

Supporting Information (S.I.)

Section I. Arrest counts and definitions of detailed crime categories

Table S1. Total arrest counts by group, 2012-2018

year	US-born	Legal Immigrant	Undocumented Immigrant	Total
2012	750,812	83,378	34,145	868,335
2013	747,027	80,441	32,233	859,701
2014	732,337	77,007	30,465	839,809
2015	700,229	73,663	30,430	804,322
2016	705,315	75,762	28,791	809,868
2017	709,487	73,363	28,100	810,950
2018	731,689	75,798	28,888	836,375
Total	5,076,896	539,412	213,052	5,829,360

Table S2. Felony arrest counts by group, 2012-2018

year	US-born	Legal Immigrant	Undocumented Immigrant	Total
2012	222,328	23,357	7,573	253,258
2013	226,482	23,149	7,299	256,930
2014	229,404	22,771	6,958	259,133
2015	230,584	22,115	7,104	259,803
2016	240,120	23,624	7,035	270,779
2017	250,953	23,819	7,152	281,924
2018	269,379	25,329	7,459	302,167
Total	1,669,250	164,164	50,580	1,883,994

To ensure consistency and comparability, our detailed criminal offenses are categorized using the same arrest codes as those adopted by the DPS in generating the Texas Criminal Illegal Alien reports (*See reference 20 in the article*). The exact offense codes, statutes, citations for the crime categories used in our study are available as a spreadsheet in our replication package. Using the DPS classifications, we report aggregate crime counts that are reassuringly close to those reported in DPS publications.* The number of total yearly incidents in our data are shown in the following table S3.

* The aggregate yearly arrest counts in our data have a correlation of 0.99 with the aggregate yearly arrest counts reported by the DPS in their annual Compliance Reports. See https://www.dps.texas.gov/administration/crime_records/pages/crimHistoryRptng.htm

Table S3. Total yearly detailed arrests Texas, 2012-2018

Crime Categories	2012	2013	2014	2015	2016	2017	2018	Category Total
Homicide	1,261	1,216	1,197	1,309	1,373	1,442	1,384	9,182
Assault	99,527	97,934	96,056	97,488	97,334	99,162	106,213	693,714
Robbery	7,427	7,456	7,270	7,261	7,581	7,546	7,178	51,719
Sexual Assault	5,447	5,327	5,189	5,299	5,371	5,718	6,033	38,384
Burglary	27,582	26,229	24,234	21,573	22,538	21,478	20,109	163,743
Theft	101,356	102,822	101,928	89,893	69,211	61,752	61,111	588,073
Arson	625	536	591	611	576	626	639	4,204
Drugs	170,647	175,325	181,014	178,284	199,173	207,774	217,269	1,329,486
Traffic	155,842	149,834	144,799	138,932	140,424	141,859	148,282	1,019,972
Weapons	15,172	15,456	15,164	16,840	19,567	21,600	22,450	126,249
Sexual Offenses	11,820	11,625	10,841	10,823	10,461	10,374	9,743	75,687
Obstructing Police	59,524	59,127	57,333	56,443	59,158	60,427	61,988	414,000
Kidnapping	554	561	598	515	517	738	1,495	4,978
All Others	225,347	218,946	204,823	189,383	186,476	180,185	181,676	1,386,836
Year total	882,131	872,394	851,037	814,654	819,760	820,681	845,570	5,906,227

Since our analysis is focused on felonies, we further rely on the severity level of the offense in CCH to indicate felony offenses. Specifically, we include capital felonies, 1st degree felonies, 2nd degree felonies, 3rd degree felonies, state jail felonies, and unclassified felonies. The felony incidences of these detailed categories are shown in Table S4.

Table S4. Total yearly detailed felony arrests in Texas, 2012-2018

Crime Categories	2012	2013	2014	2015	2016	2017	2018	Category Total
Homicide	1,261	1,216	1,197	1,305	1,367	1,440	1,383	9,169
Assault	40,175	40,612	40,257	41,865	42,869	43,881	47,778	297,437
Robbery	7,304	7,456	7,267	7,257	7,577	7,545	7,175	51,581
Sexual Assault	5,447	5,327	5,188	5,296	5,370	5,716	6,032	38,376
Burglary	19,023	18,724	17,217	15,092	15,166	14,390	13,643	113,255
Theft	25,945	27,575	27,864	26,425	23,007	22,225	22,984	176,025
Arson	621	534	588	608	573	624	638	4,186
Drugs	73,903	77,052	81,071	81,064	90,486	98,928	107,636	610,140
Traffic	19,446	18,385	17,884	18,018	19,202	19,593	20,754	133,282
Weapons	6,748	6,685	6,727	7,238	7,867	8,673	8,747	52,685
Sexual Offenses	6,465	6,025	5,903	5,834	5,747	5,609	5,465	41,048
Obstructing Police	12,441	12,793	13,507	14,274	15,359	16,524	17,567	102,465
Kidnapping	553	561	597	515	513	591	662	3,992
All Others	37,419	36,739	36,551	37,481	37,931	38,504	43,402	268,027
Year total	256,751	259,684	261,818	262,272	273,034	284,243	303,866	1,901,668

Section II. Trends of detailed crime categories

In this section, we examine the trends for the detailed crime categories listed in Table S4. Figure S1 shows that undocumented immigrants are consistently less likely to be arrested for homicides compared to US-born citizens and legal immigrants throughout 2012 to 2018. Similarly, undocumented immigrant crimes rates of assault (S2), robbery (S3), sexual assault (S4), burglary (S5), theft (S6) and arson (S7) are remarkably stable and remain the lowest among the three groups. In general, there is no evidence that undocumented immigrants are likely to be arrested for any detailed categories of violent and property crimes compared to either native citizens or legal immigrants in any year from 2012 to 2018.

