



# Study

A PROJECT OF THE PEW CHARITABLE TRUSTS AND USC ANNEBERG SCHOOL FOR COMMUNICATION

## **Estimating the Distribution of Undocumented Workers in the Urban Labor Force:**

### **Technical Memorandum to “How many undocumented: The numbers behind the U.S.—Mexico Migration Talks”**

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The opinions expressed in this study are those of the authors and do not necessarily reflect the views of The Pew Charitable Trusts.

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Available estimates of the undocumented population are total counts of persons of all ages and any labor force status. However, such estimates provide the best known population level and it is preferable to start with this number in estimating workers. Other approaches, such as imputation, necessarily yield estimates of workers that do not replicate the total population estimate (see Camerota 2001). This short study describes derivations of unauthorized workers by industry beginning from the total counts estimated by Dr. Frank D. Bean et al. (2002).

The Pew Hispanic Center (PHC) applied a straightforward imputation process to estimate the industrial distribution of undocumented labor force participants. The process proceeds in two steps: (a) given total unauthorized population counts, estimating the size of the undocumented labor force; and (b) applying a reasonable estimate of the industrial distribution of the undocumented labor force in order to derive absolute counts of the number of undocumented labor force participants by industry.

We estimated the size of the undocumented labor force by examining the age, year-of-arrival, and labor force status of those born in Mexico and those originating from all other countries. These estimates were derived from the March 2001 Current Population Survey (CPS) conducted by the U.S. Bureau of the Census (see U.S. Bureau of the Census 2000). The CPS is the U.S. government's preeminent monthly survey and serves as the basis for the U.S. Bureau of Labor Statistics' monthly employment release, as well as the nation's official poverty estimates. The March CPS features an over sample of households providing the most recent snapshot we possess of the nation's foreign-born population.

The CPS provides estimates of the Mexican origin and non-Mexican origin population by year of arrival and age. From these we calculate the proportion of the foreign-born populations that are 18 years and over and the labor force participation rates for those 18 years and over. Applying these rates to

Dr. Bean's estimates of the total undocumented population by period of arrival, we derive that there are an estimated 5.3 million undocumented persons who are likely to be over the age of 18 and participating in the labor force (see Table 1).

Applying the CPS labor force participation behavior to the Mexican origin undocumented that arrived within the last 10 years is defensible since independent estimates suggest that a great majority of the Mexican-origin and Central and South American origin population that arrived since 1990 is undocumented. Using the CPS labor force participation rates for those that arrived before 1990 is problematic. Many of these foreign-born persons are U.S. citizens or legal permanent residents, including those of Mexican origin (the 1986 Immigration Reform and Control Act legalized a substantial portion of Mexican origin immigrants that arrived before 1990 and their families who joined them later). We judged that the CPS would not provide the best estimate of labor force behavior for undocumented adults that arrived more than 10 years ago.

We estimated the labor force participation behavior of the undocumented that arrived more than a decade in the past by examining the Legalized Population Follow-up Survey (LPS2) of formerly undocumented persons who had received legalization during the late 1980s. The LPS2 surveyed these individuals in 1992, or five years following legalization (U.S. Department of Labor, 1996). To receive legalization these persons had to demonstrate that they had been continuously resident in the U.S. since before January 1, 1982. Thus LPS2 describes the characteristics of a formerly undocumented population that had been in the U.S. for more than 10 years. While the LPS2 is perhaps dated, we judge that it provides the best available guidance as to the likely labor force behavior of undocumented persons that have been in the U.S. for more than 10 years.

With estimates of the size of the undocumented labor force that had arrived within the past 10 years and more than 10 years ago, we proceeded to apportion these labor force participants to industries. For the 3.0 million workers

who arrived more than 10 years ago, we used the industrial distribution of legalized workers in the LPS2 (Table 4.D of U.S. Department of Labor, 1996). For the 2.3 million workers who arrived within the last 10 years we used the industrial distribution of foreign-born persons of Mexican and Central/South American origin that arrived since 1990 in the Current Population Survey. Table 2 displays the results of these estimations.

