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ILLEGAL ALIENS

Influence of Illegal Workers on Wages and Working Conditions of Legal Workers



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**Program Evaluation and
Methodology Division**

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The Honorable Edward M. Kennedy
Chairman, Subcommittee on Immigration
and Refugee Policy
Committee on the Judiciary
United States Senate

The Honorable Alan K. Simpson
Ranking Minority Member, Subcommittee
on Immigration and Refugee Policy
Committee on the Judiciary
United States Senate

In response to your letter of October 22, 1985, we synthesized existing studies on the effects of illegal alien workers on the U.S. labor market. As you requested, in our first report (GAO/PEMD-86-9BR), we examined the first of three questions on these effects: Do illegal alien workers displace (that is, take jobs away from) native or legal workers? We found that available research was limited and had significant methodological weaknesses for the purpose of answering this question. However, the most useful studies suggested that illegal alien workers may displace native or legal workers: That is, our answer was a highly qualified "yes."

In this report, we examine the two remaining questions:

1. Do illegal alien workers depress wages and worsen working conditions for native and legal workers?
2. Is the presence of illegal alien workers in an industry associated with a declining business environment?

For both questions, we found again that useful evidence was scarce. Many of the studies could not or did not adequately differentiate between illegal alien and legal immigrant workers. Studies that did permit (with varying degrees of accuracy) differentiation by legal status were generally limited in ways which constrain generalizability. Accordingly, our answers to both questions are again caveated.

With regard to the first question, our answer is a qualified "yes." Our major finding, based primarily on results from nine case studies, is that illegal aliens do, in some cases, exert downward pressure on wages and working conditions within low-wage, low-skilled jobs in certain labor

markets. The four case studies that supported this finding examined illegal alien workers in competition for the same jobs with legal or native workers. Competing native or legal agricultural workers, food processing workers, and janitors in specific labor markets suffered depressed wages or worsened working conditions as employers in these sectors began to hire a higher percentage of illegal workers.

In three other sectors and labor markets, the effect of illegal workers on legal or native workers' wages and working conditions overall could not be determined. The five case studies on these sectors or markets provided evidence that the increased supply of workers for some job categories, in some business and industry sectors such as the garment industry, depressed wages for some native or legal workers but, at the same time, by stimulating business, also expanded employment opportunities and wages for other legal and native workers in complementary, usually skilled occupations. None of these studies, however, permitted an assessment of net effects. This suggests that the effects of illegal workers on the wages and working conditions of native or legal workers are not automatically in the direction of depressing those conditions, and that those effects depend on a number of factors, of which the illegal status of the workers is one.

We found that two other types of evidence—wage data on illegal workers and wage data on workers in communities that differed on the presence of international migrants—were overall not useful for addressing the first question. Although some of these wage data were consistent with case study evidence indicating that illegal alien workers can exert downward pressure on wages within low-wage, low-skilled jobs in certain labor markets, they are open to different interpretations. We examined wage data on illegal alien workers and wage data on workers in communities that differed on the presence of international migrants because they are used in policy debates on the effects of illegal alien workers on the labor market.

With regard to the second question, our answer is a qualified “no.” Evidence from case studies revealed that illegal aliens were found in expanding and in stable industries as well as in declining or contracting industries. These expanding or stable industries or sectors included food processing, building maintenance, restaurants, and agriculture. Additionally, when illegal aliens were found in declining industries, they were located in healthy subsectors. These declining industries were auto parts, garments, and shoes. The presence of a relatively low paid and flexible international migrant work force may have lowered employers'

labor costs and prevented the decline of the studied sectors. However, the limited number of sectors and areas studied restricts generalizations beyond the case studies.

We note, however, that to the extent that these results are generalizable and the employer sanctions and other provisions of the Immigration Reform and Control Act of 1986 (Public Law 99-603) aimed at restricting the availability of illegal labor are successful, wages for legal or native workers should rise and sectors previously dependent on illegal workers may experience considerable stress. That is, our report may provide an early warning of the severity and location of these stresses in industries such as high-fashion shoes, garments, and perishable agricultural crops.

To complete this evaluation synthesis, we identified relevant studies by searching computerized data bases, contacting experts on the topic, and circulating our bibliography to about 20 experts. We reviewed 36 studies for relevance to the questions and technical quality and pooled information from the 26 most useful or technically sound studies for each of three types of evidence. We describe our methodology in greater detail in appendix II.

As we discussed with your office, we offered the departments of Justice and Labor (DOL) the opportunity to review and comment on our draft report. The Department of Justice did not provide comments on the draft report. The Department of Labor provided comments, which are reprinted in appendix III with our responses to them. These comments largely concern one part of one section of the report. The agency's main comment was that the report overemphasizes the possible positive effects for native or legal workers that may result from the presence of international migrants. In response to the comments, we have made some minor modifications to the report, but these do not affect our answers to the two questions we address.

As we arranged with your office, we are sending copies of this report to the other member of the Senate Subcommittee on Immigration and Refugee Policy and to the chairman and ranking minority member of the Senate Committee on the Judiciary. Copies will be made available to others

who request them. Please call me (202-275-1854) or Dr. Lois-ellin Datta (202-275-1370) if you have any comments or questions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Eleanor Chelimsky". The signature is fluid and cursive, with a large, stylized initial "E" and a long, sweeping tail on the "y".

Eleanor Chelimsky
Director

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Abbreviations

DOL	Department of Labor
FLC	Farm Labor Contractor
GAO	General Accounting Office
INS	Immigration and Naturalization Service
SEIU	Service Employees International Union
SIC	Standard Industrial Classification
SMSA	Standard metropolitan statistical area
UFW	United Farm Workers

Introduction

Background

In a letter dated October 22, 1985, the chairman and ranking minority member of the Senate Subcommittee on Immigration and Refugee Policy asked us to assess the effects of illegal alien workers on the U.S. labor market, using the results of already completed research. We address three questions on these effects:

1. Do illegal alien workers displace (that is, take jobs away from) native or legal workers?¹
2. Do illegal alien workers depress wages and worsen working conditions for native or legal workers?
3. Is the presence of illegal alien workers in an industry associated with a declining business environment?

This is the second of two reports on our findings. In our first report, Illegal Aliens: Limited Research Suggests Illegal Aliens May Displace Native Workers (GAO/PEMD-86-9BR, April 1986), we reviewed studies on the employment-related characteristics of illegal workers and on actual displacement effects. We found that although the information was limited, it suggested that illegal alien workers may displace or take jobs away from native or legal workers.

This report addresses the second and third questions. These questions and the first question on displacement are interrelated. To give a hypothetical example, the presence of illegal workers could depress wages and worsen working conditions. In turn, these effects could lead to displacement by encouraging employers to actively recruit illegal workers instead of native or legal workers. However, wage depression and worsened working conditions could also result from employer attempts to contain costs and remain in operation in a declining business environment such as that brought on by stiff foreign competition. These attempts could be aided by the presence of illegal workers and, if successful, could benefit any complementary and remaining legal workers who would lose their jobs in the event of firm or industry failure.² Thus, wage depressive effects could be at the same time harmful to one group of native or legal workers who compete for jobs with illegal workers and

¹Illegal alien workers include aliens who enter the country illegally and obtain employment as well as aliens who enter legally but work in violation of the terms of their visas. Native or legal workers include U.S. citizens (both naturalized and by birth), legal immigrants, and other workers who have a legal right to work. International migrants include both illegal aliens and legal immigrants.

²A complementary native or legal worker is one who works in the same industry as an illegal worker but in a job not normally occupied by the illegal worker.

beneficial to another group of native or legal workers who depend on the continuing viability of an illegal-worker-impacted industry for their job security.

These three questions remain relevant despite the recent enactment of immigration reform legislation. First, although the legislation is intended in part to discourage illegal immigration, it is unlikely to be completely successful in this regard. Given increasing “push” factors in many traditional sending countries (for example, due to worsening economic conditions), illegal immigration to the United States is likely to continue, though probably at a lower rate. This is especially true in the short term, before the legislation is fully implemented. Hence, continued concern about the effects of illegal aliens on the labor market is warranted. Second, to the extent that illegal immigration is decreased, our analysis may give advance notice of what will happen to wages and working conditions of native and legal workers as the supply of illegal workers decreases.

Empirical Studies

We found three types of evidence from empirical studies useful for addressing the second and third questions. They are data on illegal workers' wages, comparisons of workers in communities that differed on the presence of international migrants, and data from case studies. Although all three types of evidence were used in examining the influence of illegal workers on wages, only the case study data were relevant to the effects of illegal workers on working conditions and to the association of illegal workers in an industry with a declining business environment for that industry.

The first type of evidence for addressing the second question on wages and working conditions comes from comparisons of illegal workers' wages with the minimum wage and with legal workers' wages. Because it is cross-sectional and indirect, this information can address only whether or not illegal workers are likely to compete unfairly with native or legal workers at a given time and, thus, place downward pressure on wage levels or wage growth.

A second type of evidence on wages comes from comparisons of wages in labor markets that differed with regard to the concentration of international migrant workers. This type of evidence takes a broad view of labor market phenomena and yields estimates of the probable impact of international migrant workers on wages. It also is cross-sectional and indirect.

The third type of evidence is from case studies that examine the wages and working conditions of international migrant workers in specific industries or sectors in labor markets in specific communities or other limited geographic areas. This is the only type of evidence that addresses whether or not illegal workers adversely influence both the working conditions and wages of legal workers; the other two types bear only on wage effects. The industries or sectors studied by researchers include agriculture, building maintenance, food processing, garments, restaurants, and shoes. These studies provide information over time on the institutional changes involving illegal workers that can influence the wages and working conditions of legal or native workers and the association between the presence of illegal workers in an industry and a declining business environment. This type is more direct than the other two types in that it can illustrate the processes and events that lead to labor market outcomes.

Our experience in the prior synthesis on illegal workers (GAO/PEMD-86-9BR) suggested the general lesson that wage depression is harder and harder to detect at levels of analysis beyond or above a highly localized and occupation-specific labor market. For example, we found evidence of displacement of legal citrus pickers by illegal ones in Ventura County, California, but those effects probably would not be evident in data on agricultural workers in central California generally and even less so at higher levels of aggregation such as unskilled workers in the state. Thus, case studies that concentrate on specific industries or sectors in labor markets in specific communities may be better able to detect wage depression than aggregate data.

Each type of evidence suffers from limitations that explain why conclusive responses on the issues have remained elusive. While some of the limitations are unique to the type of evidence, others are shared by the types. One significant common problem is that the studies cannot completely separate the effects of illegal aliens from those of legal immigrants. Because the illegal alien population is “hidden,” illegal aliens are difficult to identify with certainty. Also, many of the labor markets where international migrant workers congregate are composed of both illegal alien and legal or native workers. Out of necessity, nearly all studies on the effects of illegal aliens use information on these “composite groups”—groups composed of varying and often unknown proportions of illegal and legal or native workers. As a result, studies cannot isolate the effects of illegal workers from those of other workers with complete certainty.

A second limitation shared by the studies as a whole is their limited scope. That is, studies are unable to measure the effects of all segments of the illegal worker population, which is more heterogeneous than was previously believed. This limitation is, of course, related to the difficulty of studying a hidden population. While illegal workers have been identified in a wide range of occupations and industries, studies of the labor market effects of illegal workers have concentrated on the secondary labor market. Similarly, studies have concentrated almost exclusively on illegal workers in Texas and California, though the Bureau of the Census estimates large numbers distributed in numerous other geographical areas. These restrictions of the studies' scope limit the generalizations that can be made.

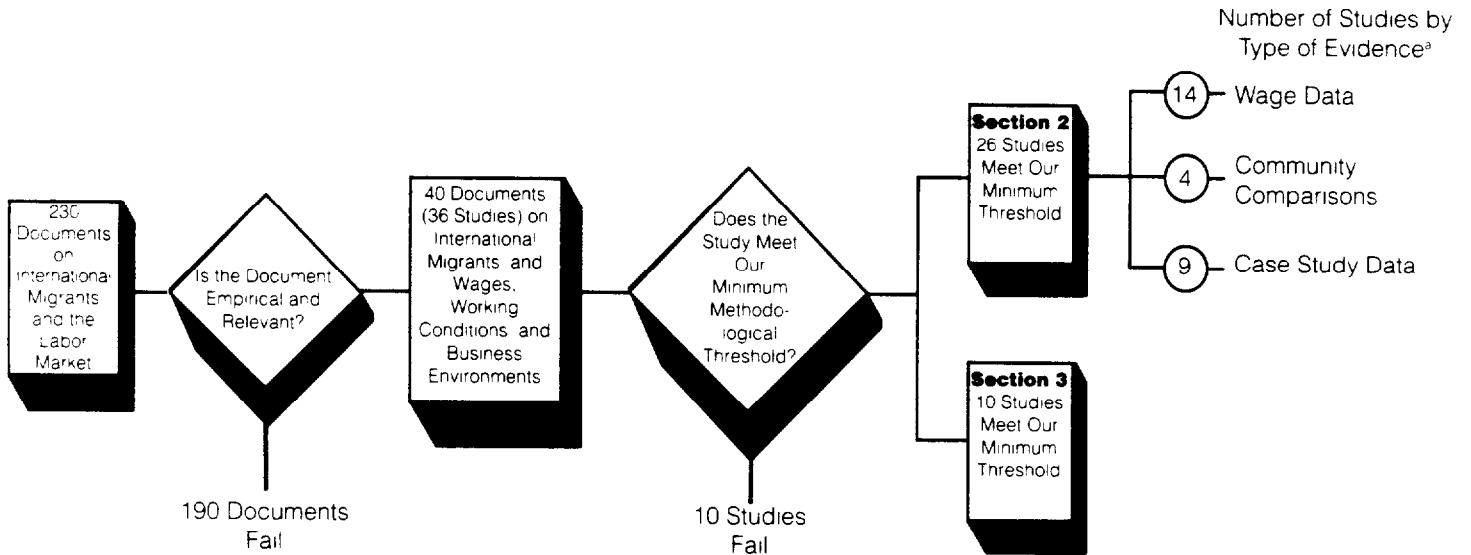
Objectives, Scope, and Methodology

As noted, the objectives of this review were to address the second and third questions using extant research. These issues define our project's objectives.

We applied the evaluation synthesis methodology to the available research. This approach has three steps: identifying relevant research; assessing the quality of studies; and combining results across studies, taking research quality and other characteristics into account.

Figure 1.1 (on the next page) outlines the process we used to identify the research. We developed several overlapping strategies to identify potentially relevant studies. These strategies yielded 230 reports that were systematically screened and reduced to 36 relevant studies. Many of these studies were not undertaken to examine the effect that illegal aliens may be having on the wages of native or legal workers but, nevertheless, presented data that appeared to be relevant to that issue. We systematically assessed the quality or usefulness of these 36 studies for addressing our questions. Ten studies that failed to meet minimum quality criteria or reported noncomparable earnings data were excluded from analyses. The 26 remaining studies met our methodological criteria and were used in the analyses of the effects of illegal workers on wages and working conditions. These studies included 14 studies with descriptive information on illegal workers' wages; 4 studies on wage comparisons between communities that differ on the presence of international migrant workers; and 9 case studies that focus on the role of international migrant workers in 7 specific industries or sectors.

