Migration and Competitiveness in US Construction and Meatpacking
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Abstract
The rising share of foreign-born workers some sub-sectors of construction and manufacturing has been facilitated by industry and labor market changes that have implications for each sector’s competitiveness. Migrants are concentrated in residential construction, where their presence helped to hold down wages and, in conjunction with low interest rates and subprime mortgages, contributed to the 2003-07 US housing boom. The impacts of migrants in meatpacking may be different. Newer plants built in rural areas closer to animals often have more productivity increasing equipment than older urban plants that closed. By providing labor, migrants may have contributing to rising productivity.

Introduction
Construction and manufacturing were associated with unionized blue-collar workers earning higher than average wages in the 1950s and 1960s, when sons often followed fathers into apprenticeship programs to learn construction jobs and into factories to work on assembly lines that produced cars and appliances. With only high-school educations, carpenters, auto workers, and steel workers represented by unions enjoyed middle class lifestyles.

Construction and manufacturing changed in the 1970s, and employment trends diverged in these goods-producing industries. Since 1970, US construction employment more than doubled to a peak 7.7 million in 2006 before falling sharply during the 2008-09 recession. Manufacturing employment peaked at almost 20 million in 1979 and fell to 11 million in 2012 due to rising productivity.
and increasing imports of manufactured goods.¹ In construction and manufacturing, the share of foreign-born workers exceeds the 16 percent average in the US labor force. Particular segments of each sector, including laborers in residential building and production workers in food processing and garments, have above-average shares of foreign-born workers.

The rising share of foreign-born workers some sub-sectors of construction and manufacturing has been facilitated by industry and labor market changes. Construction brings together a variety of specialists on one building site, and businesses specializing in drywall, roofing, and similar trades often hired migrants to help build private homes. The rising tide of foreign-born workers in meatpacking, the largest manufacturing industry in rural America, is linked to the shift of meatpacking firms from urban to rural areas, where large plants often operate two shifts in places with many animals and few residents.

The construction boom drew Hispanic immigrants into urban areas, while the rising share of Hispanic immigrants in meatpacking induced a migration from rural Mexico to rural America or from one part of agricultural America to another (Parrado and Kandel, 2010). Many immigrant construction workers find it hard to afford housing in the urban areas where they work despite relatively high wages, while some seasonal farm workers moved from California to midwestern and southeastern meatpacking plants to find year-round jobs and affordable housing.

Construction firms and meatpackers belong to associations that asked for easier access to foreign guest workers during the economic boom. For example, the Associated General Contractors in 2005 called for immigration reforms that included “a new guest worker program that …can help address the shortage of skilled and unskilled workers which continues to face the construction industry.” The National Association of Home Builders complained of “a chronic shortage of skilled workers” in the housing industry and endorsed “legislation and regulation that will facilitate and expand opportunities for foreign-born workers to be employed in the United States.”² The construction industry did not get the guest workers it requested, and did not need additional workers when the recession sharply reduced construction employment.

The story is different in meatpacking, where the share of unauthorized workers increased between 2000 and 2005 and then fell as a result of sustained

¹ Manufacturing employment as a share of US employment peaked at one-third in the early 1940s. Manufacturing employment declined every year for a decade before increasing by 109,000 in 2010 and 237,000 in 2011. Some manufacturers in 2012 complained of labor shortages, asserting that they were unable to find enough machinists and technicians.

enforcement, the recession, and higher wages. During the late 1990s, when a quarter of meatpacking workers were believed to be unauthorized, the then INS launched Operation Vanguard to check the I-9 forms completed by employers and newly hired workers. The INS obtained data from employers, flagged the employees who appeared to be unauthorized, and instructed employers to have these workers correct their data or appear for interviews when INS agents visited the plant. The resulting terminations slowed meatpacking “dis-assembly lines” and prompted complaints from migrant advocates and farmers. Former Nebraska Governor Ben Nelson complained in 1999 that: "It was ill-advised for Operation Vanguard to start out in a state with such low employment and an already big problem with a shortage of labor... There has been an adverse economic impact on agriculture because of this."  

Operation Vanguard was stopped in 2000, and the share of unauthorized workers rose. However, meatpacking plants became the focus of large-scale enforcement efforts after 2006, as when Immigration and Customs Enforcement (ICE) agency agents arrested 1,300 of the 7,000 workers employed on the day shift in six plants owned by Swift December 12, 2006. This enforcement, plus wage increases at some plants, the 2008-09 recession, and most meatpackers enrolling in E-Verify reduced the Hispanic share of laborers in meatpacking from 48 percent in 2005 to 38 percent in 2010. The meatpacking experience suggests that enforcement and other changes can change the race/ethnicity of an industry’s labor force relatively quickly.

