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Immigration: The Labor Market Effects of a Guest Worker Program for U.S. Farmers

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Summary

Temporary alien worker programs are meant to assure employers, including growers, of an adequate supply of labor when and where it is needed without adding permanent residents to the U.S. population. Guest worker programs are not supposed to harm the wage and job opportunities of U.S. workers while they alleviate spot labor shortages. President Bush’s proposal of a broad guest worker program has reignited interest in legislation introduced during the 108th Congress that relates specifically to the agricultural industry. According to the few economic analyses available concerning the Bracero program — the largest, longest-lived guest worker program for U.S. growers — it appears to have fulfilled its purpose of expanding the farm labor supply. But, the lower labor costs of bracero-using farmers seemingly came at the expense of U.S. workers. If a new guest worker program for the agricultural industry were initiated or if it became easier for growers to import labor under the current H-2A program, the effects of the Bracero program might be instructive: an increase in total agricultural employment, a decrease in domestic farm worker employment, and a decrease in farm wages. Although the magnitudes might differ today depending upon how much the U.S. farm labor and product markets have changed over time, the direction of the wage and employment effects likely would remain the same.

Policy Issues

Although the U.S. Commission on Agricultural Workers reported in the early 1990s that there was a surplus of farm labor due partly to illegal immigration, it noted that crop-specific local labor shortages persisted which indicated a temporal and spatial mismatch between the supply of and demand for farm labor. Consequently, the Commission recommended that the U.S. Employment Service (ES) take steps to improve the matching
of available domestic workers with farm jobs.\(^1\) It also recommended that the Congress examine the H-2A program — the only legal means growers currently have to temporarily import foreign workers — in light of other countries’ guest worker programs “with the goal of having the same program available to agricultural and nonagricultural employers, both in law and regulation.”\(^2\)

In the mid-1990s, the U.S. Commission on Immigration Reform reported to the Congress “that an agriculture guestworker program, sometimes referred to as a revisiting of the “bracero agreement,” is not in the national interest.” The Commission reached this conclusion because its members believed proponents of such a program had not proved that a farm labor shortage existed at that time or was likely to develop in the immediately following years. Whether or not there is an adequate supply of farm labor, either on a national or local basis, remains an ongoing matter of debate.\(^3\)

Unsuccessful attempts were made during the past few Congresses to amend immigration law to include a new temporary alien worker program for the agricultural industry. President Bush’s proposal for a broad guest worker program has reignited interest in legislation already proposed in the 108th Congress that relates specifically to agriculture. These bills include H.R. 3142/S. 1645 (the Agricultural Job Opportunity, Benefits and Security Act) and H.R. 3604 (the Temporary Agricultural Labor Reform Act).\(^4\)

**Arguments for and Against an Agricultural Guest Worker Program.** The debate about whether temporary alien worker programs have adversely affected the labor market outcomes of domestic farm workers has changed very little over time. Growers of perishable, labor-intensive crops (e.g., fruits, vegetables, and horticultural products) whose demand for workers intensifies during the harvest season have argued that they need access to foreign labor because domestic workers are unavailable in sufficient numbers. They have asserted that importing foreign workers does not harm domestic workers because the two groups do not compete. In other words, they contend that domestic workers are largely unwilling to perform the type of farm work in question even if higher wages were offered them. Domestic workers, it is claimed, have more attractive alternatives to farm employment (i.e., nonfarm jobs arguably are less strenuous and dirty as well as more stable and prestigious). Without access to foreign labor, grower advocates have maintained that their crops could not be harvested, consumer prices would rise, and imports from low-wage countries would increase.

Others have contended that were growers to raise wages and improve working conditions, more domestic workers would be willing to accept seasonal farm employment.

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3 For information on farm labor shortages see CRS Report RL30395, *Farm Labor Shortages and Immigration Policy*, by Linda Levine.

4 For additional information on guest worker legislation see CRS Report RL32044, *Immigration: Policy Considerations Related to Guest Worker Programs*, by Andorra Bruno.
Farm worker advocates have asserted that government programs that add to the supply of agricultural labor depress wages, reduce employment of domestic workers, and weaken incentives to improve working conditions as well as to improve efficiency through mechanization of harvesting operations. More specifically, they have claimed that the government’s fairly unique treatment of one segment of the agricultural industry — assuring it access to workers at a given wage level — perpetuates less efficient production and personnel practices than would otherwise be the case. They further have declared that growers prefer foreign over domestic workers because the former are not covered by the same laws as domestic workers (e.g., Migrant and Seasonal Agricultural Worker Protection Act, Unemployment Insurance, and Social Security), are less demanding due to the lower wages and poorer working conditions in their home countries, and are easier to control as they cannot work for another U.S. employer if the grower terminates them.