Figure 1.1: Our Process for Selecting Studies for Review



^a The sum of the number of studies by type of evidence (27) exceeds the number of studies used in section 2 (26) because one study provided two types of evidence. Similarly, the sum of the number of studies used in sections 2 and 3 (36) exceeds the number of studies used overall (26) because all of the section 3 studies were used in section 2.

We addressed the question of whether or not the presence of illegal aliens in an industry is associated with a declining business environment by cumulating evidence from 10 case studies of 8 different industries or sectors. These studies are the same ones that provided case study evidence for addressing the wage and working conditions question, plus one additional case study on the auto parts manufacturing industry or sector.

In the third step, we combined study results by question and type of study. We sought to take the methodological features of studies into account in combining their results and we avoided accepting any one theoretical perspective on how the labor market functions as a framework. Instead, we attempted to use aspects of various perspectives to

highlight relevant empirical evidence for analysis and the potential limitations of this evidence. For clarity, we discuss these theoretical perspectives in the next section.

Theory

In general, an increase in the number of potential workers will tend to reduce prevailing wage levels. This would occur whether the increase is the result of the growth of the native population, legal immigration, or illegal immigration. In a competitive, nonsegmented labor market, international migrants compete according to their skills just like any other workers. Wages would tend to be depressed if the supply of international migrant labor increases with no increase in labor demand or if demand increases less rapidly than the supply of international migrant labor increases.³ Whether or not an increase in the number of illegal aliens seeking employment translates into an actual decrease in wages depends on the particular conditions in the labor market, including the presence of other, offsetting pressures.⁴

Labor markets may be restricted in numerous ways, so the theory of competitive movement of native, legal immigrant, and illegal alien workers may not reflect reality. We refer to a labor market with these restrictions as a segmented labor market, meaning that the workers in one segment (for example, a specific occupation in a specific geographic location) do not compete for jobs with workers in another segment.⁵ For example, if there are jobs that legal or native workers will not take, illegal workers compete for those jobs with other illegal workers. In this situation, increases in the number of illegal workers will depress the wages of other illegal workers but will have no direct effect on the wages of other workers. Another way in which a labor market may be segmented is by level of skill or training. If illegal workers are primarily unskilled and if unskilled workers do not compete directly with more

³If the demand for labor is increasing, whether wages tend to rise, fall, or remain roughly constant depends on how fast demand is increasing relative to the increase in the number of workers seeking employment at the prevailing rate. If the demand for labor at prevailing wage rates is increasing faster than the number of potential workers, wage levels will tend to rise; if demand is rising more slowly than the number of potential workers, wage levels will tend to fall. In either case, wage levels will be lower than they would have been in the absence of the increase in the number seeking employment, but they may nonetheless be increasing.

⁴In addition, wage rates do not adjust instantaneously to changes in either demand or supply. Any effect that the illegal immigration has may be observable only after several years have elapsed. An analysis that looked only at the wages of illegal worker and legal worker groups at a particular time may be observing the situation either prior to, part way through, or at the completion of the wage adjustment process.

⁵Strictly segmented labor markets may be rare.

highly skilled workers for employment, an influx of illegal workers will lower the wages of the unskilled workers with whom they compete. The influx would not have a direct effect, however, on the wages of other categories of workers.

Although illegal immigration may not have a direct effect on the wages of other categories of workers when labor markets are segmented, illegal immigration can have an indirect effect that can be either positive or negative.

1. Positive effects. To the extent that two categories of workers are employed in producing goods or a service, an increase in illegal immigration may actually increase the wages of the category with which the illegal aliens are not directly competing. For example, this would occur if a substantial fraction of the labor required by the luxury restaurant industry was of the type supplied by illegal workers, such as busing or washing dishes, if the increase in illegal immigration reduced employer costs by enough to allow them to reduce the price they charge for their meals, and if the lower price for the meals led, in turn, to increased unit sales. The increase in sales would tend to increase the demand for the noncompeting category of workers, such as chefs or waiters.

2. Negative effects. To the extent that illegal workers are employed by firms that produce a particular type of product that competes with the product produced by firms that employ other kinds of workers, the increase in illegal immigration may reduce the wages of the other category of workers. The reduction occurs because of competition between products rather than directly between workers. Thus, if an influx of illegal workers lowered the costs of operating a moderately priced, full-service restaurant, workers who gain their livelihood in firms that compete with such restaurants (for example, fast food restaurants or firms producing ready-to-eat food for sale in supermarkets) will experience a reduction in the demand for their services. This, in turn, will put downward pressure on the wages they pay their employees.⁶

We used the insights from these two perspectives to assist us in selecting relevant empirical evidence for analysis, and in interpreting this evidence and understanding its potential limitations. For example, the

⁶These are not the only complications one could consider. But they are sufficient to allow one to gain an appreciation of why it is very difficult to discern the full effect of illegal immigration from an empirical analysis based on generally available wage data.

insights of the segmented labor market approach were useful in selecting studies that compared the wages of illegal and legal workers. Since our aim was to choose studies with information on those illegal and legal worker groups that were likely to compete with one another, we used as study selection criteria some of the indicators of the absence of labor market segments that are suggested by this perspective: similarity of the illegal and legal workers in terms of occupation, industry, skill level, and geographic area. Failure to consider these factors in an analysis would leave open the alternative explanation that illegal and legal workers were in different labor market segments and thus unlikely to influence one another's wages.

The more general competitive-perspective was useful in identifying some of the potential limitations of studies that examined differences in wages among communities that differed on the presence of international migrant workers. For instance, since an increased supply of international migrant workers may, over time, have indirect effects on communities other than the ones originally affected, cross-sectional comparisons of communities that experience direct effects with communities that experience indirect effects may underestimate the full impact of international migrants.

Report Organization

Section 2 presents our findings on the effects of illegal workers on legal or native workers' wages and working conditions. In section 3, we discuss the association between the presence of illegal workers in an industry and a declining business environment. Appendix II describes our methodology in greater detail, and the bibliography lists the studies we reviewed. The bibliography includes references for 40 reports: 30 reports on 26 basic studies that met our methodological criteria and were used in the synthesis, and 10 reports on 10 studies that did not meet our criteria and were not used. In appendix III, we present comments from the Department of Labor on this report and our responses to these comments.

Do Illegal Alien Workers Depress Wages and Worsen Working Conditions for Native or Legal Workers?

Our qualified answer to the above title question is that illegal workers do, in some cases, depress wages and worsen working conditions for native or legal workers who directly compete with them for jobs. Three types of evidence—wage data on illegal workers, wage data on workers in communities that differed on the presence of international migrants, and case study data—were used to examine the effects of illegal workers on the wages of legal or native workers; only one type of evidence, case study data, provided information on the effects of illegal aliens on working conditions for legal or native workers. Technical limitations on the case study evidence as well as on the other two types of evidence constrain our conclusions.

Wage Data on Illegal Workers

Data on illegal workers' wages, the first type of evidence, were used in comparisons with the minimum wage, which is the legal lower limit for wages, and with legal or native workers' wages. The comparisons with the minimum wage indicated that illegal workers' wages are low. The comparisons of legal and illegal workers' wages were not sufficiently strong for our purpose of examining the effects of illegal workers on the wages of legal workers.

Comparisons With Minimum Wage Rates

Comparisons of illegal workers' wages with the minimum wage allowed us to combine data from several small studies to describe the distribution of studied illegal workers' wages. That is, they permitted the aggregation of wage data from different samples of illegal workers collected at different points in time.

Available Evidence

Several studies reported the earnings of samples of illegal alien workers. We reviewed 23 of these studies plus unpublished INS data on employed illegal workers who were apprehended in 1985. Of the 23 studies, 14 were useful. (See table 2.1.) The remainder had significant methodological weaknesses or noncomparable earnings data. Most of the studies were small cross-sectional surveys done within communities or industries in California and Texas. The majority of illegal workers studied were Hispanics. Most illegal workers on whom settlement data were available had been in the country for more than 6 months. Although illegal workers were found in a wide range of occupations, they appeared to be concentrated in less skilled and blue collar occupations.

**Section 2
Do Illegal Alien Workers Depress Wages and
Worsen Working Conditions for Native or
Legal Workers?**

Table 2.1: Description of Studies That Reported on Illegal Workers' Wages

Study	Study period	Location	Illegal worker sample^a	Data source	Measurement of legal status
Cardenas (1976)	1975	San Antonio, TX	75 Mexican community residents	Survey of residents in low-income area	Identification by key informants
Cardenas & Flores (1980)	1978-1979	Houston, TX	138 community residents or persons receiving services at an immigration aid center	Surveys of parents of children in school for undocumented and of persons receiving services at an immigration aid center	Self-identification
Community Research Associates (1980)	1979-1980	San Diego County, CA	114 aliens apprehended by INS	Survey of aliens detained at INS centers	Legal test ^c
Johnson & Williams (1981)	1979	St. Louis, MO area and southeastern IL	8 Mexican community residents	Survey of residents and researchers' observations	Self-identification, observation
Kubiske (n.d.)	1984	Mexico City, Mexico	813 Mexican applicants for U.S. visas	Survey of applicants who had spent time in U.S. illegally	Self-identification
Maram (1980)	1979	Los Angeles County, CA	244 Hispanic restaurant workers	Survey of workers in workplace	Self-identification
Mines & de Janvry (1982)	1978-1979	Town of Los Animas, Zacatecas, Mexico and various settlement communities in California	41 male community residents who migrate to or live in U.S.	Survey of migrants and other village residents	Self-identification, verified by village informants
Morales (1983)	1980-1982	Los Angeles, CA	346 auto parts production workers in 8 firms	Survey of union officials and other key informants, administrative records	Identification by key informants
North & Houston (1976)	1975	Nationwide	779 aliens apprehended by INS	Survey of aliens detained at INS Border Patrol sites and district offices	Legal test ^b
Orange County (1978)	1977-1978	Orange County, CA	177 community residents	Survey of aliens in workplace and community	Self-identification, identification by key informants
Papademetriou & DiMarzio (1985)	1979-1983	Northern New Jersey and New York City	974 applicants for services at an immigration aid center	Applications for services	Self-identification
Simon & DeLey (1984)	1981-1982	Los Angeles, CA	434 Mexican female community residents	Survey of female residents in Hispanic residential area	Self-identification
Tarrance et al (1982)	1982	Texas	1526 aliens apprehended by INS and other alien workers	Surveys of aliens detained at INS centers and other alien workers	Self-identification, legal test ^b
Villalpando et al (1977)	1976	San Diego County, CA	160 aliens apprehended by INS	Survey of aliens detained at INS centers	Legal test ^c

Note: These studies met our methodological criteria and were used in the synthesis. Complete references for them are in bibliography.

^aSample size is for illegal workers on whom wage data are available.

^bAliens were identified as illegal if they could not document their status.

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Worsen Working Conditions for Native or
Legal Workers?

Findings

Our analyses revealed that the illegal workers studied were low paid. They earned about 1.3 times the minimum wage; mean wages fell within a fairly narrow range, from the minimum wage to less than twice that amount. (See tables 2.2 and 2.3.) The fact that no study found a ratio below 1.00 simply means that no sample of workers studied had an average wage below the legal minimum.

Table 2.2: Average Ratios of Wages to the Minimum Wage for Illegal Workers by Data Source

Average ratio interval	Studies of illegal workers		INS, 1985 servicewide ^a	
	Number of studies	Average number of workers ^b	Number of apprehensions	
<1.00	0	•	20,103	(14.2%)
1.00 - 1.26	9	325 ^c	82,355	(58.0)
1.27 - 1.56	4	700 ^c	24,357	(17.2)
<1.57	1	813	15,069	(10.6)
Total	14	460	141,884	(100.0)

^aUnpublished fiscal year 1985 data on apprehensions of employed illegal aliens. Apprehensions are events, not individuals; an individual may be apprehended more than once. The numbers in parentheses are the percentages of total apprehensions in a given interval.

^bThis is the average number of workers for studies with average ratios in a given interval.

^cInformation on the number of workers is unavailable in one or more studies.

Table 2.3: Other Statistics on Ratios of Wages to the Minimum Wage for Illegal Workers by Data Source

Statistic	Studies of illegal workers	INS, 1985 servicewide ^a
Mean	1.34 ^b	1.21 ^c
Median	1.16	1.16 ^c
Minimum	1.00	^d
Maximum	1.82	^d

^aUnpublished fiscal year 1985 data on apprehensions of employed illegal aliens. Apprehensions are events, not individuals; an individual may be apprehended more than once.

^bWeighted mean with studies missing information on number of workers excluded.

^cEstimate based on weighted frequency interval data.

^dData unavailable.

Eight studies reported, however, that some illegal workers earned subminimum wages. Of these eight studies, four provided information on the number of illegal workers with subminimum wages; this group accounted for between approximately 7 and 48 percent of each study's sample.

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Do Illegal Alien Workers Depress Wages and
Worsen Working Conditions for Native or
Legal Workers?

INS data on 1985 apprehensions of employed illegal aliens also indicate that illegal aliens are low paid. These data suggested that while apprehended illegal aliens earned approximately 1.2 times the minimum wage, about 14 percent earned subminimum wages. This estimate probably exaggerates the true proportion of those earning subminimum wages, however, because apprehended illegal workers are likely to be in the U.S. for a shorter time than those who escape apprehension. (We estimate that no more than 45 percent of the employed detainees in 1984 had been in the U.S. for a year or more.) Thus, apprehended illegal workers are unlikely to have achieved the same earning power as unapprehended illegal workers.

Since these data provide no direct comparisons with legal workers, their value is limited for purposes of examining wage depression. If all studied illegal workers were in segmented labor markets, low wages would have few implications for legal workers. However, to the extent that these illegal workers are in competition with legal workers and that these very low wages are below prevailing wages, the findings would represent downward pressure on wages. In short, these statistics may include some instances of wage depression. However, without appropriate comparison data, such effects cannot be established.

**Comparisons With Legal
Workers' Wages**

A useful test for wage depression may be to compare wages of competing illegal and legal workers who have comparable job-relevant characteristics. If these workers are in comparable jobs in the same labor market and with comparable job-relevant characteristics (for example, training and experience), they should eventually earn approximately the same wages. Finding higher wages for legal workers than for competing similar illegal workers would indicate both that wages in the specific labor market are in a period of adjustment and that illegal workers are placing downward pressure on legal workers' wages. If the illegal and legal workers under study have noncomparable job-relevant characteristics, are in different segments of the labor market, or if it cannot be determined whether the two groups are in the same labor market or not, the interpretation of wage comparisons would be more problematic.¹

¹Also, even if we found at a given point in time the same wages for legal workers and for competing similar illegal workers, that would not necessarily indicate that illegal workers were having no effect on legal workers' wages. This finding could indicate that no depression had occurred (for example, because labor demand was increasing) or, as a consequence of wage equalization over time, that wage depression had occurred in the past. Additional information such as longitudinal data on wages for comparable legal and illegal workers would be needed for a clear interpretation.

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Worsen Working Conditions for Native or
Legal Workers?