Construction and meatpacking illustrate the processes that introduce migrant workers into an industry, viz, pioneering migrants who prove to be good workers and forge networks that enable current workers to refer and train friends and relatives hired to fill vacant jobs. During booms, employers complain about enforcement of laws against hiring unauthorized workers, arguing that too few workers has spillover effects and reduce economic activity and jobs for US workers. During busts, newly hired migrant workers are often first to be laid off, and they often struggle to find other jobs. Meatpacking provides a rare example of how enforcement combined with wage increases during recession to reduce the employment of unauthorized workers.

Construction
The construction industry (NAICS 23) involves the erection, maintenance and repair of physical structures. Construction contributes about five percent to US GDP, about the same as its share of employment. Like agriculture, construction is geographically dispersed, but unlike farming, most construction occurs in the metro areas that include over 80 percent of Americans.

The construction industry has a few large and many small employers. There were almost 730,000 construction establishments with 7.3 million employees in 2007, according to the most recent industry census, including 80 percent with

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fewer than 10 workers. Over 80 percent of construction jobs were with firms that have fewer than 10 employees.4

The construction industry has three major subsectors. Construction of buildings (NAICS 236) includes residential homes (NAICS 2361) and nonresidential (NAICS 2362) buildings, such as shopping centers and factories, and accounts for almost a quarter of total construction employment; wages are typically higher in the construction of nonresidential buildings than in building homes. The projects subsector (NAICS 237) is associated with infrastructure such as highways and bridges and accounts for a seventh of construction employment; workers are typically unionized and usually receive higher-than-average wages. Specialty trades (NAICS 238) include almost two-thirds of total construction employment. Residential specialty trades (NAICS 238001) employed about half of the laborers, plumbers, electricians, and carpenters and masons, while the other half were in nonresidential (NAICS 238002) specialty trades.5

Laborers are the largest single construction occupation and involved almost 800,000 workers earning an average $16 an hour in May 2010 (Cover, 2011, p24). There were 600,000 carpenters earning an average $21 an hour in May 2010, 500,000 electricians earning an average $25 an hour, and 400,000 plumbers earning an average $24 an hour. Average hourly earnings for private sector US workers were $20 an hour in 2010, slightly lower than the average $21 for all construction workers.

Total construction employment peaked at 7.7 million in 2006 after increasing by 1.3 million between 2002 and 2006, and fell to 5.5 million in 2010 before rising slightly in 2011. Only about 40 percent of total construction employment is in residential building, where employment rose faster before the 2006 peak and fell further during the recession.6 Over half of the 1.3 million construction jobs added between 2002 and 2006 were in residential construction (Byun, 2010, 10).

Much of construction employment boom and bust can be traced to very low interest rates and financial innovations such as subprime mortgages. The US population increases by about three million a year, so that 1.2 million new homes are built in a “normal” year to handle population growth. During the housing boom that peaked in 2005-06, the number of new home starts rose to two million a year, and the value of all US homes approached $19 trillion. Declining home...

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4 It should be noted that construction workers employed by real estate firms or government agencies are not included in these data, and there are construction workers employed outside the construction industry. Two-thirds of the jobs in the construction industry are filled by workers with construction occupations—the others are managers or secretaries.

5 An overview of the construction industry labor market is available at: www.bls.gov/oco/cg/cgs003.htm

6 Byun (2010, 9) reported that about 41 percent of total construction jobs in Current Employment Statistics were in residential construction, 45 percent were in nonresidential building such as shopping centers and office buildings, and 14 percent was in heavy and civil engineering such as bridges.
prices cut the value of US homes to $12 trillion by 2011, and the large number of foreclosed homes has slowed a rebound in construction employment because there is little new home construction.

Figure 1. Employment in US Construction, 2000-2011

Jobs and Workers
Construction is a project-oriented industry. A general contractor usually assumes responsibility for building a home, highway or factory, and utilizes his or her own employees and workers provided by specialized subcontractors to complete the project. Construction employment is usually temporary at a project site, so workers move from one project to another. Work is typically outdoors and can require heavy lifting or working from ladders and on roofs, helping to explain higher-than-average injury rates among construction workers.