Figure S1. Trends of homicide crime rates by citizens, legal immigrants and undocumented immigrants

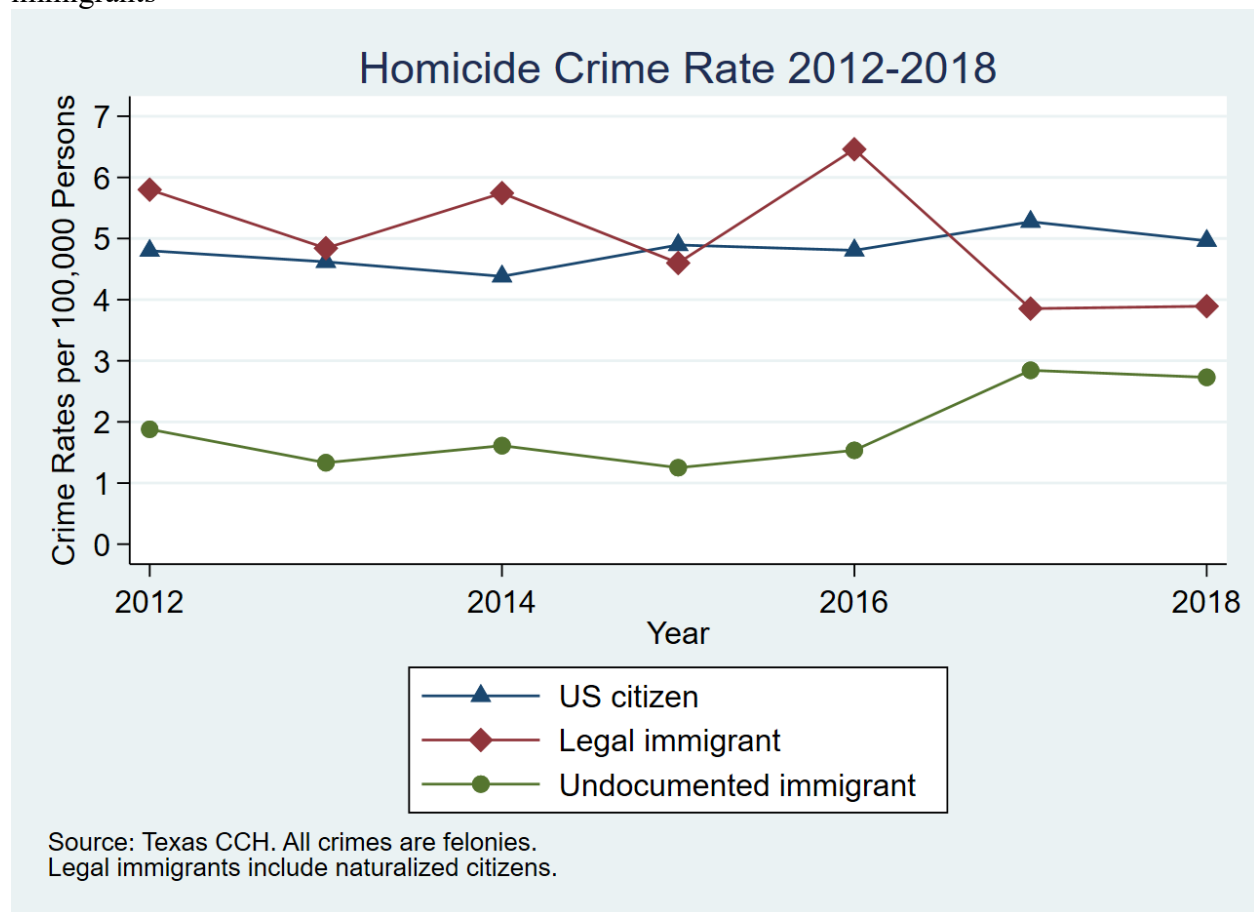


Figure S2. Trends of assault crime rates by citizens, legal immigrants and undocumented immigrants