Table 2.4: Description of Studies That Compared Legal and Illegal Workers on Wages

Study	Study period	Location	Illegal worker sample
Cardenas (1976)	1975	San Antonio, TX	75 Mexican Community residents
Maram (1980)	1979	Los Angeles County, CA	244 restaurant workers
Morales (1983)	1980-1982	Los Angeles, CA	346 auto parts production workers in 8 firms
North & Houstoun (1976)	1975	Nationwide	779 aliens apprehended by INS
Papademetriou & DiMarzio (1985)	1979-1983	Northern New Jersey and New York City	974 applicants for services at an immigration aid center
Simon & DeLey (1984)	1981-1982	Los Angeles, CA	434 Mexican female community residents
Tarrance et al. (1982)	1982	Texas	1526 aliens apprehended by INS and other alien workers

Available Evidence

Seven of the 14 studies used in the minimum wage comparisons allowed comparisons of illegal and legal workers' wages. (See table 2.4.) Sparse information on the illegal and legal workers made assessing the studies on two criteria—the comparability of the groups on job-related characteristics within studies and whether they were competing or not—difficult.

Findings

In each of the 7 studies, the sample of illegal workers had lower average wages than the sample of legal workers. However, these results represent overall group differences. They are not adjusted for job-relevant differences between illegal and legal workers that could influence wages. For example, if a sample of legal workers was in the country longer, or was more experienced or skilled than the sample of illegal workers, even though they competed, then some adjustment to account for the differences would be necessary since one would expect more settled,² more experienced, or more skilled workers to be paid higher wages

²Time in the country may have an important influence on wages because less settled workers, regardless of legal status, often are unfamiliar with U.S. labor practices and have lower consumption expectations than more settled workers.

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Legal worker sample	Data source	Measurement of legal status	Design characteristics
266 Mexican-American, Black, and Anglo community residents	Survey of residents in low-income area	Identification by key informants	Statistical adjustments made for some differences between groups
76 legal and citizen restaurant workers	Survey of workers in workplace	Self-identification	
580 legal and citizen auto parts production workers	Survey of union officials and other key informants; administrative records	Identification by key informants	Statistical adjustments made for some differences between groups
Nonsupervisory or production workers ^a	Survey of aliens detained at INS Border Patrol sites and district offices; BLS national survey of establishments	Legal test ^b	Legal and illegal worker groups compared on wages with industry group controlled
91 documented applicants for services at an immigration aid center	Applications for services	Self-identification	
108 Mexican-American female community residents	Survey of residents in Hispanic residential area	Self-identification	Legal and illegal worker groups compared on wages with some variables controlled
Legal and citizen Spanish-surname workers ^a	Surveys of aliens detained at INS centers and other alien workers	Self-identification, legal test ^b	

Note These studies met our methodological criteria and were used in the synthesis. Complete references for them are in the bibliography. Sample size is for workers on whom wage data are available.

^aSample size is unavailable.

^bAliens were identified as illegal if they could not document their status.

than less settled, less experienced, or less skilled workers. The results indicating wage differences also are not necessarily on competing illegal and legal workers. Five of the 7 studies did not clearly use legal and illegal workers from the same specific labor market and, hence, in competition.

We found that only one of the 7 studies met both criteria: The illegal and legal workers were competing, and the study adjusted for some job-related differences between the samples of illegal and legal workers. In this study, Morales (1983) examined illegal and legal workers in manufacturing firms in the Los Angeles area. Morales (1983) found that illegal workers had lower average wages than legal workers. When the groups were made equivalent through statistical adjustments on factors other than legal status, such as time on the job, wage rates were \$2.64 or 54 percent less for illegal workers than for legal (citizen) workers. This difference could mean that wage depression was occurring, with illegal and legal workers' wages yet to equalize. Because the statistical adjust-

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ments were not made on all the major factors that could plausibly explain the wage difference,³ however, this difference could be exaggerated and the full effects, if any, on legal workers' wages may have already been felt.

The approach of comparing the wages of comparable competing legal and illegal workers, with adequate consideration to labor markets and worker characteristics, can provide evidence of wage depression, but existing attempts do not provide an adequate test. Studies providing longitudinal wage data on competing workers also would help to resolve some of the difficulties in interpreting study findings.

Wage Data on Workers
in Communities That
Differed on the
Presence of
International Migrants

A second approach to addressing the question on wage effects is to assess the impact of illegal immigration on wages in different communities.⁴ Strongest conclusions would be warranted if we knew how many illegal workers entered the labor markets of interest and what other particular factors were influencing wage levels in each of these markets. Unfortunately, many of these are unknown; however, we did identify studies that assess how the presence of international migrants, including both illegal alien and legal immigrant workers, in a labor market is associated with wages in that market. As discussed in appendix II, studies such as these on the effects of an international migrant group composed of both illegal alien and legal immigrant workers are relevant to the question of the impact of illegal alien workers alone. Generally, the few useful studies found that the presence of a higher number of international migrants in a particular labor market was associated with somewhat lower wage levels in that market or market sector. The size of the estimated effect on wages was generally small.

Available Evidence

We found 7 studies that compared wages in communities that differed on the presence of international migrants. These studies had the following characteristics in common: They compared workers in labor markets that would be expected to have a large presence of international migrants with workers in other markets or with national and state data

³Other factors that could explain the wage difference but on which adjustments were not made are worker's age, time in the country, and skill level.

⁴Several of the studies examined variables besides wages, including wage growth and income. In discussing the studies as a group, we use the term "wages" to substitute for all of these variables; however, in discussing individual studies, we use the variable(s) specific to those studies.

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Table 2.5: Description of Studies on Wages in Communities That Differed on the Presence of International Migrants

Study	Study period	Communities	Data source	Dependent variables	Predictor variables	Design characteristics
Davila (1982)	1970	3 border and 16 nonborder county groups ^a in 4 southwestern states	1970 Census, heads of households	Real annual earnings	Weeks worked, full- vs part-time, experience, sex, marital status, race, occupation, industry of employment, border vs. nonborder residence, education, ethnicity	Regressions conducted for all workers and for various subgroups
Davila & Mattila (1985)	1970, 1980	Border and nonborder county groups ^a in CA and TX states	1970 and 1980 Censuses, male heads of households	Nominal and real annual earnings	Education, experience, race, ethnicity, weeks and hours worked, foreign-born, years since immigration, industry of employment, city size, disabled, marital status, border vs. nonborder residence	Regression conducted with 1970 and 1980 data; results compared
DeFreitas & Marshall (1983)	1970-1978	35 SMSAs with populations over 1,000,000 and with significant manufacturing sector	Annual Survey of Manufacturers and 1972 and 1977 Censuses of Manufacturers; 1970 Census	Average annual rates of change in hourly wages of manufacturing production workers	Area specific change in CPI, productivity, union membership among production workers, geographic region, percentage of production workers foreign-born, unemployment rate	Regression conducted using average values of variables over 1970-78
Smith & Newman (1977)	1970	3 border and 1 nonborder SMSAs in TX	1970 Census	Nominal, real, and expected real wages	Demographics, hours and weeks worked, education, occupation, length of residence in area, and border vs. nonborder residence	Regression conducted for SMSAs and workers, and for SMSA subsets and worker subgroups

Note: These studies met our methodological criteria and were used in the synthesis. Complete references for them are in bibliography.

^aSMSA, combination of SMSAs, or single county

on wages; used procedures to control for or take into account some differences among workers and labor markets that also could influence wages; and used data from the late 1960s and 1970s, often from the Census of Population. The studies differed on a variety of factors, including the quality of the evidence for addressing our question, which were taken into account in our synthesis of study results. Of these 7 studies, 4 were useful for addressing our question. (See table 2.5.)

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The data comparing wages in differing communities, while the best available, are open to alternative explanations. Differences in wages between communities may be explained by some poorly measured or unmeasured difference between the communities rather than by their differences in the international migrant work force. A major concern in this regard is differences among the communities on labor demand, which can directly influence wage levels. Differences among studies on how well they controlled for these potentially confounding factors can explain differences in study results.

The conclusion that wage differences remaining after other differences among workers and communities are controlled indicate the presence of wage depression is especially plausible, to the extent that international migrant and native workers compete in non-segmented labor markets. In this case, a plausible process or mechanism responsible for workers' lower wages—competition in nonsegmented markets—would be evident. Unfortunately, none of the four studies provides information on market segmentation and competition between international migrant and native workers in the communities studied. Although strictly segmented labor markets may be rare, without information about market segmentation and worker competition, we are less certain that a wage difference associated with international migrant presence reflects downward pressure on the wages of native workers.

Because they generally use cross-sectional data, these studies may also fail to capture the full effects over time of an influx of international migrant workers. That is, legal or native workers may flee communities in the face of depressed wages triggered by incoming international migrant workers (direct effects), only to cause wage depression themselves by entering other labor markets (indirect effects). In this case, cross-sectional comparisons of workers' wages in communities that experience direct effects and those experiencing indirect effects are likely to underestimate the full impact of international migrants.

Findings

One of the studies, DeFreitas and Marshall (1983), examined wage growth for manufacturing production workers in 35 Standard Metropolitan Statistical Areas (SMSAs) that varied on share of manual manufacturing work performed by international migrants during the period 1970-78. Each SMSA had a population of over one million and a significant manufacturing sector. The results indicate that higher concentrations of international migrants in manufacturing had a modest negative

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effect on wage growth rates. The effect was less than 1 percent slower wage growth for every 10 percent increase in the international migrant share of manual manufacturing jobs. This adverse effect was found, however, only in SMSAs with international migrants accounting for 20 percent or more of the manual workers.

Because this analysis did not measure wage growth for international migrant and native workers separately, the observed differences between communities on this factor could be accounted for by the possibly slower wage growth experienced by international migrants only, which has the effect of lowering average wage growth. This is the “averaging” problem. Also, several variables that could explain differences between communities on wage growth (such as demand, industry mix, and worker characteristics) are omitted from analyses.

The other 3 studies assessed the wage differentials for SMSAs or areas on the U.S.-Mexico border and nonborder areas, all of which are in the southwest. These studies generally used border versus nonborder residence to examine the influence of international migrant presence, among other factors, on wages. Unlike the study by DeFreitas and Marshall (1983), the border differential studies used information on individual workers rather than on communities as a whole. One of the border differential studies also attempted to avoid the averaging problem by statistically controlling for immigration status (i.e., foreign-born or not) among those workers whose wages were measured.

Smith and Newman (1977) compared wages in one nonborder SMSA and 3 border SMSAs in 1970. All 4 SMSAs are in Texas. The researchers found that workers in border SMSAs earned real wages that were about 8 percent lower than those for workers in the nonborder SMSA. They also concluded that the size of the differential roughly corresponded with the size of the international migrant presence in the border SMSAs. That is, workers in border SMSAs with a large international migrant presence earned less than workers in border SMSAs with a smaller presence. Other analyses by the authors revealed that the groups most likely to experience lower wages along the border (in comparison to the wages they would earn in a nonborder SMSA) were Mexican-Americans, low-wage/low-skill workers, and persons between 45 and 65 years of age. Because of imperfect specification and measurement of the variables that can affect wages (for example, labor demand), this analysis may not have accurately measured the influence of international migrants on wages. The study also does not control adequately for the immigration status of

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workers (for example, foreign-born or not), which makes the results susceptible to the averaging problem.

Davila (1982) examined earnings differentials between 3 border and 16 nonborder “county groups”⁵ in 4 southwestern states in 1970. After taking differences between the county groups into account, the researcher found that border workers earned approximately the same amount as nonborder workers. This is the only finding from the studies we reviewed that indicated no association between wages and border residence. The concerns cited above in the study by Smith and Newman (1977) could also be raised for the present study.

The third border differential study we reviewed (Davila & Mattila, 1985) compared workers’ wages in a sample of border and nonborder county groups in 1980 as well as in 1970. The analysis included a variety of predictors such as education, experience, race, ethnicity, weeks worked, and hours worked, to predict wages. The findings are unclear for 1970: They may or may not indicate a difference on wages. The results for 1980, however, clearly indicate that workers along the border earned approximately 12 percent less than nonborder workers after differences between the workers and areas were taken into account. This finding persists even though the analysis included whether the worker was foreign-born or not and years since immigration.

Regardless of how the results for 1970 are interpreted, they and the 1980 results may suggest that the border-wage differential widened during the 1970s. This may indicate that the impact of immigration on wages increased during that period, but it may also reflect that the economies of the border counties developed differently than the economies of the nonborder counties over these years. This study is open to the same issues as the other studies discussed in this section.

As mentioned, the four studies on workers in communities that differed on the presence of international migrants are prone to limitations that make the interpretation of findings difficult. These limitations are of special concern because the studies do not provide evidence of a plausible process or mechanism (for example, competition between international migrant and native workers in non-segmented labor markets) that can account for the reported results. We believe that, because of these limitations, the existing studies on workers in communities that differed

⁵County group was defined as a SMSA, a combination of SMSAs, or a single county

on the presence of international migrants cannot be used to support conclusions on the influence of illegal workers on legal workers' wages.

Case Study Data on Wages and Working Conditions

The labor market case studies indicated that illegal workers adversely affect legal or native workers in some industries or sectors, and have a neutral or positive impact on legal or native workers in other industries or sectors. These studies examined the links between an increased supply of international migrant workers (including many illegal aliens) for identifiable job categories and either downward pressure on or actual depression of wages and working conditions for native or legal workers seeking work in these same job categories. They also address the question of whether the presence of international migrants helps preserve jobs within the sector for complementary workers who might find demand for their labor and their earning possibilities restricted if the international migrant-impacted industry were to shrink.

Available Evidence

Nine studies that provided case study evidence for addressing the question on wages and working conditions met our methodological criteria. One study provided case study evidence only for addressing the question on the association between illegal aliens and declining business environments (Morales, 1983). All of them were done in California or New York and do not necessarily represent conditions in other areas. Although these studies cannot measure the exact proportions of illegal aliens in industries or sectors, they can determine the way employers have utilized recently arrived workers to control labor costs. In each case, the authors described the changes in labor market institutions which occurred at the same time that the presence of recent international migrants took on growing importance in the studied sector. In all the studies, the authors consulted a variety of documentary sources and conducted interviews with union organizers, employers, industry trade officials, economic intermediaries, personnel managers and workers. The authors combined evidence from these various sources in their analysis of the adaptations that occurred in labor markets as the flow of immigration grew. (See table 2.6.)

