

**Undocumented immigrants, U.S. Citizens, and Convicted Criminals in
Arizona***

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Summary

- Based on data from 1985 to 2017, undocumented immigrants are at least 146% more likely to be convicted of crime than other Arizonans.
- Undocumented immigrants tend to commit more serious crimes and serve 10.5% longer sentences than do U.S. citizens.
- Undocumented immigrants are 163% more likely to be convicted of 1st degree murder than are U.S. citizens, 168% more likely to be convicted of 2nd degree murder, and 189.6% more likely to be convicted of manslaughter. Those three categories and negligent homicide added up to 987 incarcerations. Undocumented immigrants are also much more likely to commit sexual offenses against minors, sexual assault, DUI, and armed robbery.
- Young convicts are especially likely to be undocumented immigrants. Undocumented immigrants born after June 15, 1981 are eligible for Deferred Action for Childhood Arrivals (DACA). While undocumented immigrants from 15 to 35 years of age make up a little over two percent of the Arizona population, they make up almost 8% of the prison population. These immigrants also tend to commit more serious crimes.
- Undocumented immigrant criminals are 45.4% more likely than other criminals to have been gang members, and 133% more likely to receive sentencing enhancements for being classified as dangerous.
- These numbers may give an artificially low estimate of the share of crime committed by undocumented immigrants. Undocumented immigrants may commit many of their crimes against each other, and their victims may be afraid of calling the police or testifying at trial because of their undocumented status.
- While undocumented immigrants are more likely to be convicted of crimes, they also exhibit extremely low recidivism and criminal history rates. Among criminals who are U.S. citizens, a small subset keeps going in and out of prison. Among undocumented immigrants, a much larger proportion go to prison once or twice and then never return to prison. 24.8% of U.S. citizens were admitted five or more times in the Arizona Department of Corrections, but that same number is only 2.95% for undocumented immigrants. The evidence suggests that these individuals leave Arizona after being incarcerated.
- Evidence is provided for whether changes in border enforcement can explain changes in undocumented immigrants share of newly incarcerated inmates.
- If undocumented immigrants committed crime nationally as they do in Arizona, in 2016 they would have been responsible for over 1,000 more murders, 5,200 rapes, 8,900 robberies, 25,300 aggravated assaults, and 26,900 burglaries.

Introduction

Arizona's prison population data allow us to compare undocumented immigrants' share of the prison population with their estimated share of the state population. We have data from the beginning of 1985 to June 2017. For the first time, we break down the data to examine differences between US citizens, undocumented immigrants, and legal permanent residents. One advantage of using convictions rather than just reported crimes is that convictions depend on a "beyond a reasonable doubt" standard of evidence and thus are much less likely to count innocent people.

Previous research does not directly link undocumented immigrants to specific crimes. After interviewing a number of academics who have done research in the area, Politifact noted in November 2016: "The [challenge](#) in finding concrete numbers is due to a shortfall of data. There is no national database or study tracking how many people have been killed by undocumented immigrants or the nationality of the victims." Most of the literature examines all immigrants, not just undocumented immigrants. Some studies on undocumented immigrants depend on individuals to self-report their criminal histories and even whether they were born in the United States. Others use proxies for undocumented immigrants and see how they are correlated with changes in crime rates.

The huge advantage of using the data that will be presented here from the Arizona Department of Corrections is that over our 32.5-year period we know each prisoner who entered the prison system, their criminal convictions history, and whether he is a documented or undocumented immigrant. The only mystery is why this type of data has not been utilized until now.

Past research often examines rough correlations between immigration and various types of crime rates, with the literature divided between those who claim immigrants are more law-abiding and those who find no difference (e.g., Stowell et al, 2009, p. 895 for a survey). Others emphasize more recent studies that only find a benefit in terms of lower crime (Landgrave and Nowrasteh, 2017 and Waters and Pineau, 2017, p. 326-330).¹ No previous research over at least the last two decades has found higher crime rates for undocumented immigrants (Hagan and Palloni (1998) using survey data for prisoners in El Paso and San Diego).

Many use simple, cross-sectional analysis to see whether areas with higher immigrant populations have higher crime rates. Others use a purely time series approach. Rumbaut and Ewing (2007) and Ewing et al. (2015) look at the United States as a whole

¹ Landgrave and Nowrasteh (2017) write that "a vast body of empirical literature showing that legal and illegal immigrants do not increase local crime rates, are less likely to commit crimes than their native-born peers, and are less likely to be incarcerated than are native-born Americans," but the literature that they cite lumps together all immigrants.

and note that crime has decreased since 1990 as immigration has increased. They also look at incarceration rates by national origin and nativity. Stowell et al (2009) look at how crime rates change in those metropolitan areas with the fastest growth in immigrants.

There are many different statistical problems with these primitive studies. But there are also a number of data issues that make them unable to infer anything about the behavior of undocumented immigrants. Lumping together documented and undocumented immigrants (and often naturalized citizens) may mean combining very different groups of people. As we will see, documented and undocumented immigrants have vastly different incarceration rates in Arizona. Undocumented immigrants have the highest rates, whereas documented immigrants actually have lower rates than do U.S. citizens. Putting all of these different types of people together, it is impossible to infer anything about how law-abiding undocumented immigrants are.

Other studies depend heavily on self-reported information, asking individuals about their criminal histories and even whether they were born in the United States (e.g., Butcher and Piehl, 2007; Ewing et al., 2015; Hickman and Suttorp, 2008; Salas-Wright et al. 2017).² Undocumented immigrants may not want to admit that they have been in prison, fearing that their criminal record and illegal status will make them prime candidates for deportation. They may also lie about whether they were born in the United States. There is no real benefit to undocumented immigrants responding truthfully to the government or private surveyors.

The data here were collected for a report put together for the Arizona Prosecuting Attorneys' Advisory Council (APAAC) (Lott and Wang, 2017). Beyond what criminals are currently incarcerated for, the data have remarkable information on criminal history, gang membership, whether they are identified as particularly dangerous, and citizenship status. Citizenship status was determined by what was listed in the pre-sentencing report, and prosecutors and others knew it even much earlier in the case than that. This is key because documented immigrants aren't labeled as "non-U.S. citizen, deportable" until after they have been sentenced. In contrast, illegal aliens are labeled that way prior to sentencing.

The following sections will first compare prisoners and the general Arizona population by citizenship status, then by incarceration rates for younger undocumented immigrants who are eligible for Deferred Action for Childhood Arrivals (DACA), and finally by the criminal histories of those in prison. We then compare the Arizona prison system to what is available from the federal system. Finally, we estimate the national implications

² Texas is one other state that provides some information on 'criminal aliens' committing crime, but that lumps together noncitizens who are documented and undocumented immigration status. See "Texas Criminal Alien Arrest Data," Texas Department of Public Safety, checked January 3, 2018 (https://www.dps.texas.gov/administration/crime_records/pages/txCriminalAlienStatistics.htm).

for this data and provide information on how the results are affected by changes in border enforcement.

Citizenship, Crime, and Undocumented Immigrants' relative shares of prisoners and the overall population

Undocumented immigrants' share of the Arizona population appears to have varied considerably over time. Using the U.S. Census, the Department of Homeland Security (DHS) estimated that undocumented immigrants made up 2.4%, 6.39%, and 5.48% of the state's population in 1990, 2000, and 2010, respectively (Figure 1).³ A Pew Research Center analysis of Census Bureau data estimated a population share of 4.8% in 2014, and thus a 25-year average of 5.25% from 1990 to 2014. If we use the 1990 estimate for 1985-1989, and the 2014 estimate for 2015-2017, then Arizona's 33-year average from 1985-2017 would be about 4.8% (though the trends suggest that this is an overestimate).⁴ Using the PEW's estimates over the entire period from 1990 to 2014 shows a similar pattern over time, and just a slightly higher average rate of 4.9% over the 33-year period.

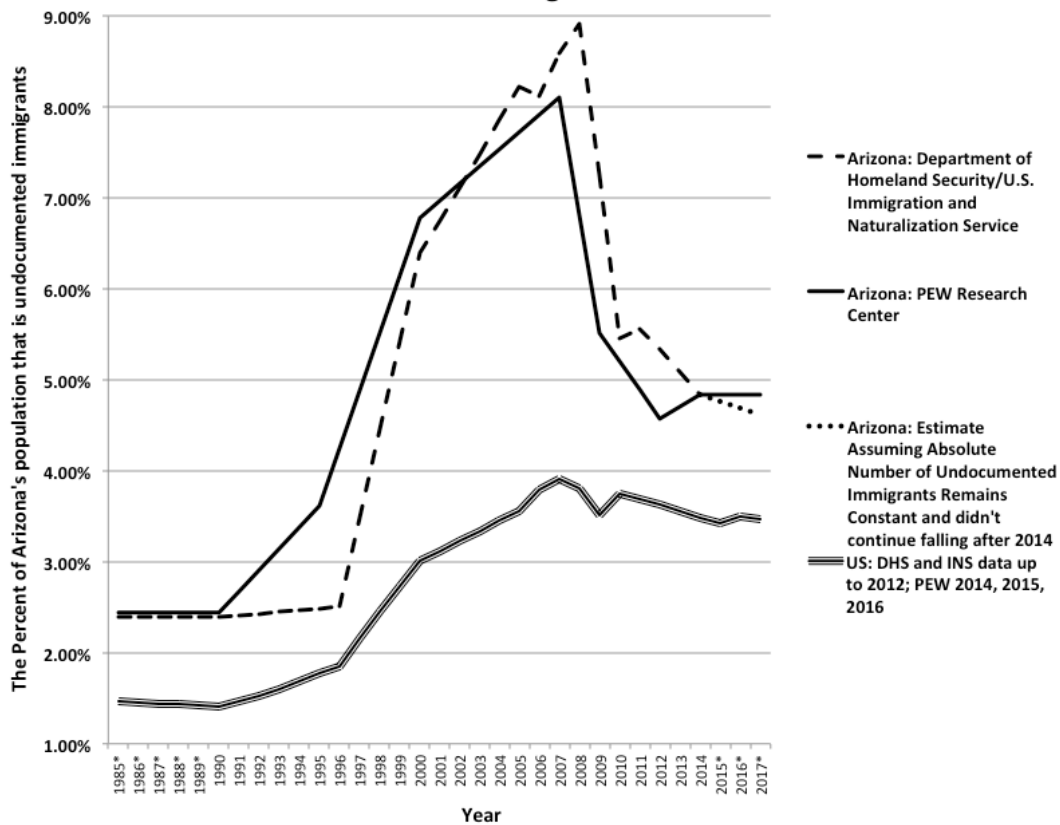
³ DHS put the number as high as 8.9 in 2008, but the gap between their pre and post census estimates for 2010 was very large: 1.9 percentage points. This suggests that they overestimated the rate in 2008. This was calculated using the federal government's estimates for 1990, 1996, 2000, and 2005 to 2014. The values for the other years were filled in using interpolation.

Pew Research Center's 2014 estimate for Arizona available here (Jeffrey S. Passel and D'Vera Cohn, "Overall Number of U.S. Unauthorized Immigrants Holds Steady Since 2009," Pew Research Center, September 20, 2016 (http://assets.pewresearch.org/wp-content/uploads/sites/7/2016/09/31170303/PH_2016.09.20_Unauthorized_FINAL.pdf)). See also here <http://www.pewhispanic.org/interactives/unauthorized-immigrants/>.

Pew Research Center's national estimates from 1990 to 2015 are available here (Jens Manuel, Jeffrey Passel, and D'Vera Cohn, "5 facts about illegal immigration in the U.S.," Pew Research Center, April 27, 2017 (<http://www.pewresearch.org/fact-tank/2017/04/27/5-facts-about-illegal-immigration-in-the-u-s/>)).

⁴ This assumes that the undocumented immigrants' share of the population didn't keep declining as one goes further back in time. Similarly, this assumes that undocumented immigrants' share didn't keep declining after 2014. To the extent that these trends had continued the true rate would be even lower than the 4.8 estimate.

Figure 1: The Percent of Arizona's and the US's Population that is undocumented immigrants: 1985 to 2017



*Estimated Numbers for these years using the closest available year (1990 or 2014)

Arizona's percentage of undocumented immigrants was about 82% above the national average during those years and ranked 5th in terms of states in 2014.⁵ The 95% confidence interval associated with these estimates is pretty tight, in 2014 with the PEW ranging from 4.54% to 5.13%.⁶

The Arizona data show that undocumented immigrants account for 11.8% of convictions for first and second most serious offenses (11.2% of the most serious offenses and 13.8% of the second most serious offenses). In 2014, the last year that we have data for, undocumented immigrants accounted for 12.6% of incarcerations that year (11.09% of the most serious offenses and 16.4% of the second most serious offenses).