The Labor Market Effects: Economic Theory

Fundamentally, the debate over the temporary importation of foreign labor centers on whether an increase in the supply of labor reduces domestic workers’ wage and employment opportunities. Economic theory can help to clarify this debate. The essentials are shown in Figure 1.

Before the entrance of alien workers to the U.S. labor market, the amount of labor that domestic workers are willing to supply to employers is represented by the curve labeled $S_1$. It is upward sloping because workers are willing to supply more labor services in response to higher wages. Employers’ demand for labor is represented by the curve labeled $D$, which slopes downward because employers are willing to employ more workers at lower wages. Equilibrium in this labor market occurs at point A, where those willing to work for wage $W_1$ equals employer willingness to hire at that wage. Before the importation of foreign labor, then, total employment is equal to $E_1$ and domestic workers’ wage rate is equal to $W_1$.

Figure 1. The Effects on Domestic Workers of an Increase in the Supply of Foreign Workers

![Diagram showing labor market effects](image-url)
The addition of alien workers expands the total quantity of labor offering its services at any given wage rate. This is represented by the rightward shift of the supply curve to $S_2$, with the additional foreign workers represented by the difference between $S_1$ and $S_2$. This increase in the labor force will only find employment if the wage falls, for only at a lower wage will employers be willing to hire more workers. Thus, equilibrium after the importation of alien workers occurs at point B, where the wage of domestic and alien workers drops to $W_2$ and total employment expands to $E_2$.

In summary, supply/demand theory predicts that the wage rate for all workers falls from $W_1$ to $W_2$ after the entrance of foreign workers to the U.S. labor market. As a result, total U.S. employment expands from $E_1$ to $E_2$, domestic employment contracts from $E_1$ to $E_3$, and alien worker employment is equal to $E_2$ minus $E_3$.

Because the lower post-program wage ($W_2$) makes, in this example, farm work less rewarding, some domestic workers likely will find other activities more attractive which will cause employment of domestic farm workers to decline (from $E_1$ to $E_3$). While the total employment of foreign workers ($E_2$ minus $E_3$) expands, some portion is at the expense of the farm jobs formerly held by domestic workers ($E_1$ minus $E_3$). This is called the “displacement effect.” The size of the displacement effect and of the wage effect depends on the shape of the labor demand and domestic labor supply curves.5

Along with decreasing domestic agricultural employment, an alien worker program reduces the amount of wages that accrues to domestic farm workers. Since an alien worker program also expands output, agricultural prices are expected to fall, thereby benefitting U.S. consumers.

**Estimated Effects of the Bracero Program.** Few studies have tried to empirically estimate the labor market impact of the Bracero program, which allowed the temporary importation of farm workers from Mexico. The Bracero program ran from 1942 to 1964. At its peak in 1956, about 445,000 Mexican workers were admitted for employment in the U.S. agricultural industry.6

Morgan and Gardner examined a 7-state area, in which more than 90% of braceros had been employed, to estimate the impact of the program on the wage and employment levels of hired farm labor. Its effect was found to be consistent with economic theory: the Bracero program was estimated to have increased total farm employment, reduced domestic farm workers’ employment, and lowered farm wages. Morgan and Gardner concluded that the wage loss to all nonbracero farm workers was 6% to 7% of total wages paid to farm workers in the bracero states between 1953 and 1964, or some $139 million per year (in 1977 dollars). U.S. farmers were found to have gained from the program by being able to hire about 120,000 more workers at 15-20 cents less per hour than they would have in the program’s absence. Such a large employment response (about 26%) to a much smaller decrease in wages (less than 9%).