The case study research does not allow us to examine the wage effects on labor markets of a group consisting entirely of illegal alien workers since the two groups are usually working side by side in the same sectors. It does, however, offer some insights into the diversity of the illegal alien group. These are useful in analyzing the potential wage depressing

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Table 2.6: Description of Case Studies on Legal and Illegal Workers' Wages and Working Conditions

Study	Study period	Location	Industrial sector	Illegal worker sample	Legal worker sample
Bailey & Freedman (1982)	1979-1980	New York City, NY	Restaurants	Illegal kitchen workers	Legal kitchen workers, waiters, and bartenders
Maram & King (1983)	1978-1980	Los Angeles, CA	Garments	Illegal garment factory operatives	Legal factory operatives, legal skilled garment workers
			Restaurants	Illegal kitchen workers	Legal kitchen workers
Mines (1985)	1983-1985	Richmond, CA	Tortilla production	Illegal strike breakers	Veteran legal workers on strike
Mines & Anzaidua (1982)	1980-1981	Ventura, CA	Citrus	Picking crews of nonunion inexperienced illegal workers	Picking crews of experienced unionized legal workers
Mines & Avina (1986)	1982-1985	Los Angeles, CA	Building maintenance	Illegal immigrant nonunion janitors	U.S. born black and legal Hispanic unionized janitors
Moraies (1983)	1980-1982	Los Angeles, CA	Auto parts production	Illegal factory operatives	Legal factory operatives
Moraies (1985)	1983-1984	San Diego, CA	Restaurants	Illegal kitchen workers	Legal kitchen workers, waiters, and bartenders
Naiven & Frederickson (1982)	1980-1981	San Diego, CA	Restaurants	Illegal kitchen workers	Legal kitchen workers, waiters, and bartenders
			Agriculture	Illegal tomato workers	Legal green-card workers
Runsten (1985)	1984-1985	Los Angeles, CA	Shoes	Illegal shoe factory operatives	No identifiable legal substitute group, legal skilled shoe workers
Waldinger (1986)	1980-1985	New York City, NY	Garments	Illegal garment factory operatives	Legal factory operatives, legal skilled garment workers

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Data source	Measurement of legal status	Comments
78 interviews with NYC restaurateurs; 29 NYC fast-food outlets surveyed; 13 restaurant employers surveyed in Greensboro, NC, Census data	Identification by key informants	Some random selection of employers. Census data analysis combined with survey results
Surveys with 499 garment and 327 restaurant workers; survey of 102 employers and union officials; survey of 1,030 unemployed U.S. workers	Self-identification	Employed workers interviewed at jobsites, unemployed at unemployment office; interviewed employers randomly selected
Interviews with 3 management officials, union and strike leaders; interviews with 15 striking workers; participant observation; newspaper articles	Key informants, relatives of illegal workers identified specific workers as illegal	Surveys of participants combined with newspaper accounts and documentary evidence on the tortilla industry; preliminary report was reviewed for accuracy by several participants in the strike events
Interviews with 92 workers, 4 crew leaders, 2 personnel managers, and numerous industry officials; participant observation	Self-identification, employment records	Study synthesized data provided by all levels of the citrus industry with documentary evidence
Interviews with managers of 2 union and 2 nonunion firms, interviews with workers at a nonunion firm, interviews with unemployed former janitors, interviews with union officials, BLS data	Self-identification	Detailed accounts from union officials, building managers, workers, and government surveys; Nonparticipant observation techniques also used
Interviews with key informants in 8 plants, data collected on 920 workers, interviews with union officials and 8 employers	Identification by key informants	Non-random choice of firms chosen with aid of union officials (only unionized chosen), workers were from these firms, survey data were supported by documentary evidence
Ethnographic observations, interviews with 13 employers and 109 workers, Census data	Self-identification	A variety of 13 full-time service restaurants were chosen, half of the worker respondents were native-born waiters and bartenders, other half were illegal kitchen workers
Interviews with 11 restaurant employers and 14 farmers, review of Census, documentary, and court evidence	Court records, key informants	Ethnographic observation of firms including informal interviews and documentary evidence
Interviews with over 80 workers, 5 employers, union officials, and shoe industry officials in Mexico	Self-identification	Survey data put into historical context by extensive use of secondary sources and Census data
Interviews with 100 workers, 136 employers, 6 unionists, and other industry leaders, Census data used, nonparticipant observation	Self-identification	Worker interviewees randomly selected, monitored industry for 5 years, making combined use of trade journals, government documents, and survey data

Note: These studies met our methodological criteria and were used in the synthesis. Complete references for them are in bibliography. All but one of them (Morales, 1983) provided case study evidence for addressing the question on wages and working conditions. All of the studies were used to address the question on illegal aliens and declining business environments.

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effects stemming from the presence of illegal aliens under some circumstances. For example, it appears that long-term illegal settlers go through a self-selection process and tend to be relatively well paid and highly skilled. This suggests that it is the recent or temporary international migrant, perhaps regardless of legal status, who is likely to accept very low wages and place downward pressure on the wages of those already working in the U.S. labor market. Such workers may accept low wages because they are unfamiliar with U.S. labor practices and have lower consumption expectations.

Findings

The 7 sectors addressed by the 9 case studies have been grouped into two categories. First, we look at three labor market sectors in which the potential for downward wage pressure cannot be shown to have, on balance, harmed U.S. workers. Then, we examine four labor market sectors where wage depression can be shown. Because the effects on competitor and complementary workers vary from sector to sector, and from area to area, the impacts of immigration on the regional labor market in one sector cannot be generalized to other sectors or localities.

**Net Effects Indeterminate in
Three Sectors or Industries**

Wages cannot be considered depressed in the three sectors discussed below because one of the following conditions can be met: (1) no clear and identifiable competitor group of native or legal workers was adversely affected by the presence of international migrants, or (2) some groups of native or legal workers within an industrial sector were benefited while others were harmed by the presence of international migrants. The effect on balance cannot be determined.

1. Garments in New York City and Los Angeles. Garment work in Los Angeles and New York City is done largely by small contractors who hire large numbers of international migrants. International migrants have helped certain subsectors to survive or even thrive. This has created employment for skilled native or legal workers in these preserved or expanded subsectors, although it may have kept wages low for substitute native or legal workers seeking jobs as factory operatives in those firms that would survive even without the availability of international migrant labor. We conclude that a competitor group of native workers exists and that members of it were adversely affected by the presence of international migrant workers, but the overall effect on competing and complementary workers is indeterminate.

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The presence of international migrants, both entrepreneurs and workers, has provided New York City (Waldinger, 1986) and Los Angeles (Maram & King, 1983) manufacturers, who have the option of subcontracting overseas, with a large number of flexible U.S.-based contractors with a low enough cost structure to justify placing a large proportion of their growing small batch orders locally. The small entrepreneurs, who are dependent on international migrant labor for flexibility and low labor costs, have expanded at a time that the import share of the U.S. garment market is increasing rapidly.⁶

In New York, which has been highly unionized since the 1930s, the process of wage concessions began before the trade competition and influx of international migrants of the 1970s. The domestic relocation of industries to the nonunion south and west was largely responsible for this earlier weakening of union strength.

The industry is made up of three types of firms: manufacturers who design the garments, contractors who specialize in various production tasks, and jobbers who act as intermediaries. Most production is subcontracted to the contractors. The New York (Waldinger, 1986) and Los Angeles (Maram & King, 1983) studies agree that highly competitive contracting firms make up the majority of garment entities and that they are expanding—69 percent of the California firms and 74 percent of the New York firms are reported to be contractors. The surveyed contractors maintain that low-cost labor is crucial to their survival. In the state of New York, census data show that the relative wages of garment workers declined from 89 percent of the average manufacturing wage in 1958 to 74 percent in 1980. In Los Angeles, researchers found that 35 percent of the surveyed Hispanic workers earned less than minimum wage and 33 percent earned exactly minimum wage. Most garment production workers in the two cities are foreign born—over two-thirds in New York City and almost 90 percent in Los Angeles. In New York City, evidence shows that the proportion of Asian and Hispanic international migrant garment workers is expanding rapidly—from 1970 to 1980 the percentage rose from 17 to 43 percent. The proportion of the undocumented among the international migrant workers in New York is unknown but significant.⁷ In Los Angeles, 83 percent of the almost 500

⁶In 1959, imports represented 6.9 percent of women's and men's clothing; in 1984, half of these garments were made abroad. This import competition has not been limited to standardized goods but has spread also to fashion-sensitive products

⁷Twenty-two percent of foreign-born in the New York metropolitan area were undocumented according to the Census Bureau in 1980

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interviewed in the Maram and King study were illegal workers. Moreover, the number of international migrant-owned contractor firms is increasing. For example, in New York City, the number of Chinese contractors increased from 8 in 1960 to 480 in 1985.

In addition, surveyed contractors report that foreign competition is intense. Forty-two percent of those surveyed in the Maram and King study said they had to bid directly against foreign subcontractors. Indirect competition from large retailers who special order garments in the Far East also puts pressure on domestic manufacturers that hire U.S.-based contractors to perform production tasks. Wages in Hong Kong, for example, are one fifth of even the depressed levels prevalent in the United States.

The small contractors who rely on international migrant labor believe that recruitment through international migrant networks yields better workers than through formal channels where native workers apply. These employers believe that international migrants will work at lower wages, endure more flexible hours, can be trained at lower cost by their compatriots, and have lower turnover rates than native workers. In Maram and King's Los Angeles survey, for example, only 13 percent of employers said that native workers would be willing to be trained while 73 percent said that international migrant workers would be.

With regard to the willingness of native workers to accept jobs being filled by international migrants, interviews with unemployed native workers in Los Angeles showed that few were willing to work at sewing machines. The reservation wage (i.e., the level at which unemployed workers are attracted to jobs) for these native workers was at least 1 or 2 dollars above the prevailing wage for entry level positions in the garment factories. Only 5 percent said they would work at the prevailing wage and only 21 percent said they would work at one dollar above the prevailing wage. Given the anticipated high turnover rates among native workers, many employers, whose labor bill is about 65 percent of total costs, feel they cannot afford to shift to a native work force. Twenty-one out of 31 Los Angeles contractors said they would go out of business if they had to raise wages just one dollar over the minimum.

Maram and King argue for Los Angeles and Waldinger argues for New York City that many small contracting firms based on low-cost and flexible international migrant labor have been able to preserve jobs in the United States which otherwise would have moved overseas. Since most native workers are not interested in these jobs at wage levels which the

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garment contractors report they can afford, native workers are not a competitor labor group (for these preserved jobs) and are not harmed by the international migrant presence. In fact, some native or legal workers hold jobs that are complementary to illegal aliens in the preserved sectors and depend on the survival of the industry in the U.S. in order to keep their jobs. On the other hand, parts of the industry would survive a relative scarcity of international migrants. The high fashion hubs of New York and Los Angeles will always require a large number of contractors who are close at hand to make detailed and prompt changes. Wage improvements in these surviving sectors would probably result as the supply of international migrant workers declined. That is, native workers in these surviving sectors probably are experiencing adverse wage effects from the presence of competing international migrant workers. However, since some native or legal workers would be helped and some harmed by a scarcity of illegal alien workers, we believe it cannot be determined on balance if wages are depressed for native or legal workers by the presence of illegal workers in the garment trade.

2. The Los Angeles Shoe Industry. At present, the Los Angeles shoe industry, which makes mostly skill-intensive high fashion women's shoes, depends on trained foreign workers. In the absence of a major and expensive program to train native or legal workers to replace this foreign influx, the Los Angeles shoe industry would be endangered. Because no current group of native or legal workers competes with the foreign workers, the first condition (discussed on page 30) is met.

The U.S. shoe industry has experienced vigorous international competition. In 1965, 95 percent of U.S. consumption was produced domestically while by 1984 this had fallen to 30 percent. This competitive international environment has pressured domestic producers to hold down labor costs in an industry whose labor bill is about 30 percent of total costs.

According to case study researcher Runsten (1985), the Los Angeles industry has held costs down. In the 1940s, the Southern California industry paid the highest wages in the nation for comparable workers. Over the years, the relative wage fell. In 1983-1984, a survey of 5 (out of a population of 24) significant firms, which Runsten cites, paid wages of less than \$5.00 an hour relative to the national average for the industry of \$5.40. The five surveyed firms also had turnover rates of 28 percent while the national rate was 73 percent in 1984. The unusual job loyalty of the international migrant work force is due to a lack of options in the U.S. job market for these predominantly illegal, non-

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English speaking international migrants. Lower turnover saves Los Angeles employers training expenses.

The dependence of the industry on already apprenticed international migrant shoe workers is clear. First, in the 1940s, the industry was composed of mostly native and European international migrant workers. By 1983-1984, production workers in the firms were predominantly Latin American international migrants. One hundred percent of two of the surveyed firms and over 80 percent of the other three were either Mexicans or Central Americans. The interviewer who spoke to worker respondents in the survey cited by Runsten reported that the vast majority of the surveyed workers said they were illegal. Second, in this survey, of 43 international migrant shoe workers who answered the question, thirty-eight (or 88 percent) of these international migrants said that their last job in their home country was in the shoe industry. They arrived already trained.

Two employers interviewed by Runsten reported that they and other employers had tried training native workers under government programs on several occasions. The native workers did not last because of the demanding job, the uncertain work week, and the Spanish language dominant work environment, according to these shoe producers.

The Los Angeles shoe industry specializes in women's shoes—the most skilled and labor intensive shoe sector, and the one with the most volatile demand. The employers have become dependent upon a skilled pool of workers available for flexible hours on short notice through the international migrant job referral network. These flexible and skilled workers help employers meet the volatile product market conditions they face. Employers perceive the international migrant option as their only one.

International migrants (many of whom are illegal) represent most of the supply of skilled shoe workers in Los Angeles and put downward pressure on wages and working conditions. Over the post-World War II period, international migrants have come to dominate the Los Angeles shoe industry and few native workers still compete in this labor market. Since no trained native labor force exists which can compete with the international migrant workers, who arrive already apprenticed in the shoe making craft, it cannot be shown that any competitor native group is harmed by the presence of the international migrants. On the contrary, employers reported to Runsten that a disappearance of the illegal

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Mexican shoe workers would convince them to close down their businesses, which would eliminate jobs for the small group of legal or native shoe workers, and for complementary native or legal workers who depend on the industry for their jobs.

3. Restaurants in Los Angeles, San Diego, and New York City. International migrants in the restaurant industry indirectly create jobs for waiters, bartenders, and other complementary native workers. At the same time, native or legal workers seeking unskilled kitchen jobs have suffered from the competition of low-wage international migrants. Since some native or legal workers are helped and others harmed by the presence of illegal aliens, the net effect for native or legal workers cannot be determined. We conclude that a competitor group of native workers exists and that members of it were adversely affected by the presence of international migrant workers, but the overall effect on competing and complementary workers is indeterminate.

The restaurant trade in Los Angeles, San Diego, and New York City can be divided into three sectors—fast foods, the intermediate or coffee shop sector, and the full-service sector. Fast food restaurants hire few international migrants, the intermediate service sector hires large numbers in “back of the house” (kitchen) jobs, while the full-service restaurants hire predominantly international migrants in “back of the house” jobs. All three sectors have expanded rapidly in recent years as the rate of eating out has gone up.

As Bailey and Freedman (1982) explain for New York and Morales (1985) for San Diego, employers in the full-service firms have come to prefer international migrants for the kitchen jobs. International migrants, according to the surveyed employers in these two studies, were willing to stick with entry level jobs such as dish washing and slowly work their way up to more skilled jobs such as pantry chef. Native workers, at least at prevailing wages, are less likely to persevere long enough to climb the “back of the house” job ladder. Also, full-service employers reported in two studies (Nalven and Frederickson, 1982; Morales, 1985) that the use of international migrant recruitment networks protects them against high turnover and training costs associated with using native workers. The Los Angeles study of Maram and King found that 76 percent of Hispanic international migrant restaurant workers in the sample were undocumented, and Morales’ San Diego study identified 95 percent of the interviewed “back of the house” workers as undocumented Mexicans.