Construction workers often identify with a craft or occupation such as carpenter more than with a particular employer. Some unions operate hiring halls to deploy carpenters, electricians and other craft workers to employers according to union rather than employer seniority. Employer-union cooperation to operate three-to-five year apprenticeship programs that trained workers on the job were
once common,\textsuperscript{7} but many of these joint apprenticeship programs have disappeared. Today most construction workers are trained in technical or trade schools or in employer-run training and apprenticeship programs.

The fact that construction workers have skills that are used in other industries often makes workers mobile than employers. This mobility was once an advantage for unionized workers in some residential areas, who could call a strike in one town and go to work in another, putting many of the costs of the strike on relatively small employers. However, the unionized share of workers in construction occupations fell from other 40 percent in the 1970s to 14 percent in 2011. Unions have lost most of their power in residential construction, but they remain powerful in heavy and civil engineering and in non-residential building (www.bls.gov/news.release/union2.toc.htm).

Table 1. US Construction Industry Employment, 2010 (000)

<table>
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<tr>
<th>Employment</th>
<th>Percent</th>
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<tr>
<td>Residential building</td>
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<tr>
<td>Nonresidential building</td>
<td>660</td>
</tr>
<tr>
<td><strong>Heavy and Civil Engineering</strong></td>
<td></td>
</tr>
<tr>
<td>Utility system construction</td>
<td>390</td>
</tr>
<tr>
<td>Highway, street, and bridge</td>
<td>289</td>
</tr>
<tr>
<td>Other heavy and civil</td>
<td>150</td>
</tr>
<tr>
<td><strong>Special trade contractors</strong></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td>1,467</td>
</tr>
<tr>
<td>Nonresidential</td>
<td>1,999</td>
</tr>
</tbody>
</table>

Not seasonally adjusted

The workers employed in the construction industry have occupations ranging from executive to helper, but two-thirds have “construction occupations” such as

\textsuperscript{7} Under the National Apprenticeship Act of 1937 (Fitzgerald Act), US DOL’s Bureau of Apprenticeship registers training programs and the workers being trained. In FY09, some 37,000 programs were training 432,000 apprentices (www.doleta.gov/atels_bat/bat.cfm)
carpenter, laborer, or electrician. Foreign-born workers are concentrated in six of the 14 construction occupations that account for a third of total employment, including carpet installers, cement masons, laborers and helpers, drywall installers, and roofers. In some construction occupations, a third or more of the workers are self-employed, including carpet installers, painters, and carpenters.

Almost two-thirds of construction employees are hired by specialty trades contractors, and the number of workers employed in residential building rose from 1.8 million to 2.4 million between 2002 and 2006. At the peak of the housing boom, employment in residential specialty trades equaled that in non-residential specialty trades (Moehrle, 2010, p34). However, wages in the two sectors diverged. Residential workers traditionally earned less than nonresidential workers, but the gap widened from $20 an hour for residential and $22 for non-residential workers in 2004 to the same $20 for residential workers in 2009 versus $28 for non-residential workers (Moehrle, 2010, p35). Real wages in residential construction fell, while real wages rose for non-residential construction workers. The gap is even wider if benefits are included in cost comparisons.

Employment rose and real wages fell in residential construction in part because many of the new workers were unauthorized workers with little bargaining power. Between 2002 and 2006, net unauthorized migration, 60 percent Mexican, was over 500,000 a year. Some unauthorized workers found their first US job building homes, while others moved from seasonal jobs such as farm work into construction to earn higher wages. The housing bust knocked these immigrant workers off their first rung up the US job ladder, but most appear to have remained in the US to await recovery.

**Hispanics and Las Vegas**

The number of Hispanic construction workers quadrupled between 1990 and 2007, from about 700,000 to almost three million. A third of production workers employed in the construction industry are Hispanic, and many of these Hispanics are immigrants from Mexico and Latin America. Hispanics are younger than other workers: most Hispanic construction workers are in the 30-34 year age group, while most non-Hispanic construction workers are in the 45-49 age group. Many Hispanic construction workers have little education; half have not completed high school.

At the peak of the housing boom, a quarter of Hispanic construction workers were laborers, followed by 15 percent carpenters and 10 percent painters. Over half of drywallers were Hispanic, as were at least 40 percent of workers in roofing, concrete, and carpeting and painting. The Pew Hispanic Center estimated that a seventh of all construction workers, and at least a third of those employed in low-skilled construction trades, were unauthorized (Passel, 2006).