⁵ Arizona's rank among states: "Estimated unauthorized immigrant population, by state, 2014," Pew Research Center, November 3, 2016 (<http://www.pewhispanic.org/interactives/unauthorized-immigrants/>).

⁶ See page 18 here Jeffrey S. Passel and D'Vera Cohn, "Overall Number of U.S. Unauthorized Immigrants Holds Steady Since 2009," Pew Research Center, September 20, 2016 (http://assets.pewresearch.org/wp-content/uploads/sites/7/2016/09/31170303/PH_2016.09.20_Unauthorized_FINAL.pdf).

The 12.6% share of 2014 incarcerations implies that undocumented immigrants were convicted at least 163% more often than Arizonans in general. The tight confidence interval associated with the estimated share of undocumented immigrants in the population would have to be over 52 standard deviations higher than it is for undocumented immigrants to be incarcerated at the same rate as the average Arizonan.⁷

For the entire 1985 to 2017 period, undocumented immigrants were 146% more likely to be convicted. A useful comparison can be made to Hispanics. Table 1 shows that in 2014, Hispanics accounted for about 37.6% of entering prison and about 28.8% of the Arizona population. That means their incarceration rate exceeded the overall state imprisonment rate by about 31%. (Appendix 1 breaks down the data per person rather than per incarceration, though those results show a 43% higher share of undocumented immigrants.)

In comparison, documented immigrants (Legal Permanent Residents) were extremely law-abiding. They made up only 1.5% of the prison population in 2014, while a rough estimate indicates that their share of the state's population is about 3.9%.⁸ This

⁷ One person suggests that the Department of Corrections data mean something different than what I was told by the APAAC. "Lott erroneously assumed that the third category, called 'non-US citizen and deportable,' only counted illegal immigrants," claims Alex Nowrasteh. He asserts it also includes legal immigrants, though this ignores the importance of the pre-sentencing report in collecting this information. Yet, even if that were correct, it doesn't greatly affect our results. Only about 10% of those deported are lawful permanent residents. Lott shows that after also accounting for temporary foreign workers this claim only reduces undocumented immigrants' share of convictions leading to incarceration from 11.8% to 10.6%. Alex Nowrasteh, "The Fatal Flaw in John R. Lott, Jr.'s study on illegal immigrant crime in Arizona," Cato Institute, February 5, 2018. John Lott, "Responding to Cato's and others' attacks on our research regarding crime by illegal immigrants," Crime Prevention Research Center, February 6, 2018 (<https://crimeresearch.org/2018/02/responding-catos-attacks-research-regarding-crime-illegal-immigrants/>).

⁸ The Legal Permanent Resident population estimate for 2014 in Arizona is 260,000 (James Lee and Bryan Baker, "Estimates of the Lawful Permanent Resident Population in the United States: January 2014," Department of Homeland Security's Office of Immigration Statistics (<https://www.dhs.gov/sites/default/files/publications/LPR%20Population%20Estimates%20January%202014.pdf>). Refugees and Asylees can apply to be legal permanent residents after one year of continuous presence in the U.S. (Immigration and Refugees, Common Terms, Penn State University Libraries, <http://guides.libraries.psu.edu/c.php?g=623034&p=4339995>). Add in refugees and asylees by assuming that they are equally spread out in congressional districts across the country (Refugees & Asylees 2015 Data Tables, Homeland Security, <https://www.dhs.gov/immigration-statistics/refugees-asylees>). There is a second way of getting at this number. This is obtained by taking the share of Arizona population that are legal permanent and temporary visas holders and multiplying it by the share of US visas holders who have permanent visas. The Arizona Department of Corrections numbers are for documented immigrants (Legal Permanent Residents). The Migration Policy Institute reports a broader number that 7.8% (534,213) of Arizona's population in 2015 was "The foreign-born population includes naturalized U.S. citizens, lawful permanent immigrants (or green-card holders), refugees and asylees, certain legal nonimmigrants (including those on student, work, or some other temporary visas), and persons residing in the country without authorization." The Migration Policy Institute also indicates that

suggests that lumping together documented and undocumented immigrants provides a very misleading image of both groups. However, immigrants as a group (legal and illegal immigrants) still are convicted at relatively high rates, making up 14.1% of incarcerations and 8.7% of the population – an incarceration rate 62% higher than their share of the general population.⁹

There are some obvious differences between incarcerated documented and undocumented immigrants (Table 2). Documented immigrants are 5.6 years older. Just 34.7% of documented immigrants are 30 years of age and younger, while for undocumented immigrants it is 52.4%. In this dimension, undocumented immigrants are closer to US citizens who have 44.6% are in the same age. Documented immigrants are also 18.3 percentage points less likely to be Hispanics.

If documented immigrants are so law-abiding and they continue to be that way once they become U.S. citizens, including naturalized citizens with native-born citizens will make native-born ones look more law-abiding than they are. But the effect is very small. For all U.S. citizens in 2016, they make up 86.9% of those incarcerated that year and 92.27% of the population. Assuming that naturalized citizens are incarcerated at the same rate as documented immigrants, the incarceration rate for native-born U.S. citizens would be 84.7% and their share of the population 86.51%. These numbers imply only a 3.9% change in the per capita incarceration rates for U.S. citizens when naturalized citizens are removed.

Hispanics who are legally in the U.S. (U.S. citizens and documented immigrants) make up 26% of Arizona's population and 29.8% of the prison population.¹⁰ But given that these legal Hispanics are very young, with a media age of only 20 and that young people generally commit most crime, adjusting for their age implies that they are law-abiding

for the U.S. as a whole that number is 22,593,269, and the U.S. State Department indicates that for that year 10,891,745 were on temporary visas. Thus, 51.8% of Migration Policy Institute number represents people who were temporarily in the U.S.. Assuming that is the same rate in Arizona, 51.8% of 7.8% is 4.04%. The U.S. State Department annual report for 2016 Table 18 is the source of this data (<https://travel.state.gov/content/dam/visas/Statistics/AnnualReports/FY2016AnnualReport/FY16AnnualReport-TableXVIII.pdf>).

⁹ Documented immigrants were convicted and served prison time for a number of the most serious crimes. Twenty-five were convicted of manslaughter, with those who have been released serving an average sentence of 5.8 years. Seventeen of those went to prison after 2008, and those convicts who have been released served an average of about 2.8 years in prison. The last two such people entered prison entered prison in 2017. Twelve were convicted of 2nd degree murder, and those who have been released served an average of 13.9 years in prison. Nine of those entered prison after 2008. Fifteen went to prison for 1st degree murder, and all of them had serious secondary offenses for which they were also convicted. Thirteen of those fifteen went to prison after 2008. Eighteen documented immigrants were convicted of sexual assault.

¹⁰ Pew Research Center, "Demographic profile of Hispanics in, Arizona 2014," (<http://www.pewhispanic.org/states/state/az/>) and Pew Research Center, "Overall Number of U.S. Unauthorized Immigrants" (<https://tinyurl.com/yaaurm9r>).

compared to the rest of the legal population.¹¹ The perception that Hispanics are relatively more likely to be criminals is misplaced. It results from combining legal and illegal Hispanics.¹²

¹¹ Pew Research Center estimates that in 2014 the median age for non-Hispanic whites and blacks are 46 and 32 respectively. Pew Research Center, "Demographic profile of Hispanics in, Arizona 2014," (<http://www.pewhispanic.org/states/state/az/>).

¹² Given that legal Hispanics have such a low rate of convictions, it is hard to blame these results on racism against Hispanics.

Table 1: Race and Citizenship of those incarcerated in Arizona per incarceration								
	1985 to June 2017				2014			
RACE	Total*	US Citizens	Undocumented immigrants: Non-US citizen, Not Legal Permanent Resident	Documented immigrants: Non-US citizen, Legal Permanent Resident	Total*	US Citizens	Undocumented immigrants: Non-US citizen, Not Legal Permanent Resident	Documented immigrants: Non-US citizen, Legal Permanent Resident
Caucasian	197,321	42.0%	0.6%	0.1%	8,340	39.2%	1.1%	0.1%
African-American	61,315	12.9%	0.3%	0.1%	2,529	11.6%	0.5%	0.2%
Native American	29,968	6.4%	0.1%	0.0%	1,434	6.8%	0.1%	0.0%
Hispanic, US Born †	120,829	25.5%	0.6%	0.0%	5,993	27.8%	1.1%	0.1%
Hispanic, not US born	47,259	0.6%	9.2%	0.4%	1,980	1.0%	7.7%	0.9%
Asian	1,194	0.2%	0.1%	0.0%	67	0.2%	0.0%	0.1%
Other	4,950	0.5%	0.5%	0.1%	299	0.7%	0.5%	0.2%
Unknown race	142	0.0%	0.0%	0.0%	3	0.0%	0.0%	0.0%
Total	462,978	88.1%	11.2%	0.7%	20,645	87.4%	11.1%	1.5%
<p>* Totals are for those who can be classified as U.S. citizen, undocumented immigrants, or documented immigrants. 0.29% of the sample for the 1985 to 2017 period could not be classified in one of these three categories, and 0.12% for 2014 could not be classified.</p> <p>† One concern with the table is that there are US born individuals who are listed as not being US citizens or who are attempting to gain citizenship (though this last group is extremely small). We asked Bill Montgomery, the County prosecutor for Maricopa county, and the Arizona Department of Corrections about these cases, and we were told that they involved people renouncing their US citizenship and then returning to the US or whose US citizenship was never claimed. Given the small number of people who have renounced their citizenship, this assumption seems questionable. (https://www.federalregister.gov/documents/2017/11/02/2017-23885/quarterly-publication-of-individuals-who-have-chosen-to-expatriate-as-required-by-section-6039g). Possibly they are recording errors, where non-citizens are listed as born in the US or people born in the US are listed as non-citizens. In any case, the number of these cases is very small and does not appreciably alter the results presented here (See Appendix A3).</p>								

By Demographic Characteristic	US Citizens	Undocumented immigrants: Non-US citizen, Not Legal Permanent Resident	Documented immigrants: Non-US citizen, Legal Permanent Resident
Male	86.80%	97.30%	91.92%
White	47.66%	4.99%	8.52%
Black	14.65%	2.42%	9.66%
NA	7.26%	0.60%	0.82%
Hispanic	29.59%	87.15%	68.82%
Asian	0.21%	0.52%	2.66%
Race Other	0.60%	4.29%	9.47%
Race Unknown	0.03%	0.03%	0.03%
Age at Admit	33.52	31.43	37.07
Percentages by age			
0-20	6.2%	7.7%	3.4%
21-25	19.1%	21.9%	14.2%
26-30	19.3%	22.9%	17.1%
31-35	17.3%	18.8%	14.5%
36-40	14.1%	13.2%	13.5%
41-50	17.5%	12.0%	23.6%
51-60	5.4%	3.0%	10.8%
61-70	0.9%	0.5%	2.6%
>70	0.1%	0.1%	0.3%
	100.0%	100.0%	100.0%

The average prison terms suggest that undocumented immigrants have committed the most serious crimes and documented immigrants the least serious. During the entire 1985 to 2017 period, the average prison stay was 660.6 days for undocumented immigrants, 598 days for US citizens, and 473.6 days for documented immigrants.

Possibly undocumented and documented immigrants serve longer prison sentences simply because they are less likely to be granted parole than U.S. citizens. Still that doesn't explain the results. Arizona "abolished parole for offenses committed after January 1, 1994,"¹³ and the time served in prison by undocumented immigrants admitted after that date is still greater than the time served U.S. citizens: 632 days for undocumented immigrants, 553.7 days for US citizens, and 468.3 days for documented immigrants. In fact, the number of days in prison for undocumented immigrants increases from being 10.5% greater than U.S. citizens to 14.1% greater.

¹³ "Truth in Sentencing," Arizona State Senate Issue Brief, August 18, 2010 (<https://www.azleg.gov/briefs/Senate/TRUTH%20IN%20SENTENCING.pdf>).

The data here represent a unique look at all of the prisoners who entered the Arizona Corrections Department from January 1985 through June 2017. During that period, there were 464,641 prisoners who entered the system, and 462,978 for whom we have information on their citizenship status. Between the 464,447 most serious offenses and the 151,108 second-most serious offenses, we have information on 615,555 crimes. It is the entire universe of cases, not a sample, and thus there are no issues of statistical significance. 98% were incarcerated for more than 2 weeks. To the extent that differences exist, that is simply what the differences are.