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Part of the employer preference is based on low wages accepted by the international migrants. The Maram and King study in Los Angeles reported that 22 percent of the undocumented workers and 8 percent of the reportedly legally resident workers were paid below minimum wage. In the study, 37 out of 52 surveyed restaurant managers believed that international migrants either held down wages or averted a labor shortage for kitchen workers. Thirty-nine of these employers admitted to having replaced native workers (Mexican-Americans, Blacks, and Anglos) with Spanish-speaking international migrants.

Most of the surveyed employers in the studies (Nalven and Frederickson, 1982; Maram and King, 1983) reported that they would not have to shut down if moderate wage increases for kitchen workers were forced on them by a slowdown in the influx of international migrants. They pay less than 20 percent of their labor costs to international migrant-dominated jobs since most "front of the house" jobs such as waiters, bartenders, and cocktail waitresses are occupied by native workers. However, most of these employers said that increased labor costs would result in price hikes and decreased demand for their products.

Two of the authors (Morales, 1985; Bailey and Freedman, 1982) argue that the industry as a whole may not shrink as a result of reduced availability of international migrants but the increased price of food (as employers pass on rising labor costs) or reduced quality in full service restaurants would lessen demand for this subsector's product. The fast food and intermediate sectors, which do not depend as much on skilled and stable international migrant labor, according to these authors, would become relatively more attractive in prices and would increase their market share.

A shift from full service to fast food and intermediate service firms would lower the skill level of the industry as a whole. Although it might create more employment for native or legal workers in the lower skilled fast food and intermediate service sectors, the shift would also decrease the numbers of native or legal workers in "front of the house" jobs in the full service sector. According to the analysis of Morales and to Bailey and Freedman, these workers would lose their jobs along with "back of the house" workers as the subsector shrank. The jobs gained in the lower skilled sectors would be on average less well paid than the lost jobs in the full service sector. Thus, the overall effect on U.S. workers is indeterminate. Although many native workers probably have experienced or are currently experiencing adverse effects from the presence

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of international migrant workers, the absence of these workers also could produce adverse effects.

**Adverse Wage Effects Found in
Four Sectors or Industries**

Wages (or compensation) for an identifiable group of legally resident immigrant or native workers were found to be depressed in the four sectors discussed below.

1. Citrus in Ventura County, California. In Ventura County citrus, a group of settled mostly legal workers gained increases in wages and benefits during the 1970s. In the 1975 to 1985 period, farm labor contractors using more recently arrived international migrants, the majority of whom were illegal, were able to drive down compensation by at least 18 percent for citrus pickers in the area.

The evolution of institutions in the citrus industry is described by Mines and Anzaldua (1982). In the post-World War II period, ample supplies of braceros (Mexican contract laborers) were used by growers to hold wages nearly constant from 1945 to 1964. When the U.S. Congress ended the bracero program at the beginning of 1965, a chaotic period of uncertain labor supplies ensued. This forced employers (organized into harvesting associations) to voluntarily improve compensation levels including attractive benefits. Employers advertised for workers in known sending areas in Mexico and arranged for the legalization of returning former braceros. By the early 1970s, a skilled and stable corps of citrus pickers composed entirely of workers of Mexican birth had been formed. Despite rising wages in the 1970s, labor costs for growers rose very moderately.

During the 1970s many pickers settled in Ventura County, brought their families, and began to make demands for better wages. The United Farm Workers (UFW) were able to win contracts for most citrus pickers in the County by 1980. While conditions were improving for the veteran Mexican labor force, farm labor contractors (FLCs) appeared in Ventura County. The FLCs, using in large part recently immigrated Mexicans, competed for the picking contracts against the unionized harvesting associations. By 1985, after several strikes, the union lost all its contracts. All six unionized associations were dissolved. Between 1980 and 1985 they were replaced by 27 FLCs. The piece-rate levels did not decline by large amounts but most benefits (such as health insurance, pensions, and vacations) and worker prerogatives disappeared. Also, since the replacement workers were less experienced and picked more slowly, per hour wage rates declined.

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Although there is no study that compares the whole labor force of the FLCs with that of the harvesting associations, the Mines and Anzaldúa study, which focused in detail on four crews, found that the contractors employed younger, less experienced and more recently arrived international migrants than the unionized crews. The unionized crews were found to be made up predominantly of legally resident Mexican international migrant workers (employers thoroughly checked documents) while one contractor crew was composed of 52 percent illegal workers and the other was made up entirely of illegal workers. From 1975 to 1985, the legal workers employed by the unionized harvesting associations suffered a loss of benefits worth at least 18 percent of their total compensation because FLCs were able to use recently immigrated replacement workers to drive down labor costs. Some of the veteran workers left the industry, but many remained to work at the lower levels of compensation.

2. Pole Tomatoes in San Diego County, California. In San Diego County legal tomato workers lost their jobs or accepted a substantial cut in pay during the 1970s as growers shifted to the greater use of illegal workers.

Nalven and Frederickson (1982) describe the employer adaptations to changing conditions in the 1970s. In the early 1970s most of San Diego County's pole tomatoes were grown in the southern part of the county. The harvest labor force was made up mostly of legal border crossers (legal resident aliens with homes in Tijuana, Mexico).⁸ Wage rates were above \$4.00 an hour and some growers had signed contracts with the United Farm Workers (UFW) which included health benefits and a pension plan. By the late 1970s, however, North County growers were able to reduce labor costs to \$3.35 an hour. There is some evidence to indicate that one large grower rejected workers who had worked for him previously for newer, more recently arrived workers, and that a large majority of the new workers were illegal aliens. In the South County area, growers did not have the option of hiring the recently arrived workers because the Border Patrol engaged in frequent raids, and the flat South County region offered illegal workers no place to hide. By 1980, almost all pole tomato production had moved to the more rugged North County area. The number of original legal border crossers still employed on the one North County ranch for which court evidence is available has been reduced. Wages for the predominantly illegal replacement group had been lowered to the legal minimum. The legal border-

⁸The INS reports that 4,300 legal (green card) border crossers were employed in agriculture in San Diego County in 1977.

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crossing group which had been the dominant labor force in the early 1970s had to accept degraded working conditions or leave the industry.

3. A Tortilla Firm in Contra Costa County, California. In 1985, the largest tortilla production firm in the United States used recently immigrated replacement workers as strikebreakers in a large factory in Contra Costa County. This tactic forced a group of legally resident and U.S. born workers to agree to a large wage cut.

Mines (1985) detailed the events which resulted in a large wage cut for native and legal tortilla workers in 1985. The tortilla industry in California has utilized a predominantly female nonunion Mexican international migrant labor force. Despite recent changes including an expanding market, increased concentration of ownership, and increased levels of mechanization, the industry has continued to pay near the minimum wage. One exception up to 1985 had been a large factory (95 workers) in Contra Costa County. At this factory, the labor force, made up predominantly of legal Mexican immigrant women, had been able to unionize and reach wage levels of an average of \$6.80 an hour for production workers by 1984. Most had been working at the factory for ten years or more.

In 1984, management announced that wages would be cut by approximately 40 percent (depending on the occupational category) and that benefits and vacation pay would be reduced. The veteran workers struck for 7 months but in the end agreed to accept the wage cuts. The factory had remained open and functioning during the strike using a replacement work force of recently immigrated young male Mexicans. (Many of these workers were relatives of interviewed workers and were identified to be illegal aliens.) Although a large group of the women refused to return to the factory after the settlement, many accepted the depressed levels of compensation. The employer's use of recently immigrated replacement workers (some of whom were illegal) had forced the veteran workers to accept a wage cut which they would not have otherwise agreed to.

4. Janitors in the Los Angeles Area. In the post-World War II period, the janitors working in the high-rise districts of Los Angeles, about half of whom were U.S. blacks, had won excellent wages and working conditions under the leadership of the Service Employees International Union (SEIU). But, in the early 1980s, a group of aggressive nonunion firms, who hired predominantly illegal workers, were able to wrest the best building contracts from the unionized firms. As a result, wages fell and most of the U.S.-born black janitors lost their jobs.

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Mines and Avina (1986) summarized the recruitment and hiring adaptations of building managers as more recent international migrants replaced more settled workers in Los Angeles County. In Los Angeles in the late 1970s and early 1980s, two groups of janitorial service firms came into intense competition with each other—large, unionized contractors and midsized, nonunion contractors.

The large contractors had a heavily U.S.-born black work force. Compensation in 1983 at the peak had reached over \$12 an hour including benefits. Its work force was represented by Local 399 of the Service Employees International Union (SEIU) which had successfully used the strike threat to win well-paying, full-time jobs for the workers it represented. At the beginning of this period, the large, unionized contractors controlled almost all of the lucrative contracts in the high rise buildings in downtown Los Angeles. Meanwhile, the midsized, nonunion firms paid less than \$4 per hour, had a predominantly Hispanic international migrant work force, and specialized in contracts for the smaller suburban buildings. In one surveyed nonunion firm, 94 percent of its workers were found to be working in the United States illegally. The gap in labor costs between the types of firms exposed the unionized firms to attack.

In the early 1980s, a small group of aggressive midsized firms sensed the vulnerability of the unionized firms and made their move. At labor costs half as large as those of the unionized firms, the new contenders made attractive offers to building managers. By 1985, the nonunion firms had succeeded in winning away most of the downtown contracts from the large firms. The union was forced through this competition to sign special contracts in suburban areas at \$4 an hour and below. Meanwhile, the higher-paid standard agreement contracts shrunk to cover only 100 workers.

In 1977, the union estimates that approximately 2,500 black janitors were working under union protection. By 1985, this number had declined to 600 of which only 100 were still protected by a high-wage contract—the other 500 were covered by a less generous contract and had suffered a cut in compensation.

The native workers protected by Local 399 had experienced steadily improving conditions since the late 1940s. Even during the 1977 to 1983 period, the union was able to protect its workers with a viable strike threat at the large unionized companies. However, by 1983, the tide had turned against the native janitors. The union went into rapid decline and wages fell precipitously.

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Evidence of the decline in wages for Los Angeles janitors as a result of the use of predominantly illegal aliens by nonunion contracting firms was disclosed by survey research among employers and workers. This drop in wages was independently corroborated by government statistics. The Bureau of Labor Statistics' survey of a sample of janitorial firms revealed a 14 percent drop in wages from 1983 to 1985. (See table 2.7.) This drop occurred even though these years witnessed a period of economic expansion and increased demand for janitors in Los Angeles. (See table 2.8.)

Table 2.7: Janitorial Wages in Nonmanufacturing (Service) Firms in Los Angeles (1978-1985)

Year	Wages (dollars per hour)
1978	4.37
1979	4.94
1980	5.37
1981	5.94
1982	6.15
1983	6.58
1984	5.95
1985	5.63

Note: Data are from the Bureau of Labor Statistics, Labor Market Surveys

Table 2.8: Employment of Janitors, Selected Years

Year	1970	1980	1983
Los Angeles	14,509	17,525	22,460
California	30,004	45,114	51,628

Note: Data are from Unemployment Insurance, California Employment Development Department

Conclusions

Our synthesis and assessment of the available research (26 studies) shows that although information is limited, illegal workers and international migrant workers (who are both illegal and legal) have exercised downward pressure on wages in some labor markets. However, in other labor markets, the wage depressive effect of illegal aliens also was shown to expand employment possibilities for complementary legal or native workers. We arrived at this finding through a review of three types of evidence on wages: wage data on illegal alien workers, in comparison with minimum wage rates and legal workers' wages; wage data on workers in communities that differed on the presence of international migrant workers, both illegal and legal; and case study data on the

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effects of illegal alien workers on wages and working conditions in specific sectors or industries in specific geographic areas. Only the case study evidence was sufficiently convincing overall for addressing the question.

Our synthesis of 14 studies with wage data on illegal alien workers indicates that illegal workers were low paid. (See tables 2.1 and 2.4.) With the exception of one study, these studies were not useful for addressing our question. The study that was sufficiently strong for this purpose indicated that illegal workers may have placed downward pressure on legal workers' wages in the labor market studied.

Four studies that reported analyses of wage data on workers in communities that differed on the presence of international migrant workers were generally not useful for our purposes. (See table 2.5.) These data did not apply to illegal workers per se, but many of the international migrants in the communities experiencing wage depression were likely to be working illegally. To an unknown extent, the association between the presence of international migrants and wage depression may be related to other differences among workers and communities. For this reason and because the association between the presence of international migrants and lower wages or wage growth may depend on an unknown threshold concentration of international migrant workers, we believe that evidence from these studies cannot be used to support conclusions on the influence of illegal workers on the wages of legal workers.

Finally, detailed information from 9 case studies on 7 individual sectors or industries in specific geographic areas indicates that illegal workers have had an adverse impact on the wages and working conditions of native or legal workers in four sectors (four case studies) but an overall indeterminate impact in three others (five case studies). (See table 2.6.) In these latter sectors, a positive impact was found, however, for higher graded or complementary workers, rather than workers in direct competition for jobs. These data offer stronger evidence on wage effects than the data on illegal workers and highlight the importance of sectoral level analysis. However, while their findings are more persuasive because of the greater detail, the case studies are restricted in scope and permit only limited generalizations beyond the circumstances described.

Is the Presence of Illegal Workers in an Industry Associated With a Declining Business Environment?

In the absence of national or industry-wide research with convincing methods to address the complex question of whether illegal aliens are associated with declining business environments, we limited our analysis to the case study literature. Although our results cannot be generalized beyond the specific localities and product markets we discuss, the case study approach, because it probes the options facing employers, permits an analysis of the way illegal aliens fit into employers' business strategies. The studies that we reviewed indicated no association between the presence of illegal workers in an industry and a declining business environment.

Available Evidence

We made use of 10 case studies, which are the same ones used in addressing the wage and working conditions question plus one additional case study on a sector of the auto parts manufacturing industry done by Morales (1983); these studies are described in table 2.6. The Morales study was not used with other case studies to address the wage and working conditions question because it did not provide sufficient information on these phenomena.

Findings

The findings for the majority of the case studies show that international migrants were working in expanding or stable business environments. These sectors included restaurants, janitorial service, agriculture, and tortilla production. The restaurant industry has experienced rapid growth; it more than doubled during the 1967 to 1979 period. Demand for janitors in California rose by 72 percent during the 1970s. In agriculture, despite productivity gains, employment used for the production of fruits and vegetables (where foreign workers are concentrated), after declining in the 1960s, grew again in the 1970s. The tortilla industry is also a growth sector. Mexican foods, of which tortillas make up about half of the production, are expected to expand by 76 percent from 1982 to 1990.

In garments, shoes, and auto parts production, on the other hand, international competition has caused a severe retrenchment in recent years. However, four studies of these three sectors indicated that declines in the sector of the industry using international migrants (including illegal workers) were lower (or actually reversed) than for the industry as a whole.

Garments in New York City and Los Angeles

International migrants were associated with subsectors of the garment trade (such as women's outerwear) which were expanding or shrinking less rapidly than the industry as a whole. Employment in New York City shrank in the garment trade during the 1970s. (Employment declined by 80,000 from 1969 to 1975.) However, this shrinkage slowed in the latter half of the decade. In Los Angeles, the garment industry actually showed growth in the 1970s. But, this expansion was concentrated in certain sectors.