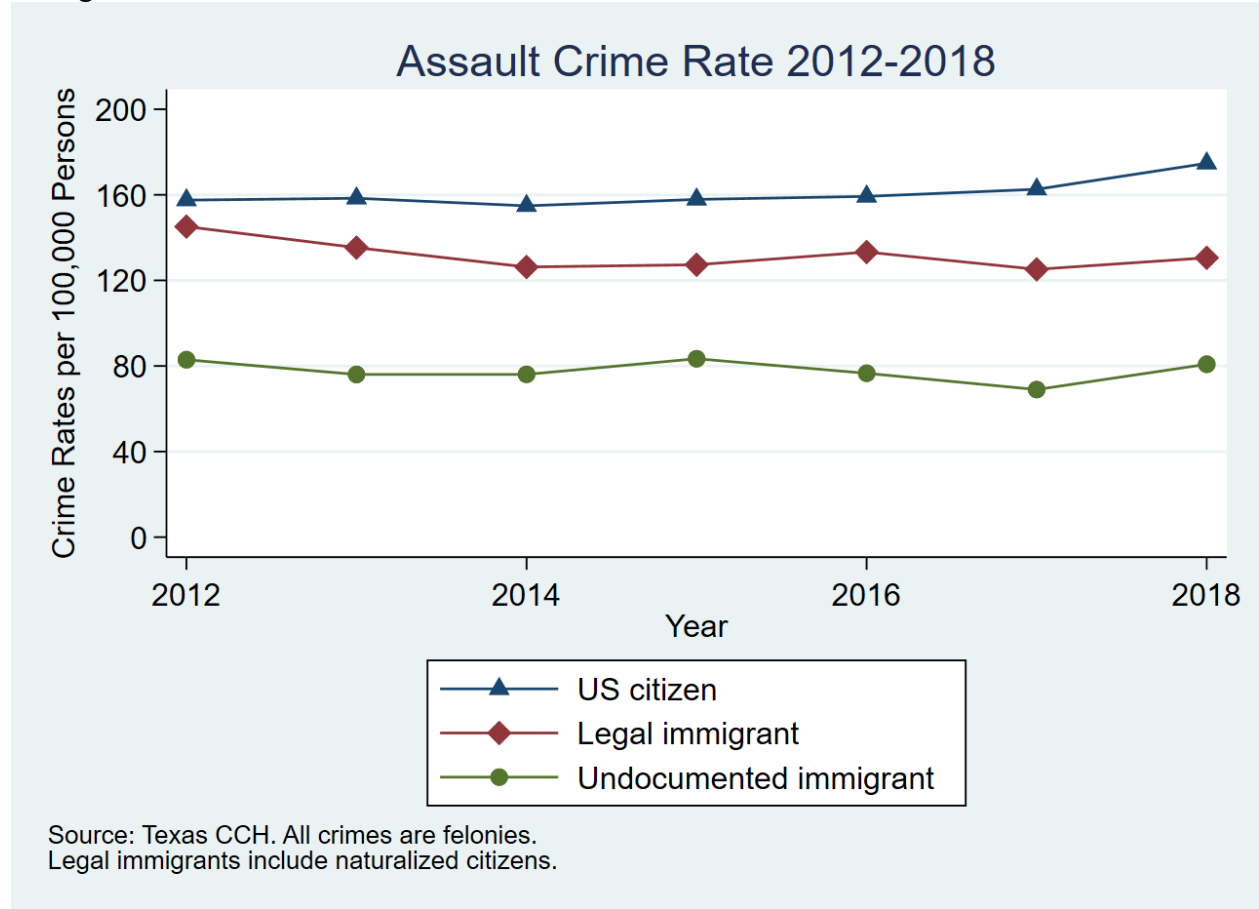
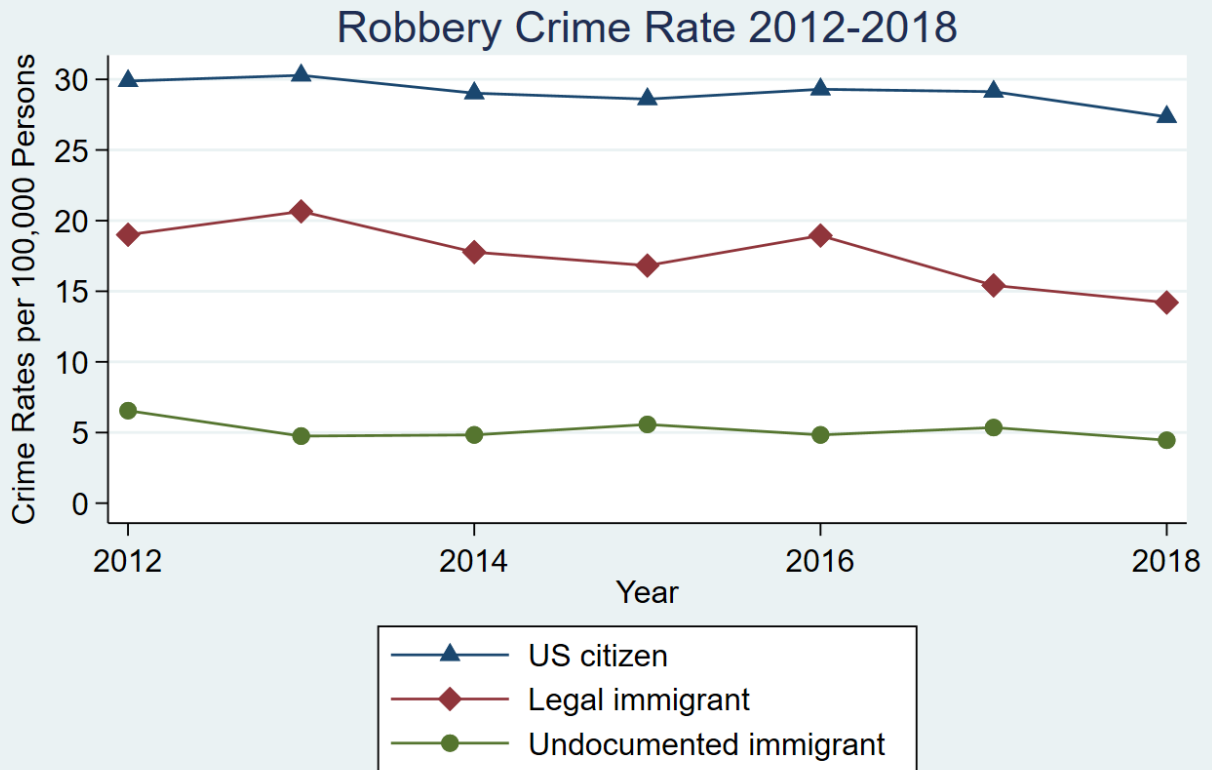


Figure S3. Trends of robbery crime rates by citizens, legal immigrants and undocumented immigrants



Source: Texas CCH. All crimes are felonies.
Legal immigrants include naturalized citizens.