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8 Construction industry workers are often classified as being structural (carpenters, cement and iron workers), finishing (drywall installers and painters), or mechanical (plumbers and sheet metal workers) reflecting their role in building a project.
Las Vegas, Nevada provides an example of the economic boom that attracted foreign-born workers. Between 1990 and 2007, the population of metro Las Vegas (Clark county) more than doubled from less than 750,000 to 1.8 million. Employment rose even faster, from less than 375,000 to almost 930,000. Nevada’s new workers included US-born and foreign-born residents, many of whom arrived to fill construction and service jobs in a city with 140,000 hotel rooms, the most of any US city. Some of the construction and service workers attracted to Las Vegas were unauthorized, giving Nevada 12 percent unauthorized workers in 2008, the highest share of any state (Passel and Cohn).9

Migrant workers were often cited as a critical ingredient of the Las Vegas boom. The share of immigrants in Nevada’s population doubled from nine percent in 1990 to 19 percent by 2007, making immigrants and their US-born children the fastest-growing segment of the state’s population. Half of Nevada’s construction workers were Latino immigrants, and state and local leaders warned of widespread economic disruption if there were stepped-up enforcement of immigration laws and no legalization, as was threatened by the Bush Administration (Ginzberg, 2007).

After 12 construction-related workplace deaths in 18 months, a series of articles prompted Congressional hearings, sporadic strikes, and stepped up enforcement of labor and safety standards.10 Even though many of the workers on major construction projects were represented by unions, the fact that many were unauthorized and that contractors were under pressure to work fast contributed to the rash of workplace accidents. Nissen et al (2008) find that neither unionization nor legal status was associated with safer workplaces in South Florida’s construction industry during the boom.

Between May 2006 and May 2010, construction employment in Nevada fell by 55 percent. During this period, Nevada also had the largest increase in average hourly earnings in construction occupations, suggesting that most of those who lost their jobs were lower-wage workers in residential construction (Cover, 2011, 28).11 Kochhar (2008) found that foreign-born and especially Mexican-born immigrant workers were among the first construction workers to be laid off.

It is very hard to evaluate the Las Vegas boom. There is no doubt that the availability of foreign-born workers helped to hold down labor costs and

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9 About 25 percent of Nevada workers were foreign-born in 2007, meaning that half of the foreign-born workers in the state were unauthorized (Newburger Gryn, 2009, 12). By contrast, California had 35 percent foreign-born workers, about 6.6 million, but only 1.9 million or 30 percent were believed to be unauthorized.


11 Nevada was followed by Arizona, where employment in construction occupations fell about 50 percent between 2006 and 2010, Florida, where construction employment fell 45 percent, and California, where construction employment fell 40 percent. Construction employment rose in only two states between 2006 and 2010, North Dakota and Wyoming, with both increases liked to energy production.
accelerate growth in Las Vegas during the economic boom, and that many of the foreign-born workers who climbed a rung on the US job ladder with construction jobs lost their foothold during the 2008-09 recession. The fact that foreign-born Hispanics were a disproportionately large share of new hires in US construction during the boom made them vulnerable to layoffs during the bust.

**Meatpacking**

Food manufacturing (NAICS 311) employed an average 1.4 million workers in 28,500 establishments in 2010. Average weekly wages were $780, or 70 percent of the average $1,100 a week in manufacturing. Average weekly earnings tend to fall as employment rises in food manufacturing. Workers in small sectors, such the 59,000 in grain and oil seed milling (NAICS 3112) average $1,000 a week, while workers in larger sectors such as fruit and vegetable preserving (NAICS 3114) average $810 a week.\(^{12}\)

The largest food manufacturing subsector is animal slaughtering and processing (NAICS 3116), which employed 486,000 workers in 2010, a third of food manufacturing employment, to turn cattle, hogs, sheep, and poultry into meat and other products. Wages averaged $630 a week, about 77 percent of the average in food manufacturing and 57 percent of the average in all manufacturing. About 60 percent of meatpacking workers are in rural areas, making animal slaughtering and processing the largest manufacturing employer in rural America.

Meatpacking has changed over the past three decades from a mostly urban to a mostly rural industry in response to a search for cost savings and innovations such as preparing retail cuts of meat in meatpacking facilities. Average hourly meatpacking earnings, which were similar to wages in durable manufacturing in the 1970s, are today about half the average manufacturing wage of $24 an hour. Large plants in small towns can change their demography quickly, which has sometimes led to tensions.