Tables 3, 4, and 5 show the types of crimes that undocumented immigrants commit at disproportionately high rates. Table 3 provides incarceration rates for most serious offenses over the entire time for which we have data during the 1985 to 2017 period. Table 4 shows the same information for the second-most serious offense. While the results are generally similar, Table 5 matches the incarceration data for most serious offenses in 2014 with the population data from that same year. There were few incarcerations that year for certain types of crime, so even a few cases can often make a big difference in the measured incarceration rates. We partially address this by limiting all of the tables to showing the most serious current offenses for which at least 20 people were convicted in Arizona, but because of the small samples the rates can vary by a large amount from one year to another.

Both tables show the high rates at which undocumented immigrants are convicted of serious crime. For 1st Degree Murder, undocumented immigrants were either 163% (Table 3) or 232% (Table 5) more likely to be convicted than Arizonans in general. For 2nd Degree Murder, they were either 168% (Table 3) or 77% (Table 5) more likely, and they also had a 161% higher rate (Table 4) of being convicted of it as a second most serious offense.¹⁴ Undocumented immigrants were also consistently more likely to be convicted of manslaughter, armed robbery, sexual assault of a minor, sexual assault, DUI or DWI, and kidnapping.

Given undocumented immigrant's share of convicted criminals and the total crimes that have been committed, undocumented immigrants increase total murders in Arizona over how many would have occurred if they were like everyone else by 8.3%, rapes 7.97%, robbery 3.7%, aggravated assault 4.3%, burglaries 2.44%, larceny 2.2%, and vehicle theft 3.7%.

It is important to put these numbers in perspective: relatively few crimes end up being reported or only a fraction of those are solved and this may differ between U.S. citizens and undocumented immigrants. First, take the overall numbers for robbery. Only about 49.1% were reported to police in 2014, and only 29.6% of those that were

¹⁴ Combining first and second most serious offenses for 2nd Degree Murder resulted in undocumented immigrants facing a 166% higher rate than their share of the population in committing this crime.

reported resulted in an arrest, implying that 14.5% of all robberies resulted in arrest.¹⁵ There is some data from Texas on the rate that arrest of undocumented and documented immigrants result in conviction. Arrests for robbery over the period between June 1, 2011 and December 31, 2017 showed that 51.5% of those who were arrested were convicted.¹⁶ Thus less than 1/7th of robberies result in conviction, so the number of robbery would have to be over 7 times what is reported here. The 1,464 robbery convictions in our data from 1985 to 2017 would imply the total number of robberies was actually over 10,200.

Similarly, given that about 64.5% of murders nationally were solved through arrest in 2014, the cost estimates for murder would likewise have to increased by about 55%. Instead of 987 murders, the total by undocumented immigrants would total 1,529. Other crimes such as rape have not only low rates of being reported, but only 38.5% of those that are reported are solved through arrest.¹⁷

Yet, there are two reasons even these numbers likely underestimate the amount of crime committed by undocumented immigrants. The most likely victims of undocumented immigrants are other undocumented immigrants, and there is a common presumption frequently reported in the press that undocumented immigrants are particularly reticent to report crimes to the police.¹⁸ If undocumented immigrants

¹⁵ See the FBI Uniform Crime Reports for the clearance rate for each year. Clearance rates are the percentage of crimes that are solved through arrest. For 2014, the rates are available here (<https://ucr.fbi.gov/crime-in-the-u.s/2014/crime-in-the-u.s.-2014/offenses-known-to-law-enforcement/clearances/main>).

The information on the rate that crimes are reported to the police is obtained by comparing the estimated number of robberies in 2014 from the National Crime Victimization Survey with the number of crimes reported to police from the Uniform Crime Report (<https://www.bjs.gov/content/pub/pdf/cv14.pdf> and <https://ucr.fbi.gov/crime-in-the-u.s/2014/crime-in-the-u.s.-2014/tables/table-7>).

¹⁶ Give the lag between arrest and conviction, many arrests during 2017 would not have had time to lead to a plea agreement or a conviction and thus the true conviction rate per arrest is actually higher than 51.5%, though given the data is over 6.5 years this problem is unlikely too be large. "Texas Criminal Alien Arrest Data," Texas Department of Public Safety, checked January 3, 2018 (https://www.dps.texas.gov/administration/crime_records/pages/txCriminalAlienStatistics.htm and <https://crimeresearch.org/wp-content/uploads/2018/01/Historical-arrest-and-conviction-data-for-select-offenses-associated-with-criminal-aliens.jpg>).

¹⁷ It is difficult to determine exactly the amount of underreporting of rapes to the police because the National Crime Victimization Survey and the Uniform Crime Reports don't have exactly comparable numbers.

¹⁸ Hank Kalet, "Prisoners of Fear: NJ's Undocumented Immigrants," NJ Spotlight, June 16, 2016 (<http://www.njspotlight.com/stories/16/06/15/prisoners-of-fear-nj-s-undocumented-immigrants/>); Meredith Hoffman, "Why Undocumented Immigrants Stay in Abusive Relationships," Vice, March 9, 2016 (https://www.vice.com/en_us/article/9bg7ma/why-undocumented-immigrants-stay-in-abusive-relationships); and Leslie Berenstein Rojas, "Immigrants a largely hidden segment of LA's homeless population," KPCC Public Radio, July 14, 2016 (<https://www.scpr.org/news/2016/07/14/62582/immigrants-a-largely-hidden-segment-of-la-s-homele/>).

are indeed less likely to report crimes committed against them, just using criminal convictions will provide an underestimate of the true crime rate by undocumented immigrants. Also, as we will see, undocumented immigrants tend to be more involved in gangs and those crimes are traditionally harder to solve.

However, there are also two possibilities that might work the other way. One is that undocumented immigrants may be relatively easy to catch, but that seems unlikely. If the undocumented immigrant community in an area was very small, so that their members stood out more readily, it would be easier to catch them. But Arizona has an unusually high rate of undocumented immigrants with the vast majority of them from the same country, Mexico. In addition, as we will see, these incarcerations overwhelmingly involve young undocumented immigrants, who presumably are better able to adapt to a new culture as they grow up in the area.

A second consideration is that some local authorities spend disproportionate resources attempting to go after undocumented immigrants. The one clear example of that would be Sheriff Joe Arpaio, who was the Sheriff of Maricopa County up until the end of 2016. Maricopa county is the largest county in the state and makes up about 61% of Arizona's total population. Arpaio was famous for his tough on illegal aliens stand,¹⁹ but on January 1, 2017 Democrat Paul Penzone replaced him. Yet, while we only have data on incarcerations for the first six months of 2017, the data do not suggest that this factor was important. Indeed, the share of new prisoners who were undocumented immigrants from Maricopa County increased from 2016 to 2017, rising from 13.26% to 14.01%.²⁰ The level of undocumented immigrants going to prison from Maricopa county in 2017 was greater than all the years from 2010 to 2016 and was statistically significantly different from the average for all years at the 0.00% level for a two-tailed t-test.

Thus, while incarceration rates are dramatically higher for undocumented immigrants, they should be probably taken as a lower bound when estimating how much more likely undocumented individuals are convicted of crimes.

More recent examples of such reporting includes: Tom Dart, "Fearing deportation, undocumented immigrants wary of reporting crime," *The Guardian* (UK), March 23, 2017 (<https://www.theguardian.com/us-news/2017/mar/23/undocumented-immigrants-wary-report-crimes-deportation>) and Bryan Cox, "Since Trump, Latinos are reluctant to report crime," *Newsweek*, May 26, 2017 (<http://www.newsweek.com/trump-latinos-are-reluctant-report-crime-616253>).

¹⁹ See for example, Sarah Parvini, "Sheriff Arpaio admits violating court order in profiling suit," *Los Angeles Times*, March 18, 2015 (<http://www.latimes.com/nation/la-na-arpaio-immigration-20150318-story.html>).

²⁰ McCormick and Tollison (1984) note that with this type of problem increasing enforcement could either increase or decrease the number of arrests, though consistent with the interpretation here, they find evidence that increased enforcement reduces the number arrested.

Offense	Number of incarcerations	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident	Percent increase in the undocumented immigrants convicted relative to their average share of the Arizona State Population from 1985 to 2017
Smuggling	310	20.6%	78.1%	1.3%	1,526.3%
Compounding crime	22	50.0%	50.0%	0.0%	941.7%
Unlawful copying or sale of sounds or images from recording devices	27	51.9%	48.1%	0.0%	903.1%
Tampering w/ a public record	63	58.7%	38.1%	3.2%	693.7%
Marijuana Violation	30,208	66.4%	32.6%	1.0%	579.3%
Criminal Impersonation	977	69.1%	30.1%	0.8%	526.9%
Money Laundering	295	64.1%	29.2%	6.8%	507.3%
Kidnapping	3,160	72.3%	26.9%	0.8%	459.7%
Illegal control of an enterprise; illegally conducting an enterprise	549	73.6%	24.8%	1.6%	416.1%
Theft by extortion	92	77.2%	22.8%	0.0%	375.5%
Drive by shooting; forfeiture; driver license revocation	668	78.4%	21.1%	0.4%	339.7%
Discharging a firearm at a structure	294	81.6%	18.4%	0.0%	282.7%
Duty to give information and assistance; alcohol or other drug screening	83	81.9%	18.1%	0.0%	276.5%
Use of wire communication or electronic communication in drug related transactions	204	81.4%	17.6%	1.0%	267.6%

Conducting a chop shop	91	82.4%	17.6%	0.0%	266.3%
Solicitation	47	83.0%	17.0%	0.0%	254.6%
Conspiracy	417	83.5%	16.1%	0.5%	234.7%
Aggravated Driving/DWI	10,452	84.1%	15.9%	0.0%	231.1%
Aggravated DUI	41,243	81.8%	15.7%	2.5%	227.5%
Continuous sexual abuse of a child	77	83.1%	15.6%	1.3%	224.7%
Narcotic Drug Violation	31,949	85.0%	14.6%	0.4%	204.2%
Discharge Firearm in City Limit	470	84.3%	14.3%	1.5%	197.0%
Accidents involving death or physical injuries; failure to stop; driver license revocation; restricted privilege to drive; alcohol or other drug screening	562	84.9%	14.2%	0.9%	196.6%
Manslaughter	2,834	85.2%	13.9%	0.9%	189.6%
Facilitation	59	86.4%	13.6%	0.0%	182.5%
Participating in or assisting a criminal syndicate	428	84.6%	13.6%	1.9%	182.3%
Sexual Assault	1,706	85.9%	13.0%	1.1%	171.1%
Burglary in the 1 st degree	1,753	86.1%	12.9%	0.9%	169.8%
2 nd degree murder	2,204	86.6%	12.8%	0.5%	167.5%
1 st degree murder	1,790	86.5%	12.6%	0.8%	163.0%
Narcotic Possess-Transport	24	87.5%	12.5%	0.0%	160.4%
Molestation of a child	4,885	86.9%	12.1%	1.0%	152.5%
Possess, Sell, Marijuana	865	87.9%	12.0%	0.1%	150.5%
Sexual Abuse	2,021	87.6%	11.7%	0.6%	144.3%
Keeping or residing in house of prostitution; employment in prostitution	27	88.9%	11.1%	0.0%	131.5%
Dangerous Drug Violation	32,665	88.2%	11.1%	0.7%	130.8%
Armed Robbery	10,493	88.7%	10.9%	0.4%	127.3%
Unsworn Falsification	28	89.3%	10.7%	0.0%	123.2%