Figure S4. Trends of sexual assault crime rates by citizens, legal immigrants and undocumented immigrants

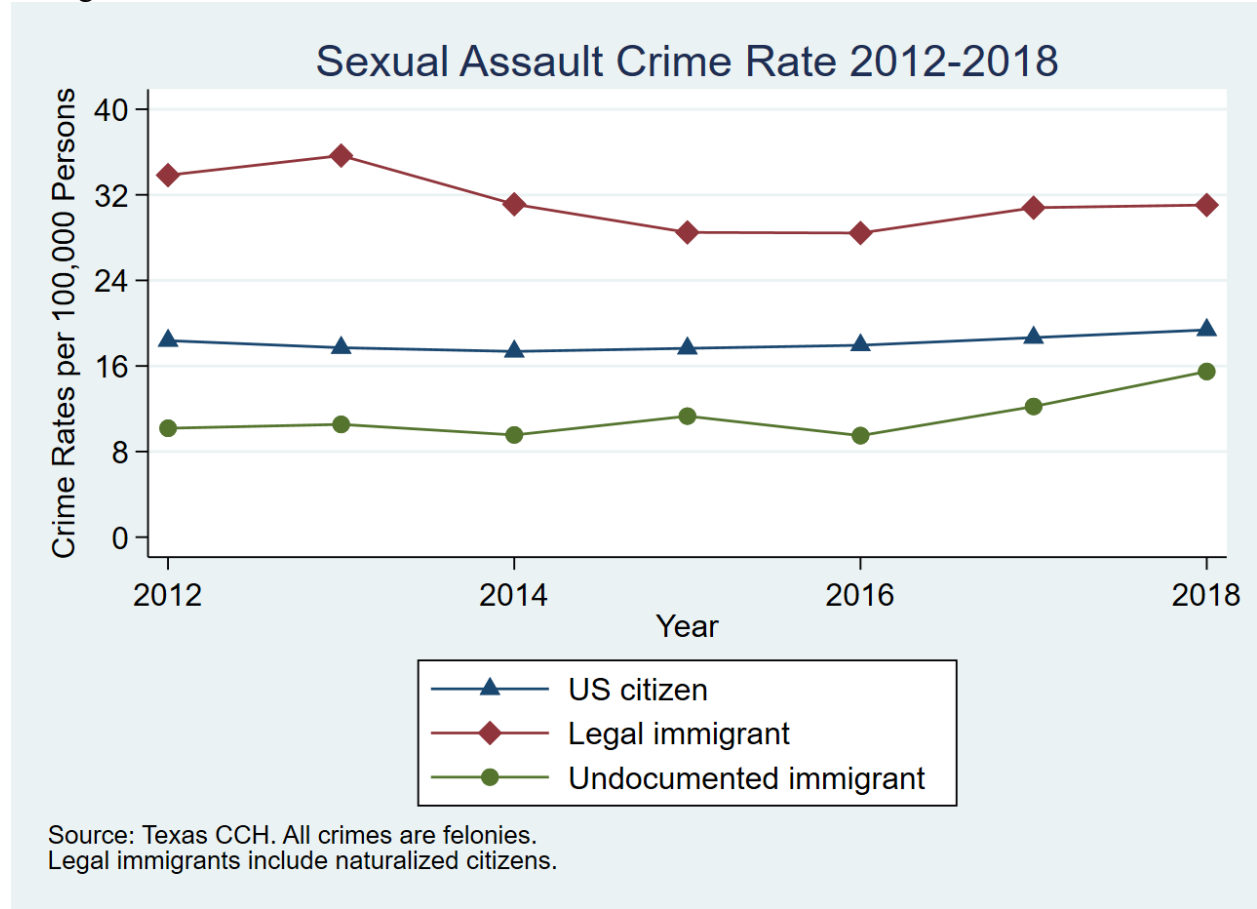


Figure S5. Trends of burglary crime rates by citizens, legal immigrants and undocumented immigrants

