge the financial support of the Sloan Foundation and the data support of the California Employment Development Department.