Negligent Homicide	757	88.0%	10.7%	1.3%	122.9%
Sexual Conduct with a Minor	4,597	88.8%	10.6%	0.6%	121.2%
Promoting prison contraband; exceptions; x-radiation; body scans	3,250	88.7%	10.6%	0.7%	119.9%
Endangerment	6,798	88.5%	10.4%	1.1%	117.6%
Possession & Sale Narcotic	2,070	89.6%	10.4%	0.0%	117.4%
Interference with monitoring devices	88	88.6%	10.2%	1.1%	113.1%
DWI License Suspend- Revoke	7,525	89.9%	10.1%	0.0%	110.1%
DWI Liquor or Drugs	500	90.0%	10.0%	0.0%	108.3%
Involving or using minors in drug offenses	121	89.3%	9.9%	0.8%	106.6%
Dangerous or deadly assault by prisoner or juvenile	101	89.1%	9.9%	1.0%	106.3%
Taking identity of another person or entity	1,841	89.2%	9.9%	0.9%	106.0%
DUI Liquor/Drugs/VPRS/Combo	173	88.4%	9.8%	1.7%	104.7%
Possession of burglary tools	3,503	89.8%	9.4%	0.8%	95.1%
Participate Criminal Street	225	89.3%	9.3%	1.3%	94.4%
Child Prostitution	129	89.9%	9.3%	0.8%	93.8%
Escape 1st Degree	65	90.8%	9.2%	0.0%	92.3%
Aggravated Assault	38,181	90.3%	9.1%	0.6%	90.2%
Unlawful use of means of transportation	8,461	90.6%	9.0%	0.4%	87.4%
Obstruction of A Criminal Investigation	67	91.0%	9.0%	0.0%	86.6%
DWI	1,408	91.1%	8.9%	0.0%	85.0%
Sexual Exploitation of a Minor	847	90.7%	8.9%	0.5%	84.5%
Unlawful Imprisonment	685	91.2%	8.8%	0.0%	82.5%
Flight from Law in a	4,202	90.9%	8.6%	0.5%	79.5%

Vehicle					
Theft Means of Transportation	10,425	91.1%	8.5%	0.4%	77.3%
Assault	95	89.5%	8.4%	2.1%	75.4%
Criminal Simulation	452	91.4%	8.4%	0.2%	75.1%
Misconduct involving weapon	10,545	91.1%	8.4%	0.5%	74.1%
Disorderly Conduct	3,559	91.0%	8.2%	0.8%	71.5%
Securing the proceeds of an offense	49	87.8%	8.2%	4.1%	70.1%
Prescription-only drug	141	92.2%	7.8%	0.0%	62.5%
Burglary 2 nd Degree	13,617	91.9%	7.8%	0.3%	61.6%
Stalking	323	92.3%	7.7%	0.0%	61.2%
Aggravated taking identity of another person or entity	488	91.4%	7.6%	1.0%	58.0%

Table 4: Share of Prisoners for Arizona by Second Most Serious Current Offense (Cases where there are at 20 incarcerations for 1985 to June 2017)

Offense	Number of incarcerations	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident	Percent increase in the undocumented immigrants convicted relative to their average share of the Arizona State Population from 1985 to 2017
Marijuana Violation	66	71.2%	28.8%	0.0%	500%
Sentence for Certain Drug Offenses	404	73.0%	26.0%	1.0%	441%
Facilitation	3,691	75.8%	23.1%	1.1%	381%
Solicitation	15,130	76.7%	21.7%	1.5%	352%
Narcotic Drug Violation	208	78.8%	21.2%	0.0%	341%
Conspiracy	5,523	79.0%	20.4%	0.6%	324%
Violent Crimes	189	80.4%	19.6%	0.0%	308%

Attempt	1,490	82.4%	17.0%	0.5%	255%
Attempt to Commit	55,533	83.1%	16.3%	0.6%	240%
Dangerous offenders; sentencing	3,807	82.0%	16.2%	1.8%	238%
Dangerous crimes against children	3,410	85.6%	13.8%	0.6%	188%
Abandonment of spouse	22	86.4%	13.6%	0.0%	184%
Dangerous crimes against children; sentences; definitions	1,284	84.2%	13.5%	2.3%	181%
2 nd degree murder	1,068	87.1%	12.5%	0.4%	161%
Assault	80	87.5%	12.5%	0.0%	160%
Method of Inflict Death	220	85.0%	12.3%	2.7%	156%
Death or Life	1,034	87.9%	11.4%	0.7%	138%
Sentence of imprisonment for felony	78	89.7%	10.3%	0.0%	114%
Notice of moving from place of residence or change of name	20	90.0%	10.0%	0.0%	108%
Driving while intoxicated	190	90.0%	10.0%	0.0%	108%
Repetitive offenders	12,623	90.8%	8.5%	0.8%	76%
Danger/Repetitive/Enhance	37,054	91.9%	7.8%	0.3%	62%
Sexual motivation special allegation; procedures	66	87.9%	7.6%	4.5%	58%
Possession & Sale Narcotic	27	92.6%	7.4%	0.0%	54%
Dangerous Drug Violation	141	92.2%	7.1%	0.7%	48%
DWI Liquor or Drugs	991	93.0%	7.0%	0.0%	45%
DWI License Suspend- Revoke	156	94.2%	5.8%	0.0%	20%
Domestic violence; definition; weapon seizure	4,893	93.6%	5.4%	1.0%	13%
DUI Liquor/Drugs/VPRS/Comb o	68	91.2%	4.4%	4.4%	-8%

Offense Commit on Release	639	95.6%	4.2%	0.2%	-12%
Shock Incarceration	34	97.1%	2.9%	0.0%	-39%
Soliciting abortion; punishment	38	97.4%	2.6%	0.0%	-45%
Aggravated criminal damage	40	97.5%	2.5%	0.0%	-48%
Robbery	68	98.5%	1.5%	0.0%	-69%

Table 5: Share of Prisoners for Arizona by Most Serious Current Offense (Cases where there are at 20 incarcerations for 2014)

Offense	Number of incarcerations	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident	Percent increase in the undocumented immigrants convicted relative to their average share of the Arizona State Population in 2014
Smuggling	20	40%	60%	0%	1150%
Marijuana Violation	1910	48%	51%	1%	966%
Illegal control of an enterprise; illegally conducting an enterprise	40	55%	35%	10%	629%
Money Laundering	21	67%	33%	0%	594%
1 st degree murder	53	75%	21%	4%	332%
Burglary in the 1 st degree	97	81%	15%	3%	222%
Molestation of Child	201	82%	15%	3%	211%
Promoting prison contraband; exceptions; x-radiation; body scans; classification	188	85%	14%	1%	199%
Sexual Assault	51	82%	14%	4%	186%
Manslaughter	104	83%	13%	4%	180%
Sexual Abuse	75	83%	13%	4%	178%

Taking identity of another person or entity	148	86%	13%	1%	167%
Criminal Impersonation	72	88%	13%	0%	160%
Sexual Conduct with a Minor	220	87%	12%	1%	146%
Armed Robbery	466	87%	12%	1%	141%
Kidnapping	121	88%	11%	1%	124%
Narcotic Drug Violation	1033	87%	11%	2%	120%
Misconduct involving weapons	676	89%	10%	1%	106%
Sexual exploitation of a minor	93	90%	10%	0%	102%
Forgery	310	89%	10%	1%	102%
Aggravated DUI	1855	86%	10%	5%	100%
Dangerous Drug Violation	2257	89%	9%	1%	97%
Luring a minor for sexual exploitation	22	91%	9%	0%	89%
Arson of an occupied structure	35	91%	9%	0%	79%
2 nd degree murder	94	89%	9%	2%	77%
Flight from Law Vehicle	141	89%	9%	2%	77%
Aggravated Robbery	106	91%	8%	1%	77%
Fraudulent schemes and artifices	95	91%	8%	1%	75%
Discharge Firearm in City Limit	29	90%	7%	3%	44%
Aggravated Assault	1852	93%	6%	1%	25%
Theft Means of Transportation	441	94%	5%	0%	13%
Endangerment	250	91%	5%	4%	8%
Burglary in the 2 nd degree	606	94%	5%	1%	7%
Burglary in the 3 rd degree	655	95%	5%	0%	5%
Negligent Homicide	21	95%	5%	0%	-1%
Organized retail theft	161	91%	4%	4%	-9%

Arson of Structure/Property	24	92%	4%	4%	-13%
Escape 2 nd Degree	48	96%	4%	0%	-13%
Trafficking in stolen property	364	95%	4%	1%	-14%
Unlawful Imprisonment	49	96%	4%	0%	-15%
Aggravated taking identity of another person or entity	51	94%	4%	2%	-18%
Child/Adult Abuse	154	94%	4%	2%	-19%
Theft	592	95%	4%	1%	-23%
Robbery	163	96%	4%	0%	-23%
Resisting Arrest	200	97%	4%	0%	-27%
Shoplifting	283	96%	3%	0%	-34%
Failure to Register as a sex offender	129	97%	3%	0%	-35%
Disorderly Conduct	194	95%	3%	2%	-36%
Threat-Intimidate	37	97%	3%	0%	-44%
Criminal Possession Forgery Document	115	96%	3%	2%	-46%
Sex Offender Registry Violation	78	97%	3%	0%	-47%
Unlawful use of means of transportation	277	96%	3%	1%	-47%
Aggravated domestic violence	211	97%	2%	0%	-51%
Criminal Damage	136	96%	2%	1%	-54%
Possession of burglary tools	190	98%	2%	0%	-56%
Aggravated Harassment	55	98%	2%	0%	-62%
Drug Paraphernalia Violation	1723	98%	2%	1%	-66%
Criminal trespass in the 1 st degree	317	97%	2%	1%	-67%
Theft Credit Card	140	99%	1%	0%	-85%
Failure to appear in the	29	97%	0%	3%	-100%

first degree					
Notice of moving from place of residence or change of name or electronic information; forwarding of information	30	100%	0%	0%	-100%

Do changes in enforcement along the Mexican-U.S. Border affect the incarceration rate of Undocumented Immigrants?

One concern with the preceding results is that they are being driven by how porous the Arizona border is with Mexico. The concern is that as illegals pass through Arizona on their way to other jurisdictions, they will commit crime. If the census estimates pick up those who are temporarily in Arizona, this effect shouldn't matter since even though there might be a different person in Arizona in June than in December, the total in the denominator is all that matters. Yet, it may be more difficult to measure those who are only in Arizona for short periods of time. The small confidence intervals claimed by those the Census data belie that they have considered this a serious problem.

If this concern is important, the size of the effect should vary over time as border enforcement between Arizona and Mexico changes. A more porous should be related to a higher share of undocumented immigrants among those who are newly incarcerated.

There were two major changes in enforcement during the period that we study. In 1994, the Clinton Administration started "Operation Gatekeeper," which "succeeded in shutting off many of the California routes" that undocumented immigrants took into the U.S.²¹ This change appeared to occur over time between 1994 and 2000. Cutting off this route into California was associated with a surge in undocumented immigrants into Arizona. In response in 2005, border enforcement was then beefed up in Arizona, and undocumented immigrants began to enter the U.S. through Texas.

If this "porous border" hypothesis is correct, these changes in enforcement imply that undocumented immigrants share of newly incarcerated individuals should increase between 1994 and 2000 and then fall after 2005. In fact, nothing like that seems to have occurred. Between 1994 and 2000, the percent of those incarcerated each year who were undocumented immigrants fell from 12.2% in 1994 to 9.7%. Even by 2004, it was almost the same level that it was in 1994 (12.0% versus 12.2%). Similarly, after 2005, instead of this percent declining it initially rose, going from 11.9% in 2005 to 13.8% in 2009. After that, the percentage fell and then rose again, but none of the

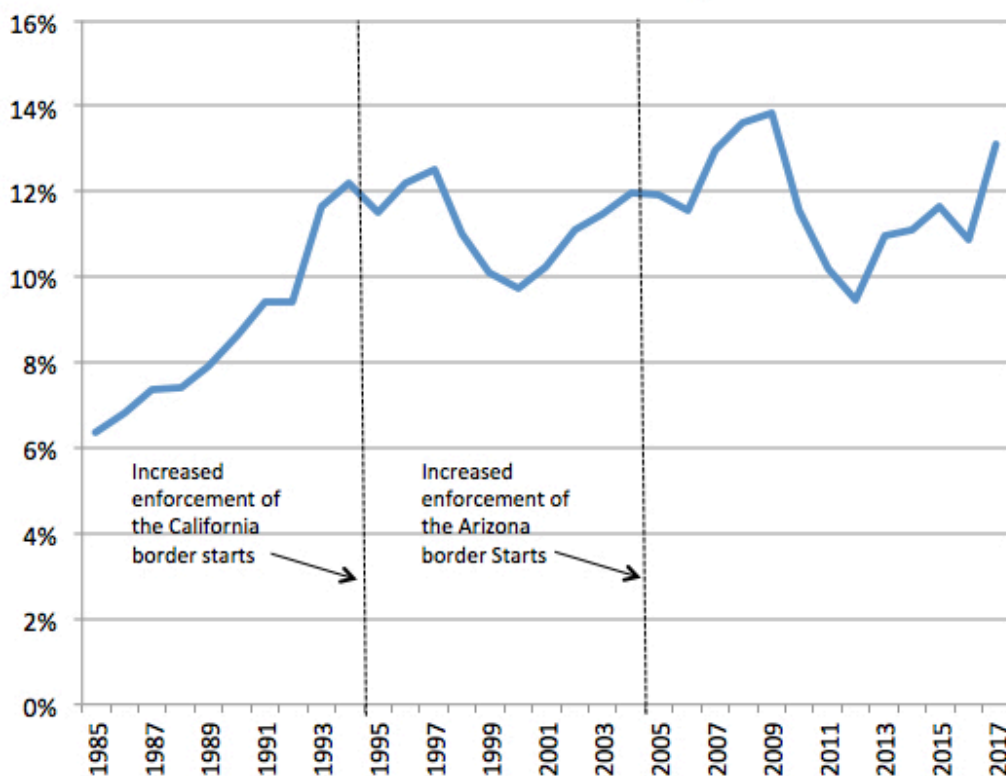
²¹ Edward Alden, "Arizona's Alarm Bell for Immigration Reform," Council on Foreign Relations, April 26, 2010 (<https://www.cfr.org/expert-brief/arizonas-alarm-bell-immigration-reform>). See also Roberts (2017) for evidence of the impact of border enforcement on rate that undocumented immigrants .

variation seems capable of explaining the large difference in incarceration rates between undocumented immigrants and U.S. citizens.