5 In the lexicon of economists, their “elasticity” or responsiveness to a change in the wage rate.

6 For more information on the Bracero program see U.S. Congress, Senate, Committee on the Judiciary, Temporary Worker Programs: Background and Issues, committee print, 96th Cong., 2d sess. (Washington: GPO, 1980).
is consistent with the informal observation that braceros were a substitute for mechanization, notably in High Plains cotton, and that the end of the program substantially accelerated the mechanization of Texas cotton. This is also the period in which the tomato harvester came into widespread use in California.\footnote{Larry C. Morgan and Bruce L. Gardner, “Potential for a U.S. Guest-Worker Program in Agriculture: Lessons from the Braceros,” in Barry Chiswick, ed., The Gateway: U.S. Immigration Issues and Policies, (Washington: American Enterprise Institute, 1982). Note: The wage loss associated with the Bracero program was incurred by both domestic farm workers and illegal immigrants since both groups were included in the labor supply estimate.}

Wise examined the experience in California for two heavily bracero-dependent crops to determine whether domestic workers would accept farm jobs if wages were raised. He estimated that a small increase in wages would bring about a larger increase in the supply of domestic farm workers: in winter melon production, a 1% increase in wages was associated with a 2.7% increase in the domestic supply of labor; in strawberry production, a 1% increase in wages was related to a 3.4% increase in the domestic labor supply.\footnote{Donald E. Wise, “The Effect of the Bracero on Agricultural Production in California,” Economic Inquiry, v. XII, no.4, Dec. 1974. (Hereafter cited as Wise, The Effect of the Bracero on Agricultural Production in California.)} Mason also found that a small increase in wages paid by the Michigan pickle industry (which had been bracero-dominated) induced a larger increase in domestic workers willing to pick the crop.\footnote{John D. Mason, “The Aftermath of the Bracero: A Study of the Economic Impact of the Agricultural Hired Labor Market of Michigan from the Termination of Public Law 78” (Ph.D. diss., Michigan State University, 1969). (Hereafter cited as Mason, The Aftermath of the Bracero.)} At least for the mid-to-late 1960s, then, these findings appear to refute the notion that increased agricultural wages would not have prompted many more domestic workers to accept farm employment.

Wise additionally found that termination of the Bracero program led to a decrease in total employment, an increase in domestic employment, and an increase in wages in strawberry and melon farming in California. More precisely, he estimated that without bracero labor from the mid-1950s to mid-1960s, domestic farm worker employment in California would have been between 51% (in strawberry production) and 261% (in melon production) higher, and wages would have been between 12% (in strawberry production) and 67% (in melon production) higher.\footnote{Wise, The Effect of the Bracero on Agricultural Production in California.}

While Mason estimated that shortly after the Bracero program’s demise farm wages rose significantly in Michigan, he was unable to determine how much the absence of bracero labor or other variables contributed to the increase.\footnote{Mason, The Aftermath of the Bracero.} In contrast, Jones and Rice found that the trend in farm wages did not change significantly in four southwestern states between the 1954-1964 bracero period and the 1965-1977 post-bracero period.\footnote{Lamar B. Jones and G. Randolph Rice, “Agricultural Labor in the Southwest: The Post Bracero Years,” Social Science Quarterly, v. 61, no. 1, June 1980.} It would thus appear that the Bracero program’s end did not have an impact on farm wages;
however, the lack of a discernible wage effect might be explained by the replacement of braceros with illegal immigrants, which effectively would have left the supply of labor little changed.

**Estimated Effects of the H-2A Program.** The program began in 1952 and remains in effect today. It was authorized under the Immigration and Nationality Act (Section 101(a)(15)(H)(ii)(A), hence its name). The program was modified by the Immigration Reform and Control Act of 1986 (IRCA, P.L. 99-603).

After decreasing between FY1989 and FY1995, the U.S. Department of Labor certified 41,827 seasonal farm jobs for the admission of foreign workers in FY1999. Despite the increase in certifications during the second half of the 1990s, the number of workers brought into the United States under the H-2A program remains quite small compared to the nation’s 1.2 million hired farm and agricultural service workers in 1999. It is likely that the markedly fewer workers who have entered the United States under the H-2A program than under the Bracero program is due, in part, to the stricter requirements of the current program and to the continuing availability of illegal immigrants.

Given the limited use that growers have made of the program, its aggregate wage and employment effects on domestic farm workers likely have been minimal. However, because of the reliance on the H-2A program of tobacco, vegetable, and apple growers in some states (e.g., Kentucky, New York, North Carolina, and Virginia), it might have had a more substantial impact on domestic farm workers in certain local labor markets.

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16 Oliveira, *Trends in the Hired Farm Work Force*. 