Meat processing is a nonfarm industry critical to US agriculture. Livestock and products account for over half of the $300 billion in annual farm sales, and cattle, hogs, and broilers account for two-thirds of livestock sales. Red meat production has been rising, from 46 billion pounds in 2000 to 49 billion pounds in 2010, while poultry meat production rose from 36 billion pounds to 43 billion pounds in the same period.\(^{13}\) Exports of beef, pork, and poultry rose from 9 billion pounds in 2000 to 14 billion pounds in 2010, while imports fell from 4 billion pounds to 3.4 billion pounds. The US has a significant trade surplus in meat.

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\(^{12}\) The 276,000 workers employed in bakeries (NAICS 3118) earned an average $685 a week in 2010.

\(^{13}\) US meat production in 2003 included 26 billion pounds of beef, 20 billion pounds of pork, and 39 billion pounds of chicken and turkey. Per capita consumption or meat, poultry, and fish in 2003 was 234 pounds, and included half red meat, 43 percent poultry, and 7 percent fish.
From Urban to Rural

Meat processing has changed in scale and location. There are fewer and larger farms, feedlots, and meat processors, reflecting a general consolidation in US agriculture and manufacturing. Meat production in the 1960s and 1970s shifted from urban areas near the consumers of meat products to rural areas nearer cattle and poultry producers, as from Chicago to Garden City Kansas (MacDonald and Ollinger, 2000).

The share of meat processing employees in nonmetro areas\(^{14}\) rose from less than half in 1980 to 60 percent by 2000, and many of the newer rural plants are larger than the older urban plants they replaced. Over 85 percent of the beef, pork, and chicken is from large plants that process at least 500,000 cattle, a million hogs, and several million chickens a year, and most have more than 400 employees. Meat products are usually transported from the plants to supermarkets and other outlets via refrigerated truck.

The shift of meatpacking from urban to rural areas was prompted by several factors, including lower land and labor costs, less stringent environmental restrictions, and easier access to animals. Lower labor costs in rural areas encouraged urban supermarkets paying high wages to butchers to request preparation of meat products at the processing plant, so that boxed, vacuum-packed, and cut-up and sometimes cooked and seasoned meat products are now prepared in processing plants. Retail packages of meat rather than carcasses became the primary output of the plants.\(^{15}\) One summary concluded that meatpacking work is “hard and dangerous, and wages are low by manufacturing standards, although often high compared with alternative employment in the rural communities in which plants are concentrated.” (Craypo, 1994, 85).

The meatpacking industry has been expanding, while the fruit and vegetable preserving industry has been shrinking. Cannery wages were traditionally higher than meatpacking wages, reflecting the fact that most plants were in high-wage states such as California and that the work was often seasonal. However, as the characteristics of the labor forces in meatpacking and canneries converge, wage gaps have narrowed. Hourly earnings for production workers in smaller food manufacturing industries, such as oilseed milling, sugar or chocolate manufacturing, and dairy products tend to be higher than in meatpacking, $15 to $20 an hour versus $12 to $14 an hour.

The meat processing industry has four major segments, animal slaughtering (311611), meat processed from carcasses (311612), rendering and meat byproduct processing (311613), and poultry processing (311615). Poultry processing has about as many employees as meat processing, but meat wages are typically

\(^{14}\) Nonmetro is a residual category for counties that are not defined as metro. There are 3,141 US counties and 2,297 were classified as nonmetro by the Office of Management and Budget as of 2002, which means they do not have an urbanized area of 50,000 or more plus surrounding counties linked by commuting patterns, the definition of a metro county.

\(^{15}\) About 39 percent of all meat sold at retail in 2000 was prepackaged, or "case-ready," compared with 23 percent in 1997.
higher than poultry wages because more of the meat plants are in higher wage midwestern states.

The poultry processing developed later than meatpacking and in the south, but became the first vertically integrated meat industry, meaning that poultry processors supply chicks and feed to farmers who own the buildings and supply the labor to raise the chickens. Almost all US broilers are raised under contracts with processors. The cattle industry is least vertically integrated, in part because it has two distinct segments. Mostly small feeder cattle operations raise calves and sell them to generally larger feedlots that "finish" the cattle. The more concentrated poultry industry has been associated with falling costs and rising consumption of poultry products.16

Meatpacking is one of the most dangerous manufacturing jobs in the US, with injuries that include muscular trauma, repetitive motion disease, cuts, and strains. The Bureau of Labor Statistics (www.bls.gov/iif) conducts an annual survey of workplace injuries and reports an incidence rate by industry, the number of injuries and illnesses reported per 100 full-time equivalent workers. In 2010, some 3.1 million nonfatal workplace injuries and illnesses were reported by private industry employers, an incidence rate of 3.5 cases per 100 equivalent full-time workers. The rate was 4.4 for manufacturing, 5.8 for food manufacturing, and over 10 in animal slaughtering and processing.