Nor is Arizona a particularly important route for drug trafficking.²² According to the Department of Homeland Security, cocaine, heroin, and meth enter through ports of entry, mainly by being concealed in cars and trucks. This means that major entry corridors for these drugs are in southern California and Texas, because that's where most of the vehicle entry takes place. A significant amount of marijuana comes through the Border States, with the exception of New Mexico.

One change left unexplained is the large run up in the percentage of newly incarcerated people who were undocumented immigrants between 1985 and 1994. There are not enough years of data here to determine if this was a result 1986 amnesty that was granted by President Reagan. If the share of undocumented immigrants who are prisoners is a proxy for their share of the population, it is possible that the amnesty increased undocumented immigrants coming into the U.S. Alternatively, the amnesty might be related to the type of undocumented immigrant coming to the US or their ability to commit crime. More work remains on these questions.

Figure 2: Percent of those being incarcerated that year who are undocumented immigrants



²² "Drug Smuggling at the Border," U.S. Department of Homeland Security, October 18, 2017.

Recidivism

Some of the other characteristics of undocumented immigrant criminals stand out and we will go through the implications of this in the next sections. Undocumented immigrant criminals are 45.4% more likely to have been gang members, they are 133% more likely to receive sentencing enhancements for being classified as dangerous, and they tend to be released from prison at a younger age despite more serious crimes because they initially go to jail at a younger age.²³ These factors are clearly related to recidivism, but affect it in different directions. Higher gang membership and lower ages for release from prison normally tend to mean higher recidivism rates. Sentencing enhancements for more violent behavior is actually associated with a lower rate of recidivism.

While convictions of undocumented immigrants are high rate relative to their share of the population, their recidivism rates are extremely low. For example, only 2.3 of convicted undocumented immigrants who are considered dangerous and who have a history of repetitive behavior recidivate within 6 years of being released. In contrast, convicted U.S. Citizens with characteristics exhibit a six-year recidivism rate of 26.4% – about 9.7 times higher.

Anyway you cut the data, U.S. citizens recidivate at much higher rates. For example, when compared with undocumented immigrants with equivalent sentencing enhancements or gang affiliations, U.S. Citizens are 2 to 11.5 times more likely to recidivate within six years than are undocumented immigrants. For ages under 65, U.S. citizens are 3.6 to 4.7 times more likely to recidivate within six years.

²³ The gang membership, sentencing enhancements, and other values discussed in the text are simple conditional means. This general pattern is maintained using logit regressions even when other factors are accounted for (Appendix 4). Hispanic undocumented immigrants are more likely to be gang members, face longer prison sentences, are younger, more likely to be male, and less likely to use a weapon or to injure someone. Hispanic U.S. citizens are even more likely to be gang members than Hispanics who are not U.S. citizens, and they are also more likely to use weapons and injure someone but less likely to be male. Native Americans are the only other groups that are more likely to gang members.

Some of the results are quite large. Being suspected of gang membership lowers the odds of the prisoner being white by 75% and black by over 95%, but it raises the odds of the person being an undocumented Hispanic immigrant by 32%. If the prisoner was convicted of a weapons charge involving a gun, it lowers the odds of the prisoner being white by 34% and Native American by 45%, but raises the odds of the prisoner being black by 59%. Incarcerated undocumented Hispanic immigrants are also almost exclusively male to a much higher rate than any other type of prisoner.

Table 6: Recidivism Rates by Miscellaneous Risk Factors for Arizona by U.S. Citizen and Undocumented Immigrants												
	US Citizens						Undocumented immigrants					
	Number of Years/Percent Recidivated						Number of Years/Percent Recidivated					
Gang Affiliation Status	1	2	3	4	5	6	1	2	3	4	5	6
Debriefed	36.9	52.1	60.2	64.3	66.2	67.8	13.9	21.2	27.8	31.1	31.8	33.8
Participant	12.5	12.5	25.0	37.5	37.5	37.5						
Step Down	29.8	47.2	54.0	57.8	60.9	62.7	0.0	0.0	0.0	16.7	16.7	16.7
Suspect	32.4	45.8	53.4	57.7	60.3	62.1	5.1	9.3	11.7	13.8	14.6	15.6
Validated	33.8	47.2	54.8	58.3	60.9	61.9	6.9	13.8	17.4	18.6	21.0	22.2
Missing	30.0	40.0	60.0	60.0	60.0	70.0						
Total	32.5	46.0	53.6	57.9	60.5	62.2	5.5	9.9	12.4	14.5	15.5	16.5
	Number of Years/Percent Recidivated						Number of Years/Percent Recidivated					
History of Sentence Enhancement	1	2	3	4	5	6	1	2	3	4	5	6
NOT Dangerous (ND)/ NOT REPETITIVE (NR)	21.8	30.6	36.1	39.5	41.8	43.4	3.0	5.3	7.2	8.5	9.5	10.1
Dangerous (D)/NR	11.5	16.3	19.0	20.4	21.6	22.2	0.9	1.4	2.1	2.5	2.7	2.8
Dangerous (D)/ Repetitive (R)	14.9	19.6	22.4	24.0	25.6	26.4	1.2	1.2	2.3	2.3	2.3	2.3
ND/R	24.5	33.8	38.7	41.6	43.5	44.7	3.1	5.6	7.1	8.1	8.9	9.5
N/A	11.2	17.0	21.1	23.5	24.8	25.9	3.4	4.5	5.6	5.6	5.6	5.6
Total	21.6	30.3	35.6	38.9	41.1	42.7	2.9	5.1	6.9	8.2	9.0	9.7

	Number of Years/Percent Recidivated						Number of Years/Percent Recidivated					
Age at Release	1	2	3	4	5	6	1	2	3	4	5	6
0-18	32.1	46.7	56.5	61.3	64.2	66.2	7.5	13.3	15.0	16.8	18.6	18.6
19	34.4	49.6	57.7	62.0	64.6	66.5	6.3	8.9	11.7	13.1	14.3	15.2
20-21	29.6	42.9	50.4	54.8	57.7	59.7	4.3	7.5	10.3	12.3	13.4	14.4
22-24	26.5	38.1	45.2	49.4	52.4	54.4	3.6	6.6	8.8	10.6	11.9	12.6
25-29	24.5	35.3	41.8	45.8	48.5	50.5	3.3	6.3	8.5	10.2	11.2	11.9
30-34	24.5	34.7	40.8	44.6	47.1	49.0	3.2	5.8	7.8	9.3	10.3	11.0
35-39	24.1	33.1	39.0	42.7	45.2	46.9	3.5	5.8	7.8	9.1	10.2	11.0
40-44	22.9	31.2	36.6	40.1	42.6	44.3	2.8	4.9	6.8	8.0	8.8	9.5
45-49	21.2	28.5	33.0	36.1	37.9	39.2	2.9	4.8	6.7	7.8	8.6	9.2
50-54	18.6	24.8	28.3	30.5	32.1	33.1	2.7	4.6	6.0	6.9	7.8	7.9
55-59	16.3	21.0	23.9	25.6	26.8	27.5	3.0	4.3	5.2	5.7	6.6	7.6
60-64	12.5	15.3	17.4	18.4	19.3	19.8	2.1	3.3	3.8	5.0	5.4	5.4
65-69	10.3	13.1	14.3	15.1	15.3	15.6	3.8	4.7	6.6	8.5	8.5	8.5
70+	6.2	7.4	8.2	8.8	9.1	9.3	4.2	5.6	7.0	8.5	9.9	9.9
Total	23.7	33.2	39.0	42.6	45.0	46.7	3.4	5.9	8.0	9.5	10.5	11.2

The vast differences in prison re-entry rates among U.S. citizens, undocumented immigrants, and documented immigrants is clear by looking at their differing criminal conviction histories. Undocumented immigrants have a very high share among those who have been convicted and sentenced to prison once or twice, but U.S. citizens are vastly more likely to have had at least three admissions into the Arizona Department of Corrections system.

Table 7: Criminal History for U.S. citizens, undocumented immigrants, and documented immigrants: Arizona (Each row sums to 100%)				
Number of admissions into Arizona Department of Corrections	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident	Ratio of U.S. Citizens relative to Undocumented immigrants
1	76.5%	22.3%	1.3%	3.43
2	88.9%	10.4%	0.7%	8.55
3	94.3%	5.2%	0.5%	17.98
4	96.8%	3.0%	0.2%	31.84
5	97.6%	2.3%	0.1%	42.55
6	98.4%	1.5%	0.1%	63.74
7	98.7%	1.3%	0.0%	76.39
8	99.1%	0.9%	0.0%	116.55
9	99.0%	1.0%	0.0%	97.67
10	99.5%	0.5%	0.0%	188.68
11	99.3%	0.7%	0.0%	139.69
12	99.3%	0.7%	0.0%	144.38
13	99.2%	0.8%	0.0%	129.00
14	100.0%	0.0%	0.0%	
15	96.4%	1.4%	2.1%	67.50
16	100.0%	0.0%	0.0%	
17	97.6%	2.4%	0.0%	41.00
Total	88.1%	11.2%	0.7%	7.88

A significant number of U.S. citizens just keep cycling through the Arizona prison system. 24.76% of U.S. citizens convicted in Arizona had served in the Arizona Department of Corrections at least five times. That simply isn't the case for undocumented immigrants, where only 2.95% of them had the same prison history.

Number of admissions into Arizona Department of Corrections	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident	Ratio of U.S. Citizens relative to Undocumented immigrants
5 or more times	24.76%	2.95%	0.08%	8.40
6 or more times	16.44%	1.53%	0.04%	10.75
7 or more times	10.54%	0.78%	0.02%	13.45
8 or more times	6.65%	0.36%	0.02%	18.30
9 or more times	3.97%	0.20%	0.01%	19.80
10 or more times	2.38%	0.08%	0.01%	30.38

It is remarkable that undocumented immigrants make up such a large share of the prison population given that they show such a low recidivism rate and have a relatively low number of admissions to prison. Unlike U.S. citizens, thus it is rarely the same undocumented immigrants going in and out of prison. Thus a much larger share of undocumented immigrants are committing crime compared to U.S. citizens than would normally be inferred from just looking at undocumented immigrants share of those entering prison.

While undocumented immigrants are convicted of more serious crimes and face longer prison terms, that is more than offset by the younger ages at which undocumented immigrants tend to be convicted. Nor does it seem likely that the different criminal histories result from undocumented immigrants being more difficult to catch or having a greater tendency to reform after prison. After all, young undocumented immigrants have a high incarceration rate, so it isn't obvious why their incarceration rate for any further crimes should then fall so much relative to U.S. citizens once they have served time in prison.

As to the alternative that the undocumented immigrants are reformed after their first or second time in prison, the low rate of recidivism seems impossibly low and has no parallels for any other groups. How can dangerous convicts with repetitive behavior have a recidivism rate of about two percentage points? Nor does it seem likely that

gang-affiliated undocumented immigrants would have a recidivism rate that is just a fourth of the rate of U.S. citizens who are in gangs.

Further evidence on this last point comes from Mexican politicians who complain about the crime committed by those criminals deported back to their country after they have served their time in prison.²⁴

The most likely explanation for the low recidivism rate is that many undocumented immigrants don't return to Arizona or the U.S. when they are deported after being released from prison.