Waldinger (1986) described how for New York the sectors based on long production runs of standardized goods, relatively high capital requirements, and skilled labor have declined. Census data show that for New York City these sectors have declined and have been stagnant in Los Angeles. Waldinger further explains that other sectors based on low inventory, short production runs and low cost capital and labor inputs have remained responsive to constantly changing fashions and spot markets. In both Los Angeles and New York City, the latter kind of production is thriving. In New York City and Los Angeles, small firms have fit into the market niche sensitive to the vagaries of style which large mass production firms have found too cumbersome to satisfy.

The success of the spot market is associated with the availability of small contract firms which specialize in small batch production. These firms owe their existence in part to their proximity to manufacturers who require fast response to detailed production instructions. In addition, these subcontractors depend on international migrants. First, the subsector benefits from large numbers of international migrant entrepreneurs willing to take risks of failure. Also, the workers themselves are mostly international migrants. In New York City in 1980, 67.8 percent of the operatives in garment factories were foreign born. In Los Angeles in 1980, 89.4 percent of apparel production workers were international migrants.

In both New York City and Los Angeles, a comparison of the fashion-sensitive women's and misses' outerwear (SIC 233)¹ with the more standardized underwear products (SIC 234) demonstrates the advantage of the small, flexible international migrant-dominated firms. The underwear sector has mostly large firms since underwear is manufactured with long production runs using expensive equipment and a stable labor force. Outerwear, on the other hand, is produced by small firms which

¹SIC is an acronym for Standard Industrial Classification, a coding system used by the Bureau of Labor Statistics to distinguish among industrial sectors

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can adapt flexibly to the volatile and fashion-sensitive market.² The New York garment industry during the 1967 to 1982 period held on to much more employment in the outerwear sector than in the underwear sector. In 1982, the outerwear sector still had 62 percent as much employment as it did in 1967, while the underwear sector only had 36 percent as many workers in 1982 as in 1967. In Los Angeles, from 1971 to 1982 employment in women's and misses' outerwear almost doubled while employment in underwear over the same period declined slightly.

The Los Angeles Shoe Industry

In Los Angeles, international migrants were associated with an industry under pressure. But the decline, if it has occurred, has been slower than the national trend. Evidence indicates that, without the influx of already apprenticed international migrants, an expensive training program would be needed to maintain the industry at its present level.

As described by Runsten (1985) shoe manufacturers in Los Angeles produce women's shoes; some of the firms compete in the high-priced dress shoe sector dominated by Italian imports. This is the most labor and skill intensive sector of shoe production. Fashion footwear (like fashion garments) is somewhat less sensitive to labor costs since it is high priced. It does, however, require a skilled and flexible labor force. Los Angeles employer estimates of training times for acquisition of the semi-skilled tasks require a minimum of three to six months.

According to a survey of Los Angeles firms reported by Runsten, the international migrant labor force (most of whom are illegal) arrives in Los Angeles from Mexico already trained. Since wages in California are much higher and hours more regular than in the shoe producing areas of Mexico, workers adjust rapidly to the relatively (by U.S. standards) low wage and uncertain hours found in Los Angeles shoe plants.

According to the employers, a training program would have to be mounted in Los Angeles (none currently exists) to replicate the trained labor force coming from Mexico. They claimed that such a program would be costly because three to six months of training are required for a new worker to attain the necessary skills. Without a trained labor force, the skill-dependent Los Angeles shoe industry would be endangered.

²In 1982, underwear firms were 3.9 times larger than outerwear firms in Los Angeles

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Runsten reports evidence that indicates that the Los Angeles shoe industry has increased slightly while the industry declined nationally. From 1970 to 1980, the number of shoe workers in Los Angeles actually rose sharply in defiance of national trends. Los Angeles employers stress the importance of the skilled international migrants to their industry's survival.

Auto Parts Production in
Los Angeles

Los Angeles auto parts producers, in response to the recession of 1979 to 1983, utilized recent international migrants to achieve flexibility and lower labor costs. These strategies have permitted some firms to adjust to a new and depressed business environment.

Morales (1983) described adaptations made by auto parts employers to the difficult conditions they confronted in the late 1970s. In 1979, an automobile recession led to the closing of auto assembly plants in Los Angeles and the consolidation of production in the Midwest. Los Angeles supplier firms producing parts for new and used cars suffered a cutback in demand.

Faced with crisis, firms used various labor cost containment strategies to survive. All were based on a shift to the use of more international migrant labor, including many illegal workers.³ One unionized firm hired recent international migrant workers preferentially. The new workers in this firm were used by management to undermine union strength. Relying on the lack of understanding between the U.S.-born union leadership and the recent international migrant rank and file, the management was able to ignore costly union rules. According to Morales, another firm used the tactic of stratifying the work force in order to keep it disunited between international migrants (of whom most were illegal) and U.S.-born workers. The U.S.-born workers as a group were paid at higher levels than the international migrants (both legal and illegal). Another option taken by a third firm (producing headers) was to move production to a border plant in Mexico. This tactic has pressured its direct Los Angeles competitors to maintain extremely low wages which only recent international migrants will accept. In the late 1970s, the Los Angeles auto parts industry faced a difficult and uncertain period of transition. The presence of international migrants buffered the shock for the employers as the companies adjusted to new conditions.

³Morales (1983) found that production workers in 8 auto part firms were 37 percent undocumented immigrants, 30 percent documented immigrants, and 32 percent citizen workers. Most of the latter were U.S.-born

Conclusions

Our synthesis of 10 case studies on 8 industrial sectors demonstrates no association between illegal aliens and industries or sectors in declining business environments. In 5 sectors where illegal aliens were found to have an important presence, the demand for labor was stable or expanding. Three sectors that also had substantial numbers of illegal alien workers were shrinking. However, subdivisions within these sectors that had high concentrations of international migrants, both legal and illegal, were found to be healthy and at times expanding. These resistant subsectors may have been bolstered by the presence of illegal alien workers.⁴ Again, due to the limited number of areas and sectors studied, we urge caution in generalizing from these findings. They do, however, identify industries likely to experience stress if the Immigration Reform and Control Act of 1986 is implemented successfully. These industries, which are in declining business environments and, at least in places, employ large proportions of international migrant workers, are shoes, garments, and auto parts production. Other, unstudied sectors, which prior to 1987 had high concentrations of illegal workers, may also feel pressure to raise wages to the reservation level (i.e., the level at which unemployed workers are attracted to jobs) and experience consequent difficulty in meeting foreign competition unless corresponding increases in productivity can be obtained.

⁴Sectors which are expanding or undergoing reorganization are likely to have recent immigrants who can circumvent labor bottlenecks arising from the low mobility of native labor.

Request Letter

United States Senate

COMMITTEE ON THE JUDICIARY
WASHINGTON, DC 20510

STROM THURMOND SOUTH CAROLINA CHAIRMAN
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 MARK H GITENSTEIN MINORITY CHIEF COUNSEL

October 22, 1985

Honorable Charles A. Bowsher
 Comptroller General
 General Accounting Office
 441 G Street, N.W.
 Washington, D.C. 20548

Dear Mr. Bowsher:

It has come to our attention that preliminary plans are underway within the GAO's Program Evaluation and Methodology Division to study the effects of illegal aliens on the American labor market.

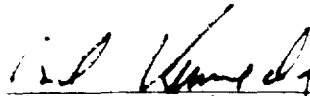
As you probably know, this is one of the most contentious issues in the current debate over immigration reform. We want to express our belief that such an undertaking would be extremely useful as we process the pending immigration legislation. Such a review may answer some of the questions on the need for a foreign guestworker program -- an issue that has become prominent in the immigration reform debate.

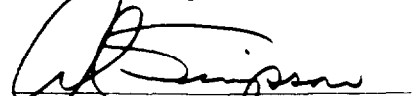
During the course of the work of the Select Commission on Immigration and Refugee Policy, the question of American labor market displacement by both legal and illegal migration was reviewed, and a number of important studies were commissioned. But the results were incomplete, given time and budgetary constraints, and they were not systematically analyzed.

Again, we believe that such a review by the GAO, assessing the state of knowledge and synthesizing the findings of available research, would be very useful not only to our Subcommittee, but also to the House Judiciary Committee. We would, therefore, commend your foresight in undertaking the proposed study, and would request that you keep the Subcommittee informed of its progress.

Many thanks for your consideration, and best wishes.

Most sincerely,


 Edward M. Kennedy
 Ranking Member


 Alan K. Simpson
 Chairman, Subcommittee on
 Immigration & Refugee Policy

Detailed Description of Method

Our objectives for this review were to synthesize research on the effects of illegal alien workers on legal workers' wages and working conditions, and on the association between illegal workers in an industry and a declining business environment. Research on the displacement effects of illegal workers was reviewed in an earlier report, Illegal Aliens: Limited Research Suggests Illegal Aliens May Displace Native Workers (GAO/PEMD-86-9BR, April 1986), and is not covered in this report. We have not attempted to address other important issues related to immigration and the labor market.

The evaluation synthesis methodology that we used is described in our paper entitled The Evaluation Synthesis (Washington, D.C.: U.S. General Accounting Office, April 1983). This methodology has three main features:

1. It attempts to identify the universe of empirical work, including unpublished and draft manuscripts.
2. It combines findings across studies, taking research characteristics and data quality into account.
3. It provides an indication of what is known, what is unclear, and where the knowledge gaps are.

Conducting the synthesis required completing three steps: (1) identifying relevant studies, (2) assessing study quality, and (3) combining information across studies.

While application of the methodology for identifying studies is identical for this and the first review on displacement, other steps differed somewhat for the two reviews. These differences in approach reflect differences between the reviews both in the types of studies used and in the questions addressed.

Identifying Studies

We began our search for relevant research literature with a broadly focused examination of six computerized bibliographic files: ABI/Inform (which covers business topics), Economic Literature Index, Sociological Abstracts, NTIS (which covers technical reports, mostly governmental), PAIS, and Social Scisearch. Our search was intentionally broad because we wanted to find as many relevant documents as possible. The search of each file was generally restricted to documents published after 1975.

The computerized searches yielded more than 1,500 references, many with abstracts. We screened them to 230 items that appeared the most relevant to our general topic: the effects of illegal aliens on the labor market. These items included reports on legal immigrants that were potentially relevant to our topic. The documents were then collected from libraries, authors, and other sources.

Documents were then scanned and classified into two main categories: legal immigrants and illegal aliens. The documents on legal immigrants were scanned, and only empirical studies of displacement, wages and working conditions, and business environment were classified as relevant. The documents on illegal aliens were read more closely and classified into three main categories: general policy and background discussion, research, and reviews of research.

Next, we reviewed the bibliographies of the research study and review documents to identify other studies that might have been missed by the computerized searches. We also searched immigration-related journals and informally contacted several experts to identify work in progress and unpublished literature. In addition, we mailed our bibliography to other knowledgeable researchers, policy analysts, and policymakers for their review, and we were further able to identify newly completed and ongoing studies.

We then coded reports by the labor market effect they addressed: wages and working conditions, and business environments. Our search yielded 40 research documents relevant to our wages and working conditions, and business environment questions. Several of these were multiple publications based on a single study and overlapping data sources. We grouped reports into a final set of 36 studies.

Assessing Study Quality

In this phase, the research studies we identified were assessed for data quality. Each study was evaluated by two raters. We asked them to rate separately each of four possible components of a study: (1) descriptive data on illegal workers; (2) descriptive data on contrast groups (such as native or legal workers); (3) descriptive data on the presence and role of illegal workers in an industry; and (4) analyses of wages and working conditions.

The raters gave two ratings for each descriptive component of a study and three ratings for analyses of wages and working conditions. The two

ratings for descriptive data were for the amount of methodological information provided in a study and the validity of the reported data.

The three ratings given for the analyses of wages and working conditions were for (1) the amount of methodological information provided; (2) the validity of the reported data for demonstrating that an effect occurred; and (3) the validity of data for demonstrating that the effect could be attributed to the presence of illegal workers.

All ratings were done using seven-point indices with one indicating either no information on a study method or a method so flawed that the data probably are wrong and seven indicating detailed information or an appropriate attempt to minimize endemic problems. In addition to providing these overall ratings, the evaluators wrote brief justifications for each rating. We developed final ratings for individual studies by averaging the ratings across evaluators.

To standardize the criteria used to assess studies, we modified a set of general guidelines for evaluating study methodologies. These general guidelines were developed by GAO. Our adaptation of the guidelines for reviewing studies on illegal aliens is given in tables II.1 and II.2. Our modifications reflect our attempt to account for endemic methodological problems across studies that concern illegal aliens. In particular, we decided not to consider the representativeness of samples of illegal aliens in their evaluations. Illegal aliens are a hidden population and it is impossible to randomly sample from this population or to know how representative a given sample might be. Since all studies share this feature, we decided to evaluate studies on the controllable features of their methodologies. We also decided not to consider sample size in evaluations. Across studies, sample sizes varied considerably. Our rating system could not adequately indicate the relative weights that should be given to samples with such extreme limits. Therefore, we decided not to weight individual studies by their sample sizes in our synthesis of findings.

Table II.1: Quality Considerations for Case Studies on Illegal Aliens

Design Issues	<p>Is the case study application clearly described? Was it appropriate?</p> <p>Was the time span of the study long enough to address the core issues fairly?</p> <p>Is this basis for case selection presented? Was it appropriate?</p>
Data Collection Issues	<p>Are the methods of data collection presented? Were they appropriate?</p> <p>If more than one investigator collected the data, how were the investigators selected, trained, and supervised?</p> <p>Are information sources described clearly and fully? Were they appropriate?</p>
Issues in Data Base Formation and Data Analysis Techniques	<p>Are the procedures for the formation of the data base described?</p> <p>Are the techniques of data-gathering and data-processing explicitly described?</p> <p>Were there interpretation differences, and, if so, how were they resolved?</p>
Reporting Issues	<p>Are methodological strengths and limitations identified clearly?</p> <p>Are the arguments for various resolutions of the evaluation question presented?</p> <p>Does the case study identify the factors explaining the phenomena observed and state clearly whether the identification of these factors was based on insight and recognition or on quantitative techniques?</p>

We classified studies as not useful for our purposes if either our rating on the amount of methodological information or on the validity of data was less than three on our seven-point index. Ten of the 36 studies were in this category or were excluded for reasons discussed in the next part of this appendix. We sought to obtain additional information on studies that had low ratings on amount of methodological information by contacting the authors of these studies. Based on the additional information that we received, ratings on amount of methodological information increased for a few of these studies, and they were included in the analysis. Some studies that analyzed wage and working condition effects were not useful for attributing wage or working condition effects to illegal workers but were included because they provided valid information on the noncausal association between the presence of illegal workers and a wage or working condition effect.

Table II.2: Quality Considerations for Non-Case Studies on Illegal Aliens

Design Issues	Was the study design appropriate? Were the procedures used to draw the sample adequate for the type of sample?
Measurement Issues	What was the relationship between the measured variables and the study objectives? Were the measured variables reliable and valid? Were measurement instruments (including pilot testing) developed adequately?
Data Collection Issues	Were data collectors selected adequately? Was the training of data collectors appropriate and adequate? Were the procedures for ensuring the reliability of data collectors during data collection adequate?
Analysis Issues	Was the analysis plan or approach appropriate? Were statistical procedures used appropriately? Was the amount of analytic detail adequate?
Reporting Issues	Were the conclusions drawn from the data and analysis appropriate? Is the statement of study limitations appropriate? If not, what were the study limitations?