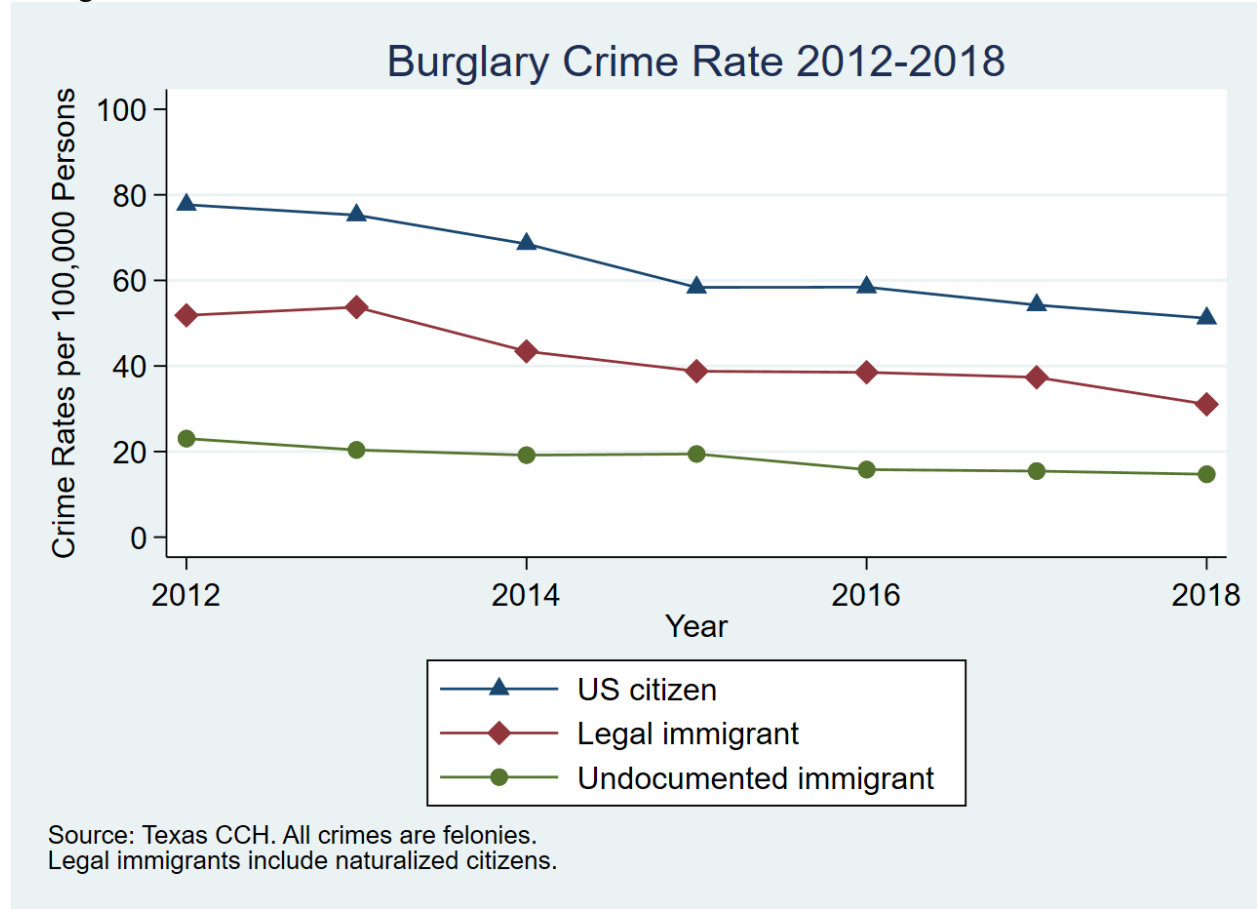


Figure S6. Trends of theft crime rates by citizens, legal immigrants and undocumented immigrants