For the purposes of estimating the aggregate labor force participation rate, it does not make much difference whether we use the CPS or LPS2. Apportioning participants to industries is however sensitive to whether we use the CPS or LPS2. There is considerable evidence that the industrial distribution of workers shifts over time as years of U.S. residence increase. Upon entry many undocumented workers find employment in agriculture and construction. As years in the U.S. increase, and with attainment of legal status, other industries succeed in attracting those workers. This industrial shift of the undocumented is very apparent in the longitudinal studies of the formerly unauthorized population. The industrial distribution of the formerly undocumented shifted markedly over the time from entry, to legalization (LPS1), to the follow-up five years following legalization (LPS2). This shift is also apparent in an examination of shifts in employment by period of arrival of Mexican foreign born in the CPS (which produces a distribution very similar to the LPS2 survey).

For these reasons it is very important to consider the industrial affiliation of long-term undocumented persons separately from those that have recently arrived. By using the characteristics of Mexicans and Central American's in the CPS who arrived in the last decade we are confident that we have a good indicator of the industrial distribution of the that portion of the undocumented population (with the exception possibly of agriculture which we omit and which is estimated separately by Dr. Martin). By using the LPS2 we are confident that we have captured the characteristics of a population that is representative of the long-time

resident unauthorized-like population. Independent research on the LPS2 finds little occupational mobility of this population after the immediate effects of the legalization (and movement out of agriculture/construction). The LPS2's similarity to CPS data on long-term residents also leads us to believe, at least for the broad industrial categories used here, that the LPS2 distribution is a good proxy for the long-term residents.

There are over 1 million undocumented workers in each of manufacturing (especially non-durables such as apparel manufacturing), wholesale and retail trades, and services. These numbers are for broad industrial categories with the exception of restaurants, business services (building maintenance, etc.), and the private household industry. Of course, these are identifiable as typical industrial niches for undocumented workers. These latter "3-digit" industries demonstrate that as one considers more tightly defined employment, the share of undocumented workers can be very significant. For example, about 10 percent of U.S. restaurant workers and nearly a quarter of U.S. private household workers are undocumented. These are significant concentrations, considering that all unauthorized workers are just fewer than 4 percent of the U.S. labor force.

## ***REFERENCES***

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**Table 1. Estimated Workers of Total Population**

Period of Arrival	Total Unauthorized	Mexican Unauthorized
	<u>Total Population<sup>1</sup></u>	
10 years or more	3.8	2.4
Less than 10 years	4.0	2.1
Total	7.8	4.5
	<u>Estimated Workers<sup>2</sup></u>	
10 years or more	3.0	1.9
Less than 10 years	2.3	1.2
Total	5.3	3.0
	<u>18 years or more<sup>3</sup></u>	
10 years or more	97.7%	96.5%
Less than 10 years	80.7%	78.9%
Total	89.0%	88.3%
	<u>Participation Rate<sup>4</sup></u>	
10 years or more	81.0%	80.0%
Less than 10 years	70.0%	70.4%
Total	75.4%	75.5%

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**Sources:**

1. Total population figures from Bean et al., 2002
2. Workers are total figures restricted to just persons 18 years or more and in the labor force
3. Current Population Survey, March 2001
4. CPS and Department of Labor, 1996

**Table 2. Unauthorized Laborforce by Industry, 2001 (in thousands)**

Industry Group	Percent of Workers		Number of Workers		Unauthorized	U.S.
	Before last decade	Within decade	Before last decade	Within decade	Workers Total	Workers Total
Construction	8%	17%	240	380	620	9,670
Manufacturing	25%	19%	750	440	1,190	20,830
Durable	12%	10%	360	220	580	12,670
Non-durable	13%	10%	390	220	610	8,150
Wholesale and Retail Trades	26%	28%	780	630	1,410	29,850
Restaurants	10%	17%	300	400	700	7,720
Others	16%	10%	480	240	720	22,130
Services	28%	21%	840	480	1,320	41,960
Business	7%	8%	210	180	390	2,350
Private Household	6%	3%	180	70	250	1,050
Other	15%	10%	450	240	690	38,570
Other Industries*	8%	5%	240	110	350	37,990
<b>Total Workers</b>	<b>100%</b>	<b>100%</b>	<b>3,000</b>	<b>2,300</b>	<b>5,300</b>	<b>143,640</b>

\* Other industries include transportation, communication; finance, insurance and real estate; mining and public administration.