Combining Information Across Studies

Our procedures for combining information differed by type of study. These procedures are described below for the wage data on illegal aliens, data on community comparisons, and case study data.

For all three types of studies, we combined information and drew conclusions about the effects of illegal workers on legal or native workers even though much of this information was on composite groups of illegal and legal or native workers. We assumed that the observed effects of composite groups were diluted or dampened in relation to the effects of a distinct group of illegal workers. The reason for this concerns the two nonmutually exclusive ways in which illegal aliens may adversely affect native or legal workers. First, they can increase the supply of labor and, by doing so, put downward pressure on wages and working conditions. In this way, illegal aliens could affect the labor market in the same way as any other new worker group, illegal or not. Second, illegal aliens, because of their precarious legal status, also may be more likely to accept low wages and poor working conditions than native or legal workers.

Wage Data on Illegal Workers

The 14 studies used in this analysis provided data on the earnings of illegal workers. All were used in the comparison of illegal workers' wages with the minimum wage; 7 of the 14 studies with data for a sample of legal workers were used in the comparison of illegal and legal workers' wages. We excluded studies whose only information on wages was from data collected by INS. These tended to be local and out-of-date. Instead, we obtained national statistics from INS directly.

For each study, we pooled data on samples of workers with the same legal status. For example, we pooled data from multiple samples of illegal workers within the same study. We then coded information on the earnings of illegal and legal workers. In most cases, the earnings data were hourly wages; in some cases, data were workers' income or piece rates. When possible, we converted the income and piece rate data to hourly wage data. Several studies reported a variety of statistics on hourly wages, including mean, median, mode, median interval, modal interval, minimum, and maximum. We focused on the mean hourly wage because it was the statistic most often reported, and it is more manipulable for analytic purposes than any of the other statistics.

In addition to coding information on workers' wages, we coded data on the number of workers on which the data were based, the settlement status of international migrants, and methodological information (for example, year data primarily collected, quality ratings, and whether or not a sample of workers included some members from another type of sample). Data on several of these variables were unavailable in many studies. As described later, some of these data were used to interpret patterns in the wage data that emerged in analysis.

For the comparison of illegal workers' wages and the minimum wage, we aggregated information from studies reporting wages in different years. To do this, we computed ratios of workers' wages to the prevailing minimum wage. Using ratios permitted us to combine wage data from different years, regardless of the minimum wage. That is, the ratios standardized the relationship between workers' wages and the statutory lower limit; they did not effectively control for wage growth over time.

After aggregating wage information in the form of ratios, we examined associations between results and methodological characteristics of the studies. First, we examined the extent to which results varied by source of wage data: hourly wage, income, and hourly wage based on piece rate. The latter two sources of wage data are suspect because they are subject to error (for example, resulting from inaccurate assumptions

about the number of hours per month or year on which to base conversion from monthly or annual income to hourly wage data) that hourly wage data are not. This analysis revealed that income data had greater variability than hourly wage source data. Also, the only study with mean hourly wages below the minimum wage used income data. Hence, we restricted our analyses to 16 studies with wage data based on hourly wages, and 7 studies with wages based on income and piece rate data were excluded. We then examined the association between illegal workers' wages and quality ratings for the 16 studies that reported mean hourly wage data. We did not find a significant association. Nevertheless, we excluded the two studies with low quality ratings (that is, studies with ratings of less than three on our seven-point index) from subsequent analyses.

For the comparison of illegal and legal workers' wages, we examined each study separately. We examined differences between the groups on wages and on characteristics that can affect wages. These characteristics include the following: employing industry, occupation, geographic area, education, job tenure, skill level, and method used to collect and analyze data. Based on the extent of the differences overall, we judged the extent to which groups within studies were comparable. We also considered the results of analyses conducted in a few studies that attempted to control statistically for group differences. Because the results were consistent across studies, we did not search for variation between results and methodological characteristics such as quality.

Wage Data on Workers in Communities That Differed on the Presence of International Migrants

We sought but could not find studies that provided direct assessment of the effects of illegal workers on labor market-wide wages. We did find 7 studies that focused on international migrant workers, both illegal and legal, and their impact on wages in different communities and labor markets. Because the effects of illegal aliens can be similar to those of a group of international migrants generally, these studies are relevant to our question on wage effects.

On the basis of study evaluations, we decided to exclude 3 of the 7 studies because of significant methodological weaknesses. We reviewed each of the remaining four studies individually to understand how methodological features (for example, statistical analysis and control variables) may have influenced results. This was important for examining results across the studies and for identifying the potential biases that can result from study limitations.

Case Study Data

We used information from a total of 10 case studies on the effects of illegal workers on wages and working conditions, and on the association between the presence of illegal workers in an industry and a declining business environment. These 10 studies cover 8 industries or sectors. All but one provided information to address the question on wages and working conditions; the entire set was used to address the question on the association between illegal workers in an industry and a declining business environment. The researchers attempted to limit their focus to a particular economic sector and a particular locality. All were completed in 1982 or more recently.

The strength of the case study approach is found in its potential ability to explain the complex decisions made by business managers who choose to use (or not use) international migrants (including illegal workers) in their labor force. Case study research can take into consideration the nature of product demand and supply (including international competition), the influence of technology, the role of ownership patterns, the part played by government agencies, and the impact of industrial relations within a given area and labor market. Seen in its entire industrial context, one can judge more readily if the presence of international migrants serves more to stimulate business and employment for complementary U.S. workers or depress wages and restrict job opportunities for competitive U.S. workers.

We reviewed the studies individually and then sought to identify patterns from all the studies on the same sectors.

Comments From the Department of Labor

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

SECRETARY OF LABOR
WASHINGTON

October 22, 1987

Mr. Richard L. Fogel
Assistant Comptroller General
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Fogel:

In reply to your letter of September 9 requesting comments on a draft report on effects of illegal workers on wages and working conditions of legal workers, the Department's response is enclosed. We appreciate the opportunity to review the report and to provide you with comments.

Very truly yours,



WILLIAM E. BROCK

WEB:rjk

Enclosure

Appendix III
Comments From the Department of Labor

Enclosure No. 1

U.S. Department of Labor's Comments on a Draft
General Accounting Office Report Entitled:
Illegal Aliens: Influence of Illegal Workers on
Wages and Working Conditions of Legal Workers

Now pages 8-15

See comment 1

The Department of Labor has a major objection to this report, Illegal Aliens: Influence of Illegal Workers on Wages and Working Conditions of Legal Workers. It should be made clear at the onset that DOL has no objection to the introductory discussion (pp. 10-24) of the two competing theoretical frameworks for analyzing labor market dynamics (a competitive non-segmented labor market and a segmented labor market). In fact, this discussion of the utility of each of the frameworks in evaluating the effects of illegal migration on the U.S. labor force provides a good basis for analysis. However, DOL's objection lies with the subsequent evaluation of the empirical work on whether illegal alien workers depress wages and worsen working conditions for native and/or legal workers. This analysis suffers from an imbalance, giving too much weight to the positive indirect effects resulting to the complementary workers in a theoretically segmented labor force.

See comment 2

While the framework of segmented labor markets may be useful, it is overemphasized throughout GAO's report. The extreme example of illegals competing and working in certain sectors of the labor market (with native and legal workers in other sectors) certainly has no basis in reality. The fact of the matter is that large numbers of native and legal U.S. workers are in the same labor market as illegal workers. Furthermore, if wages were not depressed by illegal workers, even greater numbers of native and legal workers would be in that labor market. The report could benefit by elaborating on the issue of causality. Do native-born and legal workers find certain low-skilled jobs inherently unattractive (at any wage) and thus these jobs can only be filled by illegal workers who are willing to work at low wages? Or rather do the low wages resulting from the presence of illegal workers in these low-skilled occupations discourage legal workers from seeking employment in those occupations? Certainly, an increase in wages in the lower-paying segment of the labor market could attract legal and native workers.

Now pages 37-41

The reverse is also true: falling wages resulting from the increased presence of illegal workers discourage the employment of U.S. workers. Indeed, the GAO report gives four compelling examples of adverse wage effects resulting from the presence of illegals (pp. 66-73). The case studies of the citrus industry (Ventura County, CA), the pole tomato industry (San Diego County), a tortilla firm (Contra Costa County, CA), and

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janitorial services (Los Angeles) clearly showed the adverse wage effects resulting from the presence of illegals. Additionally, they detailed the rapid and widespread displacement of native and legal U.S. workers by illegal aliens competing in the same labor market but willing to sell their labor at a lower wage. The case studies dramatically refute the argument that these are jobs that legal or native workers will not take. In the recent past, virtually all these jobs had been held by legal or native workers.

No Adverse Wage Effects Found in Three Sectors or Industries

It is the section entitled, "No Adverse Wage Effects Found in Three Sectors or Industries" (pp.54-64), which suffers from an imbalance/bias, giving too much emphasis to the possible positive indirect effects resulting to complementary workers in a segmented labor force. The introduction to this section states:

"Wages cannot be considered depressed in the three sectors discussed below because either one or the other of the following conditions can not be met:

- No clear and identifiable competitor group of native or legal workers was adversely affected by the presence of immigrants, or
- Some groups of native or legal workers within an industrial sector were benefited while others were harmed by the presence of immigrants. The effect on balance cannot be determined."

Discussion of the First Condition

"-- No clear and identifiable competitor group of native or legal workers was adversely affected by the presence of immigrants"

In all three cases, the first condition is not met. However, this point is not highlighted in the present text of the report. Rather, it is somewhat concealed by combining it with the second condition. The GAO report needs to make this point explicit. Indeed, in each of these three industries, there was a "clear and identifiable competitor group of native or legal workers [which] was adversely affected by the presence of immigrants." Some examples:

- (1) Los Angeles garment workers. On page 53, GAO reports that "[w]ith regard to the willingness of native workers to accept jobs being filled by immigrants, interviews with unemployed native workers in Los Angeles showed that few were willing to work at sewing machines." Unfortunately, the report doesn't adequately tie this finding into other statements that "[i]n Los Angeles, researchers found that 35 percent of the surveyed Hispanic [garment] workers earned less than minimum wage

See comment 3
Now on pages 30-37

Now page 32

Appendix III
Comments From the Department of Labor

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Now page 31

and 33 percent earned exactly minimum wage." (p. 56) and "[i]n Los Angeles, 83 percent of the almost 500 interviewed in the Maram and King study were illegal workers." (p. 57).

Now pages 31-32.

(2) Similarly, for New York garment workers, the report fails to make any connection between the increase in the immigrant (many illegal) work force and the decline in the relative wages (pp. 56-57).

Now page 31.

(3) Los Angeles shoe industry. While the report cites (p. 59), "there is no current group of native or legal workers in competition with the foreign workers", it fails to adequately tie this statement in with subsequent statements: "First, in the 1940s, the industry was predominantly native. By 1983-84, production workers in the firms were predominantly Latin American immigrants." (p. 60) and "In the 1940s, the Southern California industry paid the highest wages in the nation for comparable workers. Over the years, the relative wage fell" (p. 60). Thus, statements such as "[S]ince at the present time no trained native labor force exists which can compete with the immigrant workers, who arrive already apprenticed in the shoe making craft, it cannot be shown that any competitor native group is harmed by the presence of the immigrants" (p. 62) are completely unjustified.

Now page 34.

Now page 33

Now page 34

(4) Restaurants. Here the evidence that a "clear and identifiable competitor group of native or legal workers was adversely affected by the presence of immigrants" was straightforward:

"Part of the employer preference is based on low wages accepted by the immigrants. The Maram and King study in Los Angeles reported that 22 percent of the undocumented workers and 8 percent of the reportedly legally resident workers were paid below minimum wage. In the study, 37 out of 52 surveyed restaurant managers believed that immigrants either held down wages or averted a labor shortage of kitchen workers. Thirty-nine of these employers admitted to having replaced native workers (Chicanos, blacks, and whites) with Spanish-speaking immigrants." (p. 64).

Now page 36.

It is astonishing that GAO concludes that there are no adverse effects in the above three sectors. Certainly, in all of these sectors, the first condition that "no clear and identifiable competitor group of native or legal workers was adversely affected by the presence of immigrants" has not been met. This section of the GAO report needs to be revised to explicitly discuss the negative direct effects of illegal workers on native workers in each of these three sectors.

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Discussion of the Second Condition

"-- Some groups of native or legal workers within an industrial sector were benefited while others were harmed by the presence of immigrants. The effect on balance cannot be determined."

It is only due to the second condition that GAO can maintain that no adverse wage effects could be found in the garment, shoe, and restaurant industries. However, GAO presents no evidence that the positive indirect effects of illegal workers either counterbalance or outweigh both the negative direct and indirect effects of illegal migration. While the evidence of negative impacts was straightforward, quantifiable, and devastatingly illustrated in many of the case studies, the positive indirect effects were much more abstract and virtually impossible to quantify. Indeed, GAO relies on anecdotal data from respondents (who are most likely biased) in order to support their arguments: "Twenty-one out of 31 Los Angeles contractors said they would go out of business if they had to raise wages just one dollar over the minimum" (p. 58) and "...employers reported to Runsten that a disappearance of the illegal Mexican shoe workers would convince them to close down their businesses, which would eliminate jobs for the small group of legal alien or native shoe workers, and for complementary native or legal alien workers who depend on the industry for their jobs." (p. 62). The reliance on statements from employers of illegal workers to support the conclusion that there is "no adverse wage effects found in [these] three sectors or industries is highly questionable. Yet it is on the basis of these positive indirect effects which are never adequately quantified or discussed that lead GAO to place these case studies under the misleading heading of "No Adverse Wage Effects Found in Three Sectors or Industries." This section needs a new heading and extensive revision.

Some other points on the report:

- (1) Two terms are used incorrectly, adding unnecessary confusion to an already complex topic. The term "nonimmigrant" is defined under the Immigration and Nationality Act (INA) as an alien who seeks temporary entry to the United States for a specific purpose. It does not mean a person who has never immigrated. One example of the incorrect usage of nonimmigrant is on page 44-- "wage growth for immigrant and nonimmigrant workers". In place of the term "nonimmigrant", we suggest either "native-born" or "U.S.-born."

The second term, "immigrant", has a very different meaning under U.S. law than it does in the demographic sense. The INA defines immigrant as an alien admitted to

See comment 4.

Now page 32

Now pages 34-35

See comment 5

Now page 25

Appendix III
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the U.S. as a lawful permanent resident. Its usage throughout the report is confusing, particularly when GAO is attempting to isolate the impacts of illegal aliens. We suggest using the term "immigrant" (or "legal immigrant"-- admittedly redundant but quite clear to those readers not familiar with U.S. immigration law) to refer to those aliens admitted to the U.S. for lawful permanent residence. The term "illegal aliens" is self-explanatory. To refer to both groups, we suggest "both legal immigrants and illegal aliens" or "international migrants."

See comment 6.
Now pages 12-14 and 24.