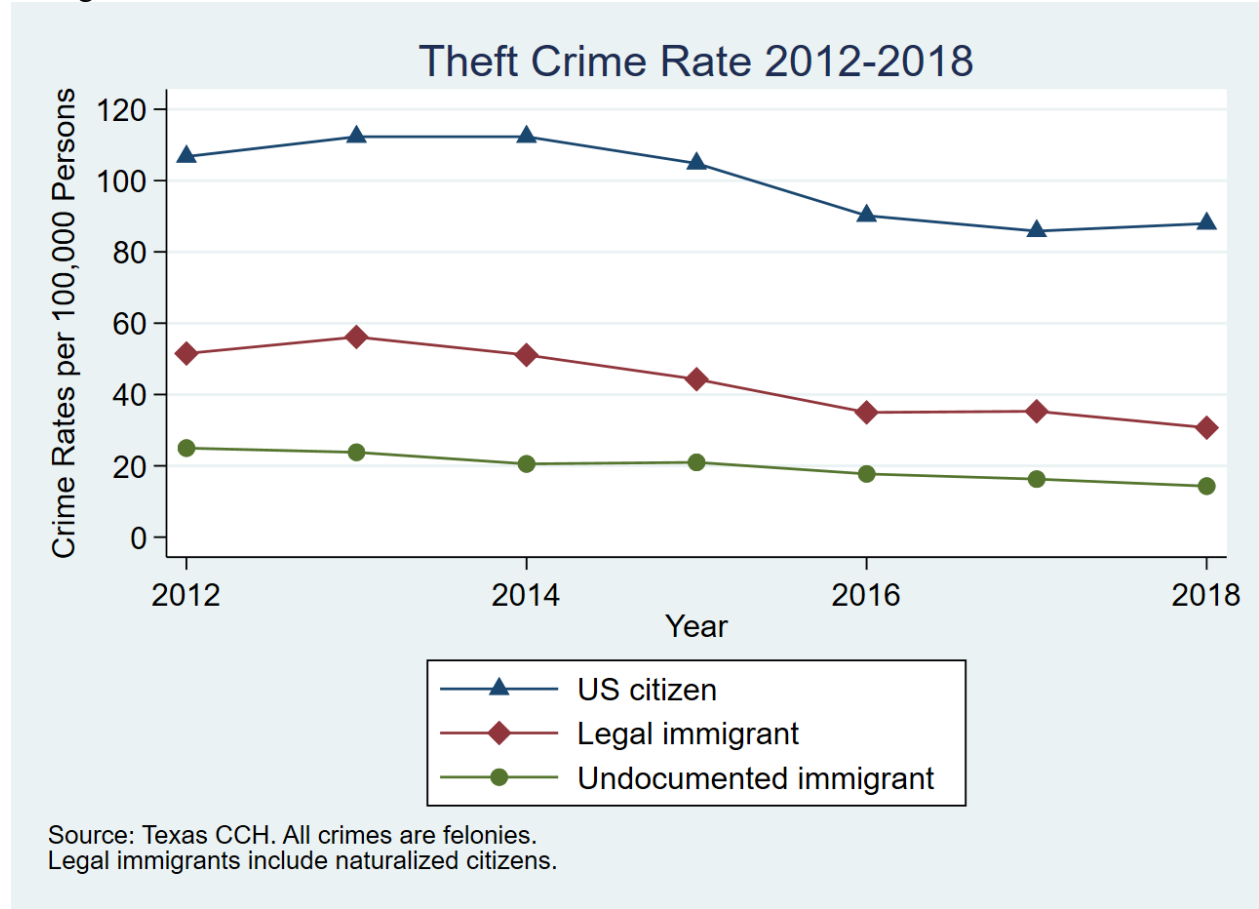


Figure S7. Trends of arson crime rates by citizens, legal immigrants and undocumented immigrants

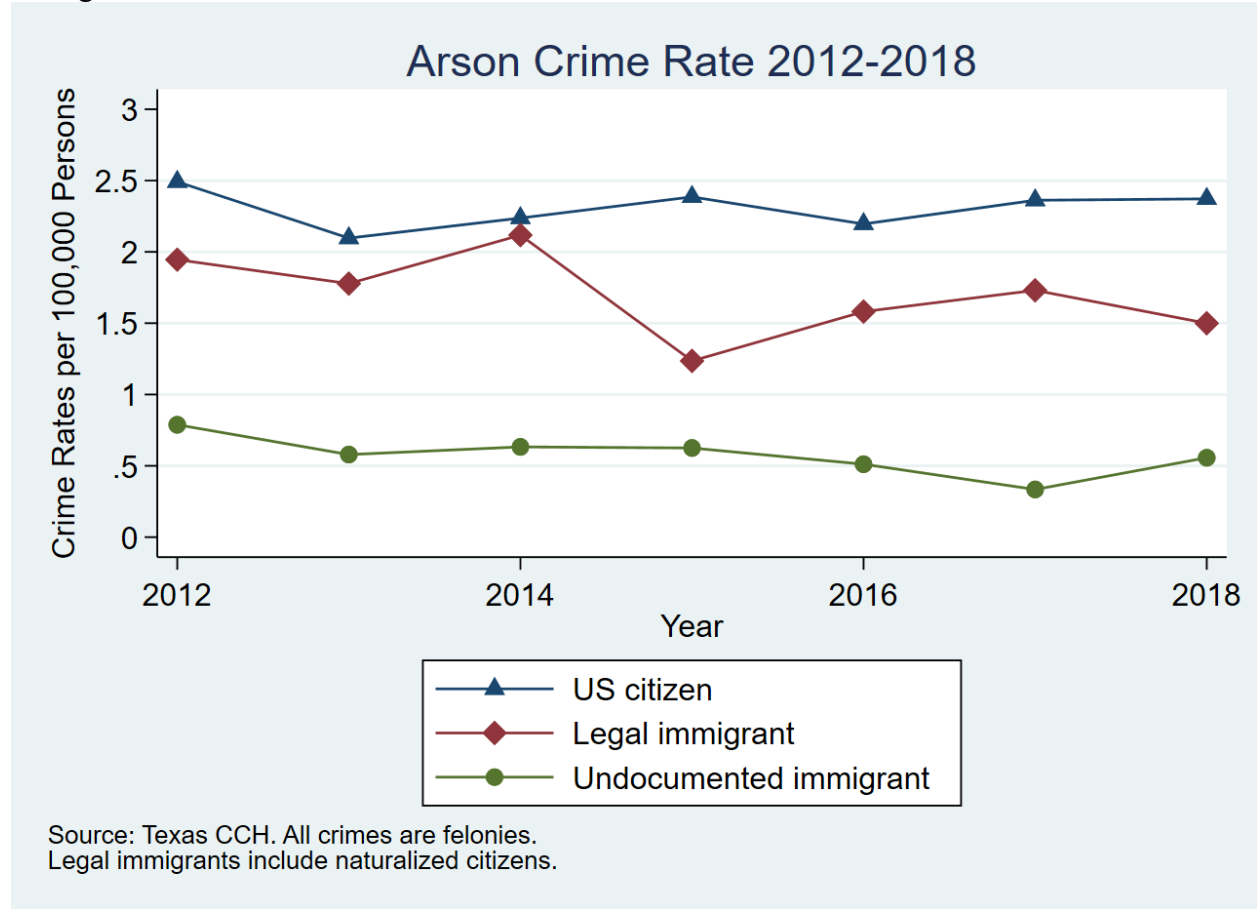


Figure S8. Trends of weapons crime rates by citizens, legal immigrants and undocumented immigrants