Historically, most meatpacking workers outside the southern states were represented by unions that had master agreements with the largest packers. Union strength peaked in 1968, when over 90 percent of meat production workers belonged to unions and the average meatpacking wage of $3.45 an hour was 15 percent above the average manufacturing wage of $3 an hour (Craypo, 1994, 71). During the 1980s, many of the unionized plants in urban areas closed amidst a wave of strikes.17 By 1986, average meatpacking wages of $8.24 an hour were 18 percent below the average manufacturing wage of $9.75. Meatpacking wages continued to fall, and by 1990 the $8.73 an hour wage was 24 percent below the $10.85 average manufacturing wage (Craypo, 1994, 71). 18

Migrants and Enforcement
Meat-packing has long attracted workers with relatively little education and sometimes little English, but meatpacking wages were comparable to those of other manufacturing industries when meat processors were in urban areas. Few

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16 Per capita consumption of chicken first surpassed per capita consumption of pork and beef in the early 1970s, largely because chicken producers were able to reduce costs and prices dramatically. It takes 10 pounds of feed and 11 weeks to produce a five-pound broiler, and chickens have become so uniform in size that consumers know what to expect with each purchase.

17 There were 158 strikes in meatpacking involving 40,000 workers between 1983 and 1986.

18 USDA estimated that large hog plants paid 10 to 12 percent higher wages than smaller plants in the early 1980s. About 90 percent of US meat and poultry is from plants that have 400 or more employees.
meatpacking workers followed plants from urban to rural areas, so when the industry moved, it had to find a new work force.

Meat processing facilities in rural areas generally do not have to compete with other factories for workers, and often recruit workers from out of the area, especially to staff second or night shifts. Refugee resettlement in the 1970s and 1980s brought Asians to the Midwest, and the 1986 Immigration Reform and Control Act facilitated the geographic and occupational mobility of newly legalized Mexicans, many of whom saw moving from seasonal farm to year-round meat processing jobs as a step up the US job ladder.19

There is little systematic data on employer preferences for particular types of workers. Poultry plant managers in the late 1980s told interviewers that Asians and Hispanics had a “better work ethic” than local Blacks and whites; Griffith also noted that economic growth offered local workers other job opportunities, encouraging many to quit meatpacking jobs. Many immigrant workers moved to fill meatpacking jobs on their own, but some plants offered cash bonuses of several hundred dollars to current workers and others who referred persons who stayed on the job 60 or 90 days.20 Networks evolved to bring US-born as well as Mexican-born Hispanic workers from south Texas and other areas with high unemployment rates to midwestern meatpacking plants.

Once a core group of Asians or Hispanics is employed in a plant, network hiring can take over recruitment, with current workers bringing friends and relatives to fill vacant jobs (Griffith, 1988, p35). 21 Network hiring shifts most recruitment costs to currently employed workers, who bring only those who can do the work and often act as the mentors of newly hired workers. Critics of the meat packing industry allege that network hiring gives managers more control of workers, as

19 The Los Angeles Times on February 16, 2004 profiled six brothers from Los Cerritos, Michoacan who migrated to Oxnard, California to pick strawberries in the 1970s and 1980s, and in 1993 began to move to Rogers, Arkansas to work for Tyson Foods. They noted that their earnings rose from $8,000 a year picking strawberries to $20,000 a year in the plants, their wives could also work, and low-cost housing enabled them to become homeowners. Daryl Kelley and Carlos Chavez, “The Carranza family, like many Latino immigrants, found its way into the American middle class by leaving the Golden State,” Los Angeles Times, February 16, 2004.

20 If companies directly recruit out-of-state workers, they may be liable for return transportation for workers who quit. For example, under Nebraska law, companies with at least 10 percent non-English-speaking workers must report any recruitment of those workers from more than 500 miles away and must pay their travel expenses to the work place. If the out-of-area workers quit within two weeks, the company must pay their travel expenses back to the place of recruitment.

21 Griffith reported that over three-quarters of poultry processing plant managers in North Georgia, North Carolina, and Delmarva in 1988 thought it would be more difficult to recruit workers after immigration reform in 1986, but only a quarter of the managers in Texas and Arkansas anticipated future recruitment problems (p40). Griffith emphasized the importance of local economic conditions in the ease of recruitment, noting that North Georgia plants had more trouble attracting and retaining workers because of booming nearby Atlanta than plants in Texas and Arkansas (43-45).
some managers allegedly threaten to fire an entire crew if there are problems with one worker. Some plants provide company housing, so that losing a job also means losing housing.