(2) The fact that strictly segmented labor markets are likely to be rare needs to be mentioned earlier in the paper, specifically in the discussion on pages 20-24. In the present document, this point is mentioned 20 pages later on page 43.

See comment 7.
Now page 11

(3) On Figure 2, the last line of footnote appears to be incorrect. Weren't 28 studies used overall, as mentioned on page 19? Figure 2 also indicates 28 studies (36 minus 8).

Now page 50

(4) The first line on page 90 (Appendix II), the word "may" needs to be corrected to read "many."

Now page 20

(5) And, last but certainly not least, the fifth study cited on page 28, "North and Houston", contains a misspelling. It should read "Houstoun." (Ms. Houstoun is a DOL employee.)

The following are GAO's comments on the Department of Labor's letter dated October 22, 1987.

GAO Comments

1. We disagree with the Department of Labor (DOL) that our report gives too much weight to the positive effects of illegal workers on complementary workers. Later agency comments indicate that DOL's objection primarily concerns the issue of labor market segmentation and our conclusions in one section of the report now entitled, "Net Effects Indeterminate in Three Sectors or Industries." We discuss our treatment of segmentation below and the report section in question in GAO comment 3.

For two reasons, we disagree that the report overemphasizes the perspective of segmented labor markets. The first reason concerns our use of the competitive nonsegmented and segmented labor markets in the report. One of our objectives is to interpret the results of extant research on the effects of illegal workers. To achieve this objective, we used the two perspectives not as a basis for analysis but primarily for the alternative interpretations that they provide of research results that indicated the presence of illegal workers in a labor market. That is, we sought to determine which of the different interpretations of such results was more plausible. In cases where, based on the evidence provided, we could not establish which was the more plausible interpretation, we were cautious in drawing conclusions about the effects of illegal workers. These cases were frequent. We view this as an appropriate and judicious use of both perspectives rather than as overemphasis of the segmented labor market.

The second reason concerns differences between GAO and DOL over the definition of "labor market segmentation." DOL's comment that segmentation "certainly has no basis in reality," and its subsequent statement about illegal and legal workers in competition imply that DOL defines segmentation as the presence of illegal and legal workers in completely separate labor markets throughout the national economy. That is, DOL seems to suggest that segmentation must be an all-or-none phenomenon: Illegal workers are in separate markets from legal workers everywhere or segmentation does not exist. Based on this definition, DOL seems to conclude that segmentation is nonexistent and views GAO's application—or any application—of the segmentation concept for the purpose of interpreting research results as overemphasis.

However, our definition of segmentation is not as rigid or broad as DOL's. From an empirical perspective, segmentation must be viewed as a highly

localized phenomenon. As it applies to illegal and legal workers, segmentation means that illegal workers numerically dominate a segment or specific occupation in a specific geographic location, and these workers do not compete for jobs with legal workers in another segment. (We have clarified our definition of segmentation in the report, which appears in section 1.) Given our definition, we believe that segmentation does exist. This situation has been documented. It may occur, for example, when foremen with responsibility for hiring tap into migration networks as a source of workers. Hence, based on our definition, the discussion of segmentation that appears in the report is very much based in reality and is appropriate.

2. The agency argues that, in the absence of illegal aliens, wage levels would rise by an amount sufficient to encourage native workers to seek employment in some of the industries now dominated by illegal aliens. We agree that this is possible but are unconvinced that it would occur universally. Our data indicate adverse wage effects resulting in four labor markets and sectors: citrus in Ventura County, pole tomatoes in San Diego County, tortillas in Contra Costa County, and janitorial services in the Los Angeles area. At least in these particular instances, the absence of illegal aliens could be expected to lead to higher wages and greater employment of native workers. As will be discussed in our next comment, however, one cannot conclude that the absence of illegal aliens would, in all cases, cause an increase in wages and job opportunities for native workers.¹ In some cases, the higher wages necessary to bring additional workers into a given labor market would possibly raise the employer's costs to a level that prevents the employer from competing effectively with foreign producers.

3. We disagree that the section now entitled, "Net Effects Indeterminate in Three Sectors or Industries" suffers from an imbalance, "giving too much emphasis to the possible positive indirect effects resulting to complementary workers in a segmented labor force." We argued that one cannot document net wage depression in three sectors because each of them met one of the following conditions:

¹The case studies also may poorly represent workplaces that employ international migrants. For example, most of the case studies that found wage depression overall were on unionized settings. Substantial evidence indicates that unionization tends to lead to higher wages. In these cases, a part of the effect that illegal aliens may have had on wages was to counteract the effect that the unions had had on wages. Yet, unionized settings account for a minority of the workplaces that employ international migrants (The Bureau of Labor Statistics estimates that in 1986 no more than 18 percent of all U.S. workers were union members.)

- No clear and identifiable competitor group of native or legal workers was adversely affected or
- Some groups of native or legal workers within an industrial sector were benefited while others were harmed by the presence of international migrants.

DOL appears to have misunderstood how we classified three sectors—garments, shoes, and restaurants. The garment and restaurant sectors met the second condition, wherein some native or legal workers benefited while others were harmed. Thus, we agree with the reformulation of our text on pages two and three of the DOL letter with regard to the garment and restaurant cases. Native or legal workers were harmed in those cases but other native or legal workers were aided. We have revised the text of the report to clarify these points. We have also highlighted the point that the net impact of the presence of international migrant workers cannot be determined based on the available evidence.

The Los Angeles shoe industry met the first condition. DOL disagrees, citing the past history of a large native workforce in the Los Angeles shoe industry. We believe that the point is not whether or not wage depression occurred in the past—it may well have occurred—but what the current conditions are in the Los Angeles shoe industry. The current conditions are that the workforce is composed almost entirely of international migrants. The question then is: Does an identifiable competitor group now exist? The research suggests that a group of native workers with these skills does not exist. It also suggests that the other option of training native workers to develop adequate skills would be costly. Such an additional expense would further jeopardize the survival of firms in an industry that was already struggling to compete with foreign producers. Hence, employers in the Los Angeles shoe industry are unlikely to ever provide training to native workers on a large scale. For these reasons, based on the available evidence, we believe that no competitor native group currently is harmed by the presence of the international migrant workers.

4. We do not conclude, as DOL suggests, that the positive effects outweigh or balance the negative effects. Instead, we claim that the net effect cannot be determined. We draw this conclusion because the evidence indicating whether the positive effects outweigh the negative effects or vice versa is unavailable. To make this clearer, we have revised the heading for this section to “Net Effects Indeterminate in Three Sectors or Industries.”

For several reasons, we also disagree with DOL's claim that the evidence for positive effects is substantially weaker than that for negative effects. First, the declines in wages and working conditions that occurred in some of these sectors—most notably the garment and shoe manufacturing industries—cannot be simply equated with the presence of international migrant workers. Market forces, especially competition from foreign producers, have had a serious impact on these industries. This is not to minimize the negative effects of past wage depression associated with the presence of international migrant workers. Rather, our point is that attribution of the amount of wage erosion that occurred over time to each of the various forces affecting the industries is impossible.

Second, the evidence for both types of outcomes is similar and, thus, suffers from many of the same problems and benefits from the same strengths. For example, DOL is correct in identifying the employer interview data as potentially biased and self-serving. However, GAO and DOL use the same type of information to support findings of negative effects.

Third, we base our conclusions on several sources of evidence and the pattern that emerges from considering them all. While no one source may provide a sufficient basis for conclusions (e.g., the relatively weak data from employers), finding a consistent pattern among several sources is very convincing. We have identified such patterns in each of the case descriptions.

5. We have revised the text to include DOL's suggestions on terminology. We also have revised the definitions that appear in the first footnote in section 1.

6. In section 2, we state that strictly segmented labor markets may be rare. We have revised the text by adding a similar statement to the discussion of theory that appears in section 1.

7. We have corrected the typographical errors noted.

Bibliography

Items marked with an asterisk are our secondary study citations.

Bailey, T., and M. Freedman. "Immigrant and Native-born Workers in the Restaurant Industry." Manuscript, Department of the Conservation of Human Resources, Columbia University, New York, 1982.

Cardenas, Gilbert. "Manpower Impact and Problems of Mexican Illegal Aliens in an Urban Labor Market." Ph.D. diss., Department of Labor and Industrial Relations, University of Illinois, Urbana-Champaign, Ill., 1976.

———, and E. T. Flores. "Social Economic and Demographic Characteristics of Undocumented Mexicans in the Houston Labor Market: A Preliminary Report." Report prepared for the Gulf Coast Legal Foundation, Houston, Texas, March 1980.

Chavez, L. R., W. A. Cornelius, and O. W. Jones. "Utilization of Health Services by Mexican Immigrant Women in San Diego." Manuscript, Center for U.S.-Mexican Relations, University of California, San Diego, Calif., 1985.

Community Research Associates. "Undocumented Immigrants: Their Impact on the County of San Diego." Report prepared for San Diego County, Calif., May 1980.

Davila, Alberto E. "Sources of Depressed Earnings Along the Texas-Mexico Border." Dallas Economic Review (November 1982), 13-9.

———, and P. J. Mattila. "Do Workers Earn Less Along the Texas-Mexico Border?" Social Science Quarterly, 66 (1985), 310-18.

DeFreitas, G., and A. Marshall. "Immigration and Wage Growth in U.S. Manufacturing in the 1970's." Paper prepared for the joint AEA/IRRA annual meeting, San Francisco, Calif., 1983.

* DiMarzio, Nicholas A. "Profiling Undocumented Aliens in the New York Metropolitan Area: Social Welfare and Labor Market Implications." Ph.D. diss., Department of Social Work, Rutgers University, New Brunswick, N.J., 1985.

Huddle, Donald L. "Undocumented Workers in Houston Non-Residential and Highway Construction: Local and National Implications of a Field

Survey." Manuscript, Department of Economics, Rice University, Houston, Texas, 1982.

Johnson, K., and M. Williams. Illegal Aliens in the Western Hemisphere: Political and Economic Factors. New York: Praeger Publishers, 1981.

Kubiske, Lisa. "Socioeconomic Characteristics of Mexican Immigrants as Seen in a Survey of Visa Applicants." Manuscript, American Embassy Visa Section, Mexico City, n.d.

McCarthy, K. F., and R. B. Valdez. Current and Future Effects of Mexican Immigration in California. Santa Monica, Calif.: The Rand Corporation, 1986.

* Maram, Sheldon L. Hispanic Workers in the Garment and Restaurant Industries in Los Angeles County. La Jolla, Calif.: Center for U.S.-Mexican Studies, University of California, San Diego, Calif., 1980.

———, and J. King. "The Labor Market Impact of Hispanic Undocumented Immigrants: An Analysis of the Garment and Restaurant Industries in Los Angeles." Report to the Rockefeller Foundation, New York, 1983.

Marshall, Adriana. "Immigration in a Surplus-Worker Labor Market: The Case of New York." Occasional Paper No. 39, Center for Latin American and Caribbean Studies, New York University, New York, 1983.

Massey, Douglas S. "The Settlement Process Among Mexican Migrants to the United States: New Methods and Findings." In D. B. Levine, K. Hill, and R. Warren (eds.), Immigration Statistics: A Story of Neglect. Washington, D.C.: National Academy Press, 1985.

Mines, Richard. "Tortillas: A Binational Industry." Manuscript, Center for U.S.-Mexican Studies, University of California, San Diego, Calif., 1985.

———, and A. Anzaldua. "New Migrants vs. Old Migrants: Alternative Labor Market Structures in the California Citrus Industry." La Jolla, Calif.: Center for U.S.-Mexican Studies, University of California, San Diego, 1982.

———, and J. Avina. "Labor Standards and Immigrants: The Case of California Janitors." Paper prepared for the conference on labor market interdependence between the United States and Mexico, Mexico City, September 1986.

———, and A. de Janvry. "Migration to the United States and Mexican Rural Development: A Case Study." American Journal of Agricultural Economics, 64:3 (1982), 444-54.

* ———, and P. L. Martin. "Immigrant Workers and the California Citrus Industry." Industrial Relations, 23:1 (1984), 139-49.

———. A Profile of California Farmworkers. Berkeley, Calif.: Giannini Information Series, Division of Agriculture and Natural Resources, University of California, 1986.

Morales, Rebecca. "Transitional Labor: Undocumented Workers in the Los Angeles Automobile Industry." International Migration Review, 17:4 (1983), 570-96.

Morales, Richard. "Under One Roof: Mexican Immigrant and Native-Born Workers in the Non-Union Restaurant Industry of San Diego County." Ph.D. diss., Department of Sociology, University of California, Berkeley, 1985.

Muller, T., and T. Espenshade. The Fourth Wave: California's Newest Immigrants. Washington, D.C.: Urban Institute, 1985.

Nalven, J., and C. Frederickson. The Employer's View, Is There a Need for a Guestworker Program? San Diego: Community Research Associates, 1982.

North, D. M., and M. F. Houstoun. The Characteristics and Role of Illegal Aliens in the U.S. Labor Market: An Exploratory Study. Washington, D.C.: New TransCentury Foundation, 1976.

Orange County Taskforce on Medical Care for Illegal Aliens. "The Economic Impact of Undocumented Immigrants on Public Health Services in Orange County: A Study of Medical Costs, Tax Contributions, and Health Needs of Undocumented Immigrants." Report prepared for the Orange County Board of Supervisors, Calif., 1978.

Papademetriou, D., and N. DiMarzio. "An Exploration into the Social and Labor Market Incorporation of Undocumented Aliens in the New York Metropolitan Area." Report prepared for the Tinker Foundation, New York, November 1, 1985.

Poitras, Guy. The U.S. Experience of Return Migrants From Costa Rica and El Salvador. San Antonio: Border Research Institute, Trinity University, 1980.

Runsten, David. "Mexican Immigrants and the California-Mexico Role in the U.S. Shoe Industry." Manuscript, University of California, San Diego, Calif., 1986.

Simon, R., and M. DeLey. "The Work Experience of Undocumented Mexican Migrants in Los Angeles." International Migration Review, 18:4 (1984), 1212-29.

Smith, B., and R. Newman. "Depressed Wages Along the U.S.-Mexico Border: An Empirical Analysis." Economic Inquiry, 15 (1977), 51-66.

Stammer, L., and V. Valle. "Most Aliens in Raids Back on Job." Los Angeles Times, August 1, 1982, part 1, pp. 1 and 16-17.

Tarrance and Associates. "A Study of Undocumented Workers in the State of Texas." Report prepared for the Governor's Budget and Planning Office, Houston, Texas, 1982.

Villalpando, M. V., et al. A Study of the Socioeconomic Impact of Illegal Aliens on the County of San Diego. San Diego: Human Resources Agency, County of San Diego, Calif., 1977.

* Waldinger, Roger. "Immigration and Industrial Change in the New York City Apparel Industry." In G. Borjas and M. Tienda (eds.), Hispanics in the U.S. Economy, New York: Academic Press, 1985.

———. Through the Eye of the Needle. New York: Columbia University Press, 1986.

Weintraub, S. and G. Cardenas. Use of Public Services by Undocumented Aliens in Texas: A Study of State Costs and Revenues. Austin, Texas: The L. B. J. School of Public Affairs, University of Texas, 1984.

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