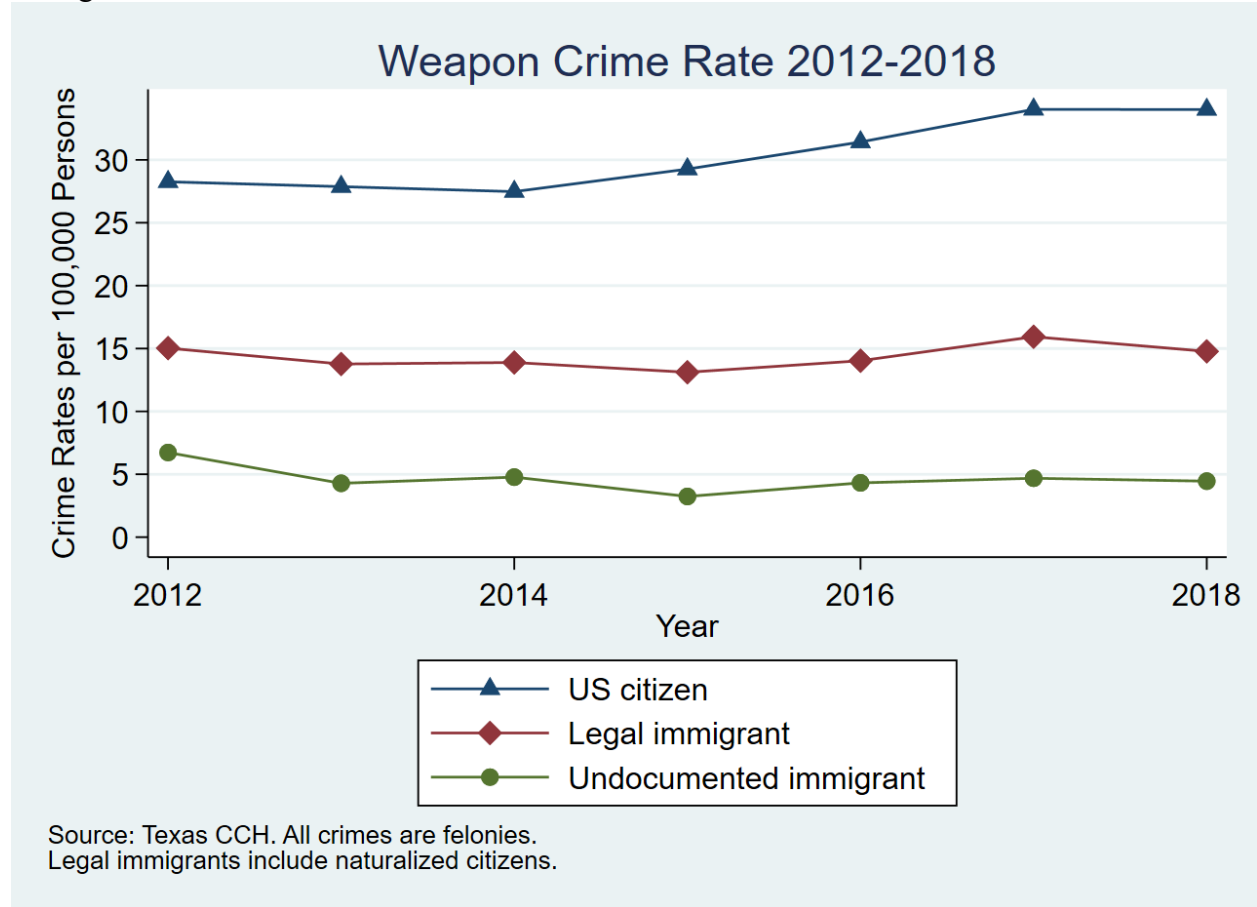


Figure S9. Trends of sexual offense crime rates by citizens, legal immigrants and undocumented immigrants