Meatpacking drew the attention of immigration law enforcers in the midwest during the late 1990s, when an estimated 25 percent of meatpacking workers were unauthorized. Operation Vanguard subpoenaed employment records from meatpacking plants, compared information provided by newly hired workers on I-9 forms with government databases, and instructed employers to ask employees who appeared to be unauthorized to clear up discrepancies in their records before INS agents came to the plant to interview them. When informed of INS suspicions that they were unauthorized, most of the suspect workers quit.

Vanguard was attacked by meatpackers, farmers, unions and Hispanic groups, prompting the INS headquarters to order its suspension in 2000. The subsequent lack of enforcement contributed to the jump in the Hispanic share of employment in meatpacking between 2000 and 2005. However, beginning in 2006, meatpacking plants were often targeted in raids seeking unauthorized workers. The Immigration and Customs Enforcement agency used 1,000 agents to inspect workers at six plants owned by Swift on December 12, 2006, arresting almost 1,300 of the 7,000 workers employed on the day shift in these plants, 20 percent. Crider Inc, a poultry processor in Stillmore, Georgia, lost three-fourths of its 900-strong work force when ICE agents mounted a raid on Labor Day weekend in 2006. In the aftermath of the raids, many meatpackers enrolled in E-Verify, the voluntary internet-based database that allows employers to check the legal status of newly hired workers.

The result was a reversal of the growing share of Hispanics in meatpacking between 2005 and 2010. EEOC data which report the sex, race and ethnicity of employees (www.eeoc.gov/eeoc/statistics/employment/jobpat-eeo1/index.cfm) in most US establishments, show that the share of Hispanic workers in food manufacturing and meat packing rose rapidly between 2000 and 2005 but fell between 2005 and 2010. In 2000, Hispanics were 38 percent of all employees in animal slaughtering and 48 percent of animal slaughtering laborers. The Hispanic share of animal slaughtering workers rose by almost 10 percentage points between 2000 and 2005, and then fell to 2000 levels or below by 2010.

Reasons for the rising share of Hispanics among laborers in meat packing include network hiring and recruitment during periods of low unemployment. Reasons for the falling share of Hispanics since 2005 include well publicized workplace raids in 2006-07 and I-9 audits since, the 2008-09 recession that increased unemployment and made year-round meatpacking jobs that often pay $12 an hour more attractive, and more employers enrolling in E-Verify, which may discourage unauthorized workers from applying for jobs.

Table 2. Employment by Race/Ethnicity, 2000, 2005, and 2010
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<th>Year</th>
<th>Industry</th>
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<th>Asian</th>
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The changing ethnicity and legal status of meatpacking workers may have contributed to union victories in some cases. Smithfield Packing’s 5,000 employee plant in Tar Heel, North Carolina, which processes 32,000 hogs a day, was the target of a union organizing effort mounted by United Food and Commercial Workers Local 1208. The plant opened in 1992, and the UFCW lost elections there in 1994 and 1997 before winning an election on a 52-48 percent vote in December 2008. Some attributed the UFCW’s win to the changed workforce, which came about when a UFCW "Justice at Smithfield" campaign in 2006 resulted in a re-screening of employees for legal status. Hispanic workers who left were often replaced by Blacks, whose share of plant workers rose from 20 percent in 2006 to 60 percent in 2008.

Community Impacts
The arrival of Hispanic workers can quickly change the face of rural areas that sometimes have not experienced significant immigration for a century. The new
residents have been welcomed in most areas, especially those losing people and jobs. Hispanic immigrant meatpacking workers buy homes and shop at local markets, helping to stabilize local economies.

However, there are also new tensions with demographic change. Many local residents complain about the side effects of the changing labor force, including more students with limited English proficiency in local schools and more uninsured patients seeking health care at local clinics and emergency rooms. Many meat processing plants provide health insurance and other benefits after 60 or 120 days of employment but, with high turnover, a significant share of the workers in a particular plant may not have health insurance.

Two extremes mark the reactions of meat processors to these externalities. Many recognize that they are hiring workers with little English and formal schooling, and some have formed partnerships with local community colleges and high schools to offer classes in English, finance and other life skills to their workers. For example, Tyson Foods has an education assistance plan that reimburses 75 percent of the cost of tuition, books and fees (up to $3,500 a year) for course work that helps to meet the company’s business needs.22 In Grand Island, Nebraska, Swift & Co. built a two-classroom school near its plant in 2002 so workers could attend high school classes before and after their work shifts; the local school district provided a teacher and a teacher’s aide.