This also has additional implications for how hard it is to catch undocumented immigrants who commit crime. It is more difficult for police to identify criminals who have no criminal record. For example, people who have previously been convicted of crime have their DNA and fingerprints in law enforcement databases. This then provides yet another reason why the numbers presented here likely underestimate the amount of crime committed by undocumented immigrants.

The data also provides a unique view into recidivism rates when other factors are accounted for. A simple Logit regression examines the recidivism rate by the convict's sixth year after release (Table 9). The estimates account for citizenship, gender, race, whether the convict committed a crime that injured someone, the weapon used, suspected gang membership, the age at release from prison, the number of days incarcerated, and fixed effects for the year of release and jurisdiction that the inmate came from. The estimates are interpreted as the odds of recidivism relative to that for white female U.S. citizen who has no weapon, wasn't a gang member, and who didn't injure anyone.

The most striking findings are that illegal aliens, older releasees, and people serving longer sentences even when the age of release is accounted for have lower recidivism rates. A ten-year increase in age lowers the odds of recidivism by 12%. Gang members, Hispanics who are born in the US, and Native Americans have much higher recidivism rates. For example, the odds of someone suspected of being a gang member recidivating are 169% higher.

The estimates imply that the odds of an undocumented immigrant recidivating are 30% lower than for a U.S. citizen. If the person is an undocumented Hispanic immigrant, the odds of them recidivating are over 50% lower.

²⁴ Diane Macedo, "U.S. Worsens Mexican Violence by Returning Criminal Aliens to Border Cities, Mayors Say," Fox News, September 29, 2010 (<http://www.foxnews.com/us/2010/09/28/mexican-lawmakers-say-worsening-mexico-violence-returning-criminals.html>).

An F-test for the first estimate shows that Hispanics who were born in the US have a much higher recidivism rate than those who aren't born in the US is significant at the 0.0000 level. It is clear that the key factor here isn't whether someone is Hispanic, but whether they are from the US or not. While the odds of recidivism are 25% higher for Hispanics born in the US, the odds are 31% lower for those born in another country. This provides evidence that those deported are much less likely

Table 9: Explaining Differences in Recidivism Rates: Logit regression to see if convict recidivates by the sixth year after they are released from prison (Also accounts for year and jurisdiction fixed effects and felony class type)		
Variable	Coefficient	Absolute Z-statistic
Undocumented Immigrant	-.364	2.51**
Documented Immigrant	-.157	0.42
Male	-.059	1.40
Black	.0497	1.18
Native American	.186	3.42***
Hispanic Born US	.2197	6.52***
Hispanic Not Born US	-.368	2.43**
Asian	-.194	0.54
Race Other	-.075	0.42
Injury	.0456	0.66
Weapon - Gun	-.031	0.43
Weapon - Knife	-.131	1.17
Weapon - Other	-.069	0.85
Weapon - Unknown	.0183	0.38
Weapon - vehicle	-.0034	0.04
Suspected Gang member	0.988	2.73***
Age at release	-.0123	7.83***
Number of days incarcerated	-.00013	5.04***
Observations	334,629	
Log likelihood	-27968.325	
Chi Square	1768.51d	
* Statistically significant at the 10 percent level for a two-tailed z-test.		
** Statistically significant at the 5 percent level for a two-tailed z-test.		
*** Statistically significant at the 1 percent level for a two-tailed z-test.		

The Age Distribution of Incarcerated Criminals by Citizenship Status

While we know that undocumented immigrants are disproportionately likely to be convicted of crimes than citizens or documented immigrants, one question is how that varies with age. The issue of age is particularly relevant given the debate over Deferred Action for Childhood Arrivals (DACA), which raises questions about the age distribution of convicts. To be eligible for DACA, undocumented immigrants have to be born after June 15, 1981 and entered into the U.S. since June 15, 2007.²⁵ By the end of June 2017, the eligible ages for undocumented immigrants was between the age of 15 and those who were two weeks past their 36th birthday. DACA also has education and criminal history requirements, though we don't have information on educational background for those who are prisoners. As to criminal history, the fact undocumented immigrants tend to commit just one or two crimes means that criminal histories are much less useful in distinguishing undocumented immigrants than the rest of the population.

The Migration Policy Institute provides an age distribution of the undocumented population for the U.S. that indicates that 47% are from 15 through 35 years of age and 45.7% are 36 and older.^{26,27} In contrast, the same percentages for the Arizona legal populations are 28.1% and 49.9% respectively. Some of the gap for the 15 to 35 age group arises from there being very few undocumented immigrants under the age of 15 (only 7.3% of all undocumented immigrants). This occurs because many undocumented immigrants had children who were born in the United States.

²⁵ U.S. Citizenship and Immigration Services, Department of Homeland Security, "Consideration of Deferred Action for Childhood Arrivals (DACA)," <https://www.uscis.gov/archive/consideration-deferred-action-childhood-arrivals-daca>. See also Migration Policy Institute, "Deferred Action for Childhood Arrivals (DACA) Data Tools," Data Hub, <http://www.migrationpolicy.org/programs/data-hub/deferred-action-childhood-arrivals-daca-profiles>.

²⁶ The age ranges provided by the Migration Policy Institute don't quite match what we are looking for so we assumed that the number of people per year were constant within their age group ranges. "Profile of the Unauthorized Population: United States," Migration Policy Institute (<https://www.migrationpolicy.org/data/unauthorized-immigrant-population/state/US>).

²⁷ Another estimate from the Migration Policy Institute implies a lower percent of the population who are in the 15 to 35 year old age group and it implies a higher crime rate for them. It puts the number of undocumented immigrants in this range at 1.9 million who arrived in the U.S. prior to 2008. That would imply they represent just 16.8% of the undocumented immigrants in the U.S.. If these young undocumented immigrants entered into the U.S. at the same proportion over time, another 4 percentage points would be added to the total. Assuming that percentage holds true for Arizona, 1.01% percent of the total population are undocumented immigrants from 15 to 35 years old. This number includes those who have not met the education requirement. In addition, "ineligibility due to criminal history or lack of continuous U.S. presence were not modeled due to lack of data. MPI estimates of the DACA-eligible population" (p. 11). Randy Capps, Michael Fix, and Jie Zong, "The Education and Work Profiles of the DACA Population," Migration Policy Institute, August 2017 (available here <https://www.migrationpolicy.org/research/education-and-work-profiles-daca-population>). "Deferred Action for Childhood Arrivals (DACA) Data Tools," Data Hub, <http://www.migrationpolicy.org/programs/data-hub/deferred-action-childhood-arrivals-daca-profiles>.

We calculate shares of the prison population based on the age at which the criminal entered prison. So undocumented immigrants between 15 and 35 make up 2.27% of the total population and 7.94% of convicts. While the legal population between 15 and 35 represents 26.7% of the total population, they account for just 54.7% of the legal population in prison.²⁸ Young undocumented immigrants make up a 71% greater share of their group's share of the prison population relative to their group's share of the general population than the same ratio for legal residents.

A similar calculation can be made for those over 35. Such undocumented immigrants account for 3.22% of the prison population and 2.2% of the general population. In comparison, the legal population accounts for 33.8% of prisoners and 47.4% of the state's total population. Adjusting for the lower crime rate that older people commit, older undocumented immigrants are about 104% more likely to be convicted than the rest of the older population.

Age at admission for prison	Share of total people entering prison by citizenship status		Undocumented immigrants share of those entering prison as a percent of their share of the population (2.27% of population for those 15 to 35 years old and 2.20% of those 36+)
	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	
15-20	5.49%	0.86%	
21-25	16.86%	2.45%	
26-30	16.99%	2.57%	
31-35	15.21%	2.10%	
36-40	12.42%	1.47%	
41-45	9.33%	0.87%	
46-50	6.06%	0.48%	
51-55	3.32%	0.24%	
56-60	1.48%	0.10%	
61-65	0.60%	0.04%	
66-70	0.23%	0.02%	
71+	0.12%	0.01%	
Total percent by citizenship status for those under 36	54.6%	7.97%	251%
Total percent by citizenship status for those at least 36 years of age	33.6%	3.22%	46.3%

²⁸ US Census Bureau, American Fact Finder, Age and Sex, <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Unfortunately, if the goal of DACA is to give citizenship to a particularly law-abiding group of undocumented immigrants, it is accomplishing the opposite of what was intended. As Table 10 shows, DACA age eligible undocumented immigrants are 250% more likely to be convicted of crimes than their share of the population. Those too old for DACA status are convicted at a relatively low rates (45.7% more than their share of the Arizona population).

To put it differently, the actual number of young undocumented immigrants in the Arizona would have to be almost nine times greater than estimated number that researchers have provided before their rate of incarceration would be the same as the general population.

The DACA age eligible undocumented immigrants also commit more serious crimes and serve sentences that are about 9.7% longer than those for U.S. citizens.

As noted previously, given the low rate that crimes are generally reported and solved, many criminals would be eligible for citizenship under DACA and the high share that undocumented immigrants make of those from 15 to 35 years of age who are imprisoned raises real concerns about the over all crime rate for young undocumented immigrants who do not have a criminal record. If undocumented immigrants are even less likely than average to be caught because their victims are reticent to report crimes, this discussion underestimates the problem with DACA age eligible undocumented immigrants.

Table 11: Share of Prisoners from 15 through 35 years of age at age of admission for Arizona by Most Serious Current Offense (Cases where there are at 20 incarcerations for 1985 to June 2017)					
Offense	Number of incarcerations	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident	Percent increase in the undocumented immigrants convicted relative to their average share of the Arizona State Population (assuming that rate is 2.27%)
Smuggling	239	15.9%	84.1%	0.0%	3604.9%
Tampering w/ a public record	45	55.6%	42.2%	2.2%	1760.0%
Marijuana Violation	20,228	64.0%	35.2%	0.8%	1452.3%
Criminal Impersonation	656	69.1%	30.6%	0.3%	1249.8%
Money Laundering	152	64.5%	30.3%	5.3%	1233.2%
Kidnapping	2,260	69.8%	29.6%	0.6%	1202.1%
Illegal control of an enterprise; illegally conducting an enterprise	303	70.3%	28.7%	1.0%	1164.9%
Theft by extortion	63	73.0%	27.0%	0.0%	1088.7%
Conducting a chop shop	48	77.1%	22.9%	0.0%	909.5%
Drive by shooting; forfeiture; driver license revocation	625	77.9%	21.6%	0.5%	851.5%
Use of wire communication or electronic communication in drug related transactions	134	78.4%	20.1%	1.5%	787.6%
Narcotic Drug Violation	16,804	79.6%	20.1%	0.4%	784.8%
Aggravated Driving/DWI	5,263	80.9%	19.1%	0.0%	739.5%
Aggravated DUI	20,615	79.4%	18.8%	1.8%	729.3%

Conspiracy	274	81.4%	18.2%	0.4%	703.9%
Discharging a firearm at a structure	244	82.0%	18.0%	0.0%	694.4%
Duty to give information and assistance; alcohol or other drug screening	62	82.3%	17.7%	0.0%	681.6%
Manslaughter	1,950	83.4%	15.8%	0.8%	595.8%
Facilitation	45	84.4%	15.6%	0.0%	585.3%
Cont. sexual abuse of a child	26	84.6%	15.4%	0.0%	577.7%
Discharge Firearm in City Limit	397	84.4%	14.6%	1.0%	543.6%
Dangerous Drug Violation	16,774	84.9%	14.5%	0.5%	540.5%
Participating in or assisting a criminal syndicate	325	84.6%	14.5%	0.9%	537.1%
Unsworn Falsification	21	85.7%	14.3%	0.0%	529.3%
Accidents involving death or physical injuries; failure to stop; driver license revocation; restricted privilege to drive; alcohol or other drug	401	85.5%	14.2%	0.2%	526.2%
Sexual Assault	1,115	85.1%	14.2%	0.7%	524.2%
2 nd degree murder	1,159	85.2%	13.9%	0.9%	512.0%
1 st degree murder	1,513	85.6%	13.9%	0.5%	511.4%
Burglary in the 1 st degree	1,391	85.6%	13.5%	0.9%	495.4%
Molestation of a child	2,069	86.7%	13.0%	0.3%	472.8%
Possess, Sell, Marijuana	707	87.4%	12.4%	0.1%	448.3%
Sexual Abuse	999	87.7%	12.1%	0.2%	433.6%
Promoting prison contraband; exceptions; x-radiation; body scans	2,397	87.2%	12.1%	0.8%	431.1%
Negligent Homicide	535	86.5%	12.0%	1.5%	427.0%
Armed Robbery	8,660	87.6%	11.9%	0.4%	425.5%
Stalking	144	88.2%	11.8%	0.0%	420.1%
DUI Liquor/Drugs/VPRS/Combo	69	87.0%	11.6%	1.4%	410.8%