The other end of the spectrum is marked by processors who say that their major economic contribution is the facility they provide for local farmers and the payroll they provide to local workers. Meatpackers who do not make impact payments, sponsor sports events, and meat with community leaders may contribute to the backlash against immigration in some communities, prompting some cities and counties to vote against zoning or other changes needed to open or re-open meat processing facilities.

A profile of Beardstown, Illinois, a city of 7,000 known for the Beardstown Ladies Investment Club, concluded that the city is "propped up by one major employer, a partially undocumented work force and uneasy residents.” (Walker, 2003). Hispanics became the majority of Beardstown residents after Excel reopened a pork processing plant that had been closed by Oscar Mayer in 1986. Cargill, the privately owned parent of Excel, received state tax benefits without opening its books under a special exception to tax subsidy rules in order to get the plant reopened in 1987. Excel reduced the starting wage from Oscar Mayer’s $8.75 to $6.50 an hour and began to recruit workers in the Rio Grande Valley, providing those with work authorization documents and who could pass a drug test a $400 advance and a bus ticket to Beardstown.

After immigration agents arrested several residents for selling false IDs, Beardstown mayor Bob Walters accused Excel of playing “in the gray area. They don't violate the law, but they sure don't play by the book, either.” Excel

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22 “Meatpacking industry providing education to workers.” AP. June 10, 2005
countered that it “follows the government’s I-9 requirements for verifying employment eligibility,” prompting Walters to assert that immigration authorities “could come down here on any given day and put up a roadblock and Excel would have trouble operating the plant.”

Many rural counties in the Midwest are losing people, forcing residents to choose between depopulation and diversity. Over the past 50 years, census-defined rural counties without a city of at least 2,500 people lost more than a third of residents in 11 Great Plains states, with farm-based counties away from interstate highways losing the most residents. Of the 99 US counties with the highest percentage of residents older than 85, all but two are in the Great Plains.

The General Accounting Office, in a March 1998 report on communities in Nebraska and Iowa with large meatpacking work forces, concluded that there were mixed effects of immigrants in often small cities and towns. On the one hand, the arrival of immigrants helped to stabilize populations that were shrinking, and counties with meatpacking plants had faster increases in per capita incomes and retail sales than non-meatpacking countries. On the other hand, the increased number of poor and limited-English proficient children in schools and very high turnover among workers prompted teachers to complain that it was very hard to educate children. The housing market tightened with the influx of workers, especially for inexpensive rental housing such as mobile homes.

**Conclusions**

Construction and meatpacking are industries that have employed rising shares of migrant workers while being sheltered from international competition. The fact that houses are constructed on site means that workers are normally brought to job sites to assemble homes, not simply erect walls and other structures that were previously assembled in factories. Migrant workers helped to hold down labor costs in the labor-intensive residential construction industry, which was one factor, along with low interest rates and a variety of low-cost loans, that fueled the US housing boom between 2003 and 2007.

Migrants play a much smaller role in heavy and civil engineering projects, where workers are often employed under union contracts that offer high wages. During the housing and construction boom, some migrants were able to find jobs in major projects, with uneven results. For example, despite union representation, a spate of construction-related workplace deaths prompted Congressional hearings, sporadic strikes, and stepped up enforcement of labor and safety standards, highlighting the fact that migrant construction workers were exposed to danger in building major projects in Las Vegas, some of which were not finished because of the 2008-09 recession.

If migrants slowed productivity improvements in construction, they may have hastened productivity improvements in meatpacking, an industry that shifted

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23 The Great Plains are usually defined as all or part of west Texas and eastern New Mexico north to western Minnesota, the Dakotas, and eastern Montana.
from rural to urban areas over the past three decades. The urban facilities that were closed were often small and old, and the rural facilitates that replaced them were generally newer and larger. However, newer facilities nearer to animals were often in places with few people, so that the availability of migrants arguably helped to spur productivity growth and competitiveness.

Meatpacking wages dropped as the industry moved from urban to rural areas, and were stagnant despite the fact that workers were represented by unions in many plants. However, enforcement in 2005-06 reversed the share of Hispanics in meatpacking and encouraged many meatpackers to enroll in E-Verify, the federal internet-based system that allows employers to check the legal status of new hires. A combination of enforcement, recession, and higher wages reversed the rising share of migrants in the more modern meatpacking industry.

**Bibliography**