Solicitation	35	88.6%	11.4%	0.0%	403.5%
Endangerment	4,402	87.9%	11.3%	0.7%	398.4%
Taking identity of another person or entity	1,010	88.0%	11.0%	1.0%	384.1%
Dangerous or deadly assault by prisoner or juvenile	82	87.8%	11.0%	1.2%	383.5%
Sexual Exploitation of a Minor	294	88.4%	10.9%	0.7%	379.5%
Participating in or assisting a criminal street gang	185	87.6%	10.8%	1.6%	376.2%
Involving or using minors in drug offenses	65	87.7%	10.8%	1.5%	374.4%
Disorderly Conduct	2,313	89.1%	10.3%	0.6%	355.2%
Possession & Sale Narcotic	1,482	89.7%	10.3%	0.0%	351.8%
Escape 1 st Degree	49	89.8%	10.2%	0.0%	349.5%
Sexual Conduct with a Minor	2,629	89.4%	10.2%	0.5%	347.4%
Theft Means of Transportation	7,407	89.5%	10.1%	0.3%	346.7%
DWI License Suspend- Revoke	4,799	90.0%	10.0%	0.0%	340.6%
Possession of burglary tools	2,706	89.4%	9.9%	0.7%	337.9%
Aggravated Assault	26,019	89.6%	9.9%	0.5%	336.7%
Unlawful use of means of transportation	6,634	89.7%	9.9%	0.4%	335.6%
Interference with monitoring devices	51	90.2%	9.8%	0.0%	331.9%
Taking identity of another person or entity	92	90.2%	9.8%	0.0%	331.0%
Unlawful Imprisonment	476	90.3%	9.7%	0.0%	325.7%
Trafficking Identity	83	89.2%	9.6%	1.2%	324.6%
Attempt to Commit	21	90.5%	9.5%	0.0%	319.6%
Flight from Law in A Vehicle	3,055	90.0%	9.4%	0.6%	315.3%

Misconduct involving weapons	7,413	90.2%	9.2%	0.6%	305.9%
Driving While Intoxicated	864	91.0%	9.0%	0.0%	297.7%
Riot	68	89.7%	8.8%	1.5%	288.7%
DWI Liquor or Drugs	274	91.2%	8.8%	0.0%	285.9%
Luring a minor for sexual exploitation	58	89.7%	8.6%	1.7%	279.8%
Burglary in the 2 nd degree	10,249	91.6%	8.1%	0.3%	255.0%
Theft	25,933	91.9%	7.9%	0.2%	249.9%
Forgery	6,657	92.1%	7.7%	0.2%	240.1%
Possession and sale of a vapor-releasing substance containing a toxic substance	600	92.2%	7.7%	0.2%	237.7%
Burglary in the 3 rd degree	11,840	92.2%	7.5%	0.3%	228.9%
Aggravated taking identity of another person or entity	268	91.0%	7.5%	1.5%	228.8%
Securing the proceeds of an offense	41	90.2%	7.3%	2.4%	222.3%
Prisoner assault with bodily fluids	69	92.8%	7.2%	0.0%	219.2%
Criminal possession of a forgery device	2,049	92.6%	7.0%	0.3%	209.6%
Criminal Simulation	328	92.7%	7.0%	0.3%	208.9%
Child Prostitution	86	93.0%	7.0%	0.0%	207.3%
Aggravated criminal damage	2,996	92.4%	6.9%	0.6%	205.8%
Computer Fraud	58	93.1%	6.9%	0.0%	203.8%
Threat-Intimidate	394	92.4%	6.9%	0.8%	201.9%
Arson of Structure/Property	321	93.1%	6.5%	0.3%	188.2%
Hindering prosecution in the first degree	245	93.1%	6.5%	0.4%	187.7%
Tamper with Physical Evidence	93	92.5%	6.5%	1.1%	184.2%
Failure to appear in the	202	92.1%	6.4%	1.5%	183.5%

first degree					
Cruelty to animals	47	91.5%	6.4%	2.1%	181.2%
Fraud & False Statements to Obtain Benefit	47	93.6%	6.4%	0.0%	181.2%
Obstruct Criminal investigation	47	93.6%	6.4%	0.0%	181.2%
Public Sexual Indecency	174	93.7%	6.3%	0.0%	178.5%

Comparison to Federal data

About 13% of prisoners are in the federal prison system,²⁹ and it would be a mistake to use state prison systems to infer much about the federal system as the types of crimes committed by federal prisoners differ dramatically from those in state prisons. At the end of 2017, there were a total of 37,557 confirmed non-U.S. citizens under the supervision by the Federal Bureau of Prisons and 35,334 (or 92 percent) were undocumented immigrants.³⁰ Undocumented immigrants make up almost one-fifth of Federal inmates, substantially more than their share of those in Arizona state prisons, though differences in what is covered by federal and state law and different emphases on enforcement explain the gap. Part of the higher rate is simply because the fourth largest category of people are in federal prison for are immigration violations (7.3% on November 25, 2017).³¹

There are other major differences in the composition of federal and state cases. For example, 46.3% of federal prisoners have drug offenses as their most serious offense, while that is true for only 22.2% of Arizona state prisoners. The difference between federal and state drug offenders extends well beyond the number of cases, as the federal government tends to concentrate on more serious offenders.

Another major difference involves violent crime: 41.4% of Arizona prisoners most serious offense involved violent crime, but that is true for only 16.1% of federal prisoners. To get an idea of how large this difference actually is, in 2014, there were 317 murder incarcerations in Arizona and only 124 in the entire federal system. Again, the crimes for federal and state offenders differ in other ways, such as where the crime occurred (e.g., on federal property or Indian reservations).

²⁹ E. Ann Carson and Elizabeth Anderson, "Prisoners in 2015," Office of Justice Programs, US Department of Justice, December 2016 (<https://www.bjs.gov/content/pub/pdf/p15.pdf>).

³⁰ Department of Homeland Security, "Alien Incarceration Report Fiscal Year 2017, Quarter 4," Department of Justice, December 21, 2017 (https://www.dhs.gov/sites/default/files/publications/Alien_Incarceration_Report_OIS_FY17_Q4_2.pdf). Federal Bureau of Prisons (https://www.bop.gov/about/statistics/population_statistics.jsp).

³¹ Federal Bureau of Prisons (https://www.bop.gov/about/statistics/statistics_inmate_offenses.jsp).

Table 12: Comparing shares of Undocumented Immigrants in Federal and State Prison Systems			
	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident
Federal Bureau of Prison	79.6%	19.2%	1.2%
Arizona Department of Corrections January to June 2017	88.1%	11.2%	0.7%
Arizona Department of Corrections January 1985 through June 2017	84.3%	12.96%	1.75%

Unfortunately, the U.S. Sentencing commission rarely breaks down the crimes for non-U.S. citizens by whether they are in the country legally or not. Table 13 shows the breakdown for Arizona's crimes by both the total non-citizens and by whether they are in the country legally. The table shows clearly that there are frequently huge differences between the federal and state prison system in terms of the share of crimes committed by non-citizens, with kidnapping and drug possession being the two largest.

Table 13: Percent of crimes committed by non-citizens in 2014				
	Federal*	Arizona	Arizona	
Crime	Non-citizen (Undocumented immigrants and documented immigrants)		Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident
Murder/ Manslaughter	8.9%	14.2%	11.4%	2.8%
Kidnapping	40%	11.6%	10.7%	0.8%
Sexual Abuse	7.5%	17.3%	13.3%	4%
Robbery	2.9%	9.7%	9.56%	0.14%
Drug possession	80.5%	26.3%	24.96%	1.35%
Burglary	0.0%	6.5%	5.8%	0.66%

* U.S. Sentencing Commission, Final Quarterly Data Report, Fiscal Year 2014, Table 26.

Implications for National Violent Crime Rate

What if undocumented immigrants in the entire country committed crime at the same rate that they do in Arizona? Table 14 shows the number of violent crimes for undocumented immigrants if they committed crime at the same rate as the general U.S. population and the number if they committed them at the same rate as undocumented immigrants in Arizona. Over the years 2014 to 2016, there would have been an annual average of about 946 more murders and manslaughters, 5,218 rapes, 8,753 robberies, 23,969 aggravated assaults, 28,284 burglaries, larceny 89,335, and vehicle theft 19,330. For murders, that would represent about 6% more than would otherwise be the case.

Year	Estimated Undocumented Immigrants Population in millions	Number of crimes committed by Undocumented Immigrants if they committed them at same rate as overall population	Number of crimes committed by Undocumented Immigrants if they committed them at same rate as Arizona Undocumented Immigrants	Difference in number of crimes
Murder				
2014	11.1	493	1,346	853
2015	11.0	544	1,486	942
2016	11.3	603	1,647	1,044
			Average	946
Rape				
2014	11.1	2,954	7,857	4,903
2015	11.0	3,128	8,321	5,193
2016	11.3	3,348	8,905	5,557
			Average	5,218
Robbery				
2014	11.1	11,239	19,893	8,654
2015	11.0	11,247	19,908	8,660
2016	11.3	11,617	20,562	8,945
			Average	8,753
Aggravated Assaults				
2014	11.1	25,447	48,399	22,953
2015	11.0	26,191	49,815	23,624
2016	11.3	28,082	53,411	25,330
			Average	23,969
Burglary				
2014	11.1	59,629	89,920	30,291
2015	11.0	54,420	82,065	27,645
2016	11.3	52,984	79,900	26,916

			Average	28,284
Larceny-Theft				
2014	11.1	202,192	293,178	90,986
2015	11.0	196,195	284,483	88,288
2016	11.3	197,181	285,912	88,731
			Average	89,335
Vehicle Theft				
2014	11.1	23,905	42,360	18,455
2015	11.0	24,443	43,313	18,870
2016	11.3	26,770	47,436	20,666
			Average	19,330

Conclusion

To the extent that undocumented immigrants are reluctant to report crimes, the results underestimate undocumented immigrants share of crimes. Still, even given this caution, undocumented immigrants are convicted of crimes at much higher rates than U.S. citizens for they face longer sentences for more serious crimes.

Our reliance on incarceration data means that there is a greater confidence in the accuracy of whether these individuals have committed crime. But it also means that we are underestimating the number of crimes and social costs of criminal activity by undocumented immigrants.

The crime rate by undocumented immigrants also depends on their estimated share of the Arizona population. If there are more undocumented immigrants than claimed, their estimated crime rate goes down. Of course, the opposite might also be true. Yet, the confidence intervals associated with the estimates are very tight.

By lumping together documented and undocumented immigrants, previous research has missed out on the huge differences between these two groups. Just as undocumented immigrants are more likely to be criminals, documented immigrants tend to be very law-abiding. The results here also show that legal Hispanics are more law-abiding than the average Arizonan. The perception that Hispanics are more likely to be criminals arises from not distinguishing between legal and illegal Hispanics.

Undocumented immigrants especially commit crimes at a young age and to be involved in gangs, but then they suddenly stop being convicted. A startling difference is while a large percentage of U.S. citizens who spend their lives cycling through prison, that isn't the case for undocumented immigrant criminals. The implication for that is not only are the crime rates by undocumented immigrants higher than for U.S. citizens, but an even larger percentage of undocumented immigrants spend at least part of their lives in prison. The question that can't be definitely answered here is what happens to these

undocumented immigrant criminals. Do they quickly reform after being in prison or do they leave Arizona? The most plausible reading of the evidence suggests that they are leaving Arizona, presumably to return to their home country, overwhelmingly Mexico.

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Appendix 1: Redoing Table 1 by individual rather than looking at each incarceration

Appendix 1 breaks down the data per person rather than per incarceration as in Table 1. These results show a 43% higher share of undocumented immigrants. There were 5,322 individuals who were not included in this breakdown because their citizenship status changed between incarcerations. The 16% share of incarcerations from 1985 to 2017 implies that undocumented immigrants were convicted at least 233% more often than Arizonans in general.

	1985 to June 2017			
RACE	Total*	US Citizens	Undocumented immigrants: Non-US citizen, Not Legal Permanent Resident	Documented immigrants: Non- US citizen, Legal Permanent Resident
Caucasian	108,980	43.0%	0.4%	0.1%
African- American	26,647	10.3%	0.3%	0.1%
Native American	15,292	6.1%	0.0%	0.0%
Hispanic, US Born†	56,500	22.2%	0.3%	0.0%
Hispanic, not US born	38,668	0.7%	14.2%	0.6%
Asian	770	0.2%	0.1%	0.0%
Other	3,317	0.6%	0.6%	0.1%
Unknown race	131	0.0%	0.0%	0.0%
Total	250,305	83.2%	16.0%	0.9%

* Totals are for those who can be classified as U.S. citizen, undocumented immigrants, or documented immigrants.
† One concern with the table is that there are US born individuals who are listed as not being US citizens or who are attempting to gain citizenship (though this last group is extremely small). We asked Bill Montgomery, the County prosecutor for Maricopa county, and the Arizona Department of Corrections about these cases, and we were told that they involved people renouncing their US citizenship and then returning to the US or whose US citizenship was never claimed. Given the small number of people who have renounced their citizenship, this assumption seems questionable. (<https://www.federalregister.gov/documents/2017/11/02/2017-23885/quarterly-publication-of-individuals-who-have-chosen-to-expatriate-as-required-by-section-6039g>). Possibly they are recording errors, where non-citizens are listed as born in the US or people born in the US are listed as non-citizens. In any case, the number of these cases is very small and does not appreciably alter the results presented here (See Appendix A3).

Appendix 2: Relative shares of Arizona population and prison population by race

By racial group, Asians had by far the smallest share of their population who were convicted of a crime in 2014. Overall, Hispanics were less likely to be convicted of a crime in 2014 than either African-Americans or Native Americans. Given the high rate that undocumented Hispanic immigrants are convicted of crime, the share of crime committed by all other Hispanics appears to be very low. Undocumented Hispanic immigrants account for about 8.8 percentage points of the state population and about 61.5% of the Hispanic share of the prison population. Thus that means the U.S. citizen portion of Hispanics (28.8%) is almost twice the remaining prison population. Note that $23.14\% = 8.8\%(\text{Non-US citizen Hispanics}) * 2.63$ (the higher crime rate for undocumented immigrants).

RACE	Percent of the Arizona Population	Percent of Arizona Prison Population	Ratio (Percent Prison Population/ Percent Entering Arizona Population)
Caucasian	55%	40.4%	0.735
African-American	4.62%	12.2%	2.641
Native American	5.15%	6.95%	1.35
Hispanic	30.48%	38.61%	1.267
Asian	3.19%	0.32%	0.100

Appendix 3: Examining to see if the estimates are sensitive to cases where US born people were listed as either undocumented or documented immigrants.

As noted earlier, while it is possible that some of the convicts who are listed as US born and as either undocumented or documented immigrants renounced their citizenship or never had their citizenship claimed for them, it is also possible that there are data errors. Even if all these cases are in error, the number of cases is still small and they don't appreciably alter the results. To see this, we recalculated the initial numbers on page 6 and those shown in Table 3 by removing all cases where convicts were classified as undocumented or documented immigrants as well as US born.

To see how sensitive the results are to the inclusion of these observations. The Arizona data show that undocumented immigrants account for 11.3% of convictions for first and second most serious offenses (10.7% of the most serious offenses and 13.0% of the second most serious offenses). That represents just a 0.5 percentage point change from what we reported earlier in undocumented immigrants share of criminal convictions.

Offense	Number of incarcerations	US Citizens	Undocumented immigrants: non-US citizen, Not Legal Permanent Resident	Documented immigrants: non-US citizen, Legal Permanent Resident	Percent increase in the undocumented immigrants convicted relative to their average share of the Arizona State Population from 1985 to 2017
Smuggling	310	20.6%	78.1%	1.3%	1,526.3%
Compounding crime	22	50.0%	50.0%	0.0%	941.7%
Unlawful copying or sale of sounds or images from recording devices	27	51.9%	48.1%	0.0%	903.1%
Tampering w/ a public record	63	58.7%	38.1%	3.2%	693.7%
Marijuana Violation	30,208	66.4%	32.6%	1.0%	579.3%
Criminal Impersonation	977	69.1%	30.1%	0.8%	526.9%
Money Laundering	295	64.1%	29.2%	6.8%	507.3%
Kidnapping	3,160	72.3%	26.9%	0.8%	459.7%

Illegal control of an enterprise	549	73.6%	24.8%	1.6%	416.1%
Theft by extortion	92	77.2%	22.8%	0.0%	375.5%
Drive by shooting; forfeiture; driver license revocation	668	78.4%	21.1%	0.4%	339.7%
Discharging a firearm at a structure	294	81.6%	18.4%	0.0%	282.7%
Duty to give information and assistance; alcohol or other drug screening	83	81.9%	18.1%	0.0%	276.5%
Use of wire communication or electronic communication in drug related transactions	204	81.4%	17.6%	1.0%	267.6%
Conducting a chop shop	91	82.4%	17.6%	0.0%	266.3%
Solicitation	47	83.0%	17.0%	0.0%	254.6%
Conspiracy	417	83.5%	16.1%	0.5%	234.7%
Aggravated Driving/DWI	10,452	84.1%	15.9%	0.0%	231.1%
Aggravated DUI	41,243	81.8%	15.7%	2.5%	227.5%
Continuous sexual abuse of a child	77	83.1%	15.6%	1.3%	224.7%
Narcotic Drug Violation	31,949	85.0%	14.6%	0.4%	204.2%
Discharge Firearm in City Limit	470	84.3%	14.3%	1.5%	197.0%
Accidents involving death or physical injuries; failure to stop; driver license revocation; restricted privilege to drive; alcohol or other drug screening	562	84.9%	14.2%	0.9%	196.6%

Manslaughter	2,834	85.2%	13.9%	0.9%	189.6%
Facilitation	59	86.4%	13.6%	0.0%	182.5%
Participating in or assisting a criminal syndicate	428	84.6%	13.6%	1.9%	182.3%
Sexual Assault	1,706	85.9%	13.0%	1.1%	171.1%
Burglary in the 1 st degree	1,753	86.1%	12.9%	0.9%	169.8%
2 nd degree murder	2,204	86.6%	12.8%	0.5%	167.5%
1 st degree murder	1,790	86.5%	12.6%	0.8%	163.0%
Narcotic Possess-Transport	24	87.5%	12.5%	0.0%	160.4%
Molestation of a child	4,885	86.9%	12.1%	1.0%	152.5%
Possess, Sell, Marijuana	865	87.9%	12.0%	0.1%	150.5%
Sexual Abuse	2,021	87.6%	11.7%	0.6%	144.3%
Keeping or residing in house of prostitution; employment in prostitution	27	88.9%	11.1%	0.0%	131.5%
Dangerous Drug Violation	32,665	88.2%	11.1%	0.7%	130.8%
Armed Robbery	10,493	88.7%	10.9%	0.4%	127.3%
Unsworn Falsification	28	89.3%	10.7%	0.0%	123.2%
Negligent Homicide	757	88.0%	10.7%	1.3%	122.9%
Sexual Conduct with a Minor	4,597	88.8%	10.6%	0.6%	121.2%
Promoting prison contraband; exceptions; x-radiation; body scans	3,250	88.7%	10.6%	0.7%	119.9%
Endangerment	6,798	88.5%	10.4%	1.1%	117.6%
Possession & Sale Narcotic	2,070	89.6%	10.4%	0.0%	117.4%
Interference with monitoring devices	88	88.6%	10.2%	1.1%	113.1%

DWI License Suspend- Revoke	7,525	89.9%	10.1%	0.0%	110.1%
DWI Liquor or Drugs	500	90.0%	10.0%	0.0%	108.3%
Involving or using minors in drug offenses	121	89.3%	9.9%	0.8%	106.6%
Dangerous or deadly assault by prisoner or juvenile	101	89.1%	9.9%	1.0%	106.3%
Taking identity of another person or entity	1,841	89.2%	9.9%	0.9%	106.0%
DUI Liquor/Drugs/VPRS/Co mbo	173	88.4%	9.8%	1.7%	104.7%
Possession of burglary tools	3,503	89.8%	9.4%	0.8%	95.1%
Participate Criminal Street	225	89.3%	9.3%	1.3%	94.4%
Child Prostitution	129	89.9%	9.3%	0.8%	93.8%
Escape 1st Degree	65	90.8%	9.2%	0.0%	92.3%
Aggravated Assault	38,181	90.3%	9.1%	0.6%	90.2%
Unlawful use of means of transportation	8,461	90.6%	9.0%	0.4%	87.4%
Obstruction of A Criminal Investigation	67	91.0%	9.0%	0.0%	86.6%
DWI	1,408	91.1%	8.9%	0.0%	85.0%
Sexual Exploitation of a Minor	847	90.7%	8.9%	0.5%	84.5%
Unlawful Imprisonment	685	91.2%	8.8%	0.0%	82.5%
Flight from Law in a Vehicle	4,202	90.9%	8.6%	0.5%	79.5%
Theft Means of Transportation	10,425	91.1%	8.5%	0.4%	77.3%
Assault	95	89.5%	8.4%	2.1%	75.4%

Criminal Simulation	452	91.4%	8.4%	0.2%	75.1%
Misconduct involving weapon	10,545	91.1%	8.4%	0.5%	74.1%
Disorderly Conduct	3,559	91.0%	8.2%	0.8%	71.5%
Securing the proceeds of an offense	49	87.8%	8.2%	4.1%	70.1%
Prescription-only drug	141	92.2%	7.8%	0.0%	62.5%
Burglary 2 nd Degree	13,617	91.9%	7.8%	0.3%	61.6%
Stalking	323	92.3%	7.7%	0.0%	61.2%
Aggravated taking identity of another person or entity	488	91.4%	7.6%	1.0%	58.0%

Appendix 4: Accounting for other Factors by Race and Citizenship

Table A4: Accounting for other factors when looking at differences by race and citizenship, using the Arizona Department of Corrections data from 1985 to 2017 (Logit with fixed effects for year of admission to prison and jurisdiction they committed the crime, absolute z-statistics in parentheses)

Control variable	Race / Race and Undocumented Immigrant									
	Caucasian	Caucasian Undocumented Immigrant	African-American	African-American Undocumented Immigrant	Native American	Hispanic, Not U.S. citizen	Hispanic, U.S. citizen	Hispanic Undocumented Immigrant	Asian	Asian Undoc Immigrant
Gang Member	-1.372 (19.58)	Omitted	-3.17 (11.37)	Omitted	.9994 (12.77)	0.341 (5.17)	1.223 (24.80)	.2796 (4.15)	-.799 (1.13)	Omitted
Number of Days in Prison	.000019 (4.68)	.00008 (2.02)	-2.2e-06 (0.39)	.000096 (1.87)	-.000282 (25.33)	0.0000526 (8.10)	9.02e-06 (1.92)	.000056 (8.58)	.00015 (4.12)	.00014 (2.47)
Age Admitted to Prison	.026 (77.94)	.0416 (10.49)	.0123 (26.30)	.0038 (0.82)	-.0026 (3.87)	-.0229 (40.35)	-.030 (76.74)	-.0271 (45.92)	-.0247 (7.12)	-.0255 (3.46)
Weapon Gun	-.415 (24.48)	-.462 (1.72)	.462 (23.25)	-.052 (0.24)	-.596 (14.00)	-.0599 (2.50)	.248 (15.69)	-.053 (2.18)	-0.79 (0.55)	.1835 (0.77)
Weapon Knife	-.276 (10.87)	.201 (0.71)	.006 (0.17)	-.8635 (1.70)	.504 (12.58)	-.342 (7.69)	.2297 (8.79)	-.3229 (;7.18)	-.163 (0.69)	-.2076 (0.45)
Injured someone	-.136 (9.78)	.215 (1.33)	.0556 (2.96)	-.108 (0.54)	.5139 (21.00)	-.185 (8.17)	.020 (1.36)	-.1885 (8.20)	0.225 (1.86)	.262 (1.22)
Male	-.4097 (41.70)	-.675 (6.06)	.0449 (3.10)	.585 (3.27)	-.421 (23.96)	1.806 (56.73)	.141 (12.31)	1.854 (55.20)	-.496 (6.10)	.843 (2.83)
Chi-Squared	33648	495.04	17917	186.30	17917	21487	20465	21448	361.97	198.7
Log Likelihood	-270719	-3901	-93168	-3598	-93168	-128467	-229500	-124226	-7006	-1955.6