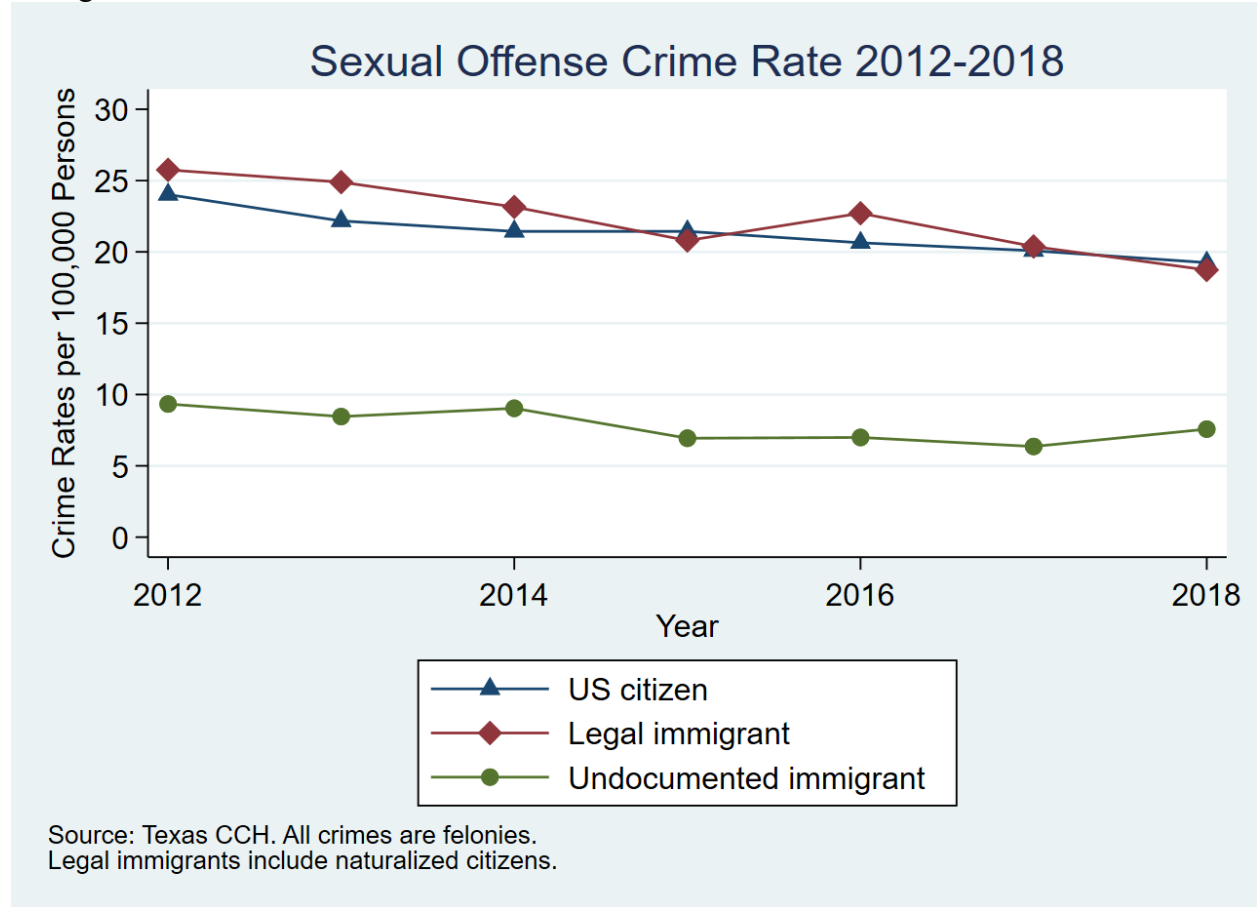
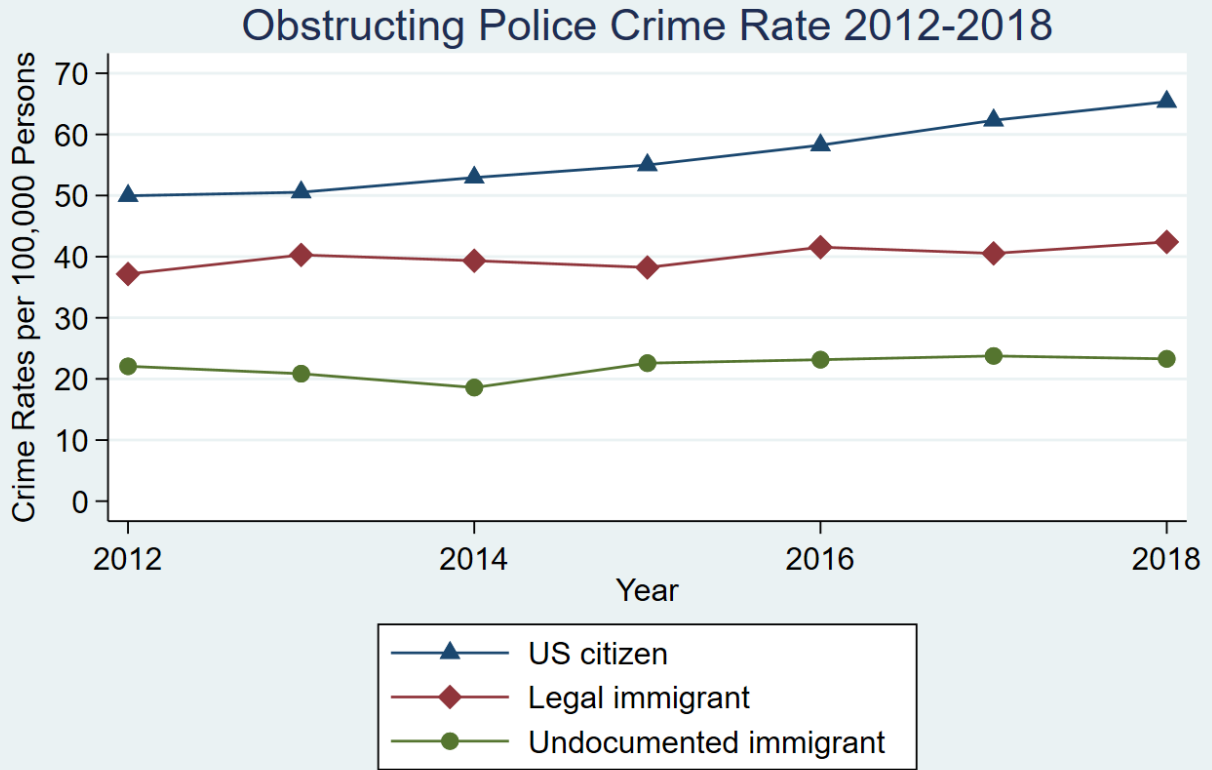


Figure S10. Trends of obstructing police crime rates by citizens, legal immigrants and undocumented immigrants



Source: Texas CCH. All crimes are felonies.
Legal immigrants include naturalized citizens.

Figure S11. Trends of kidnapping crime rates by citizens, legal immigrants and undocumented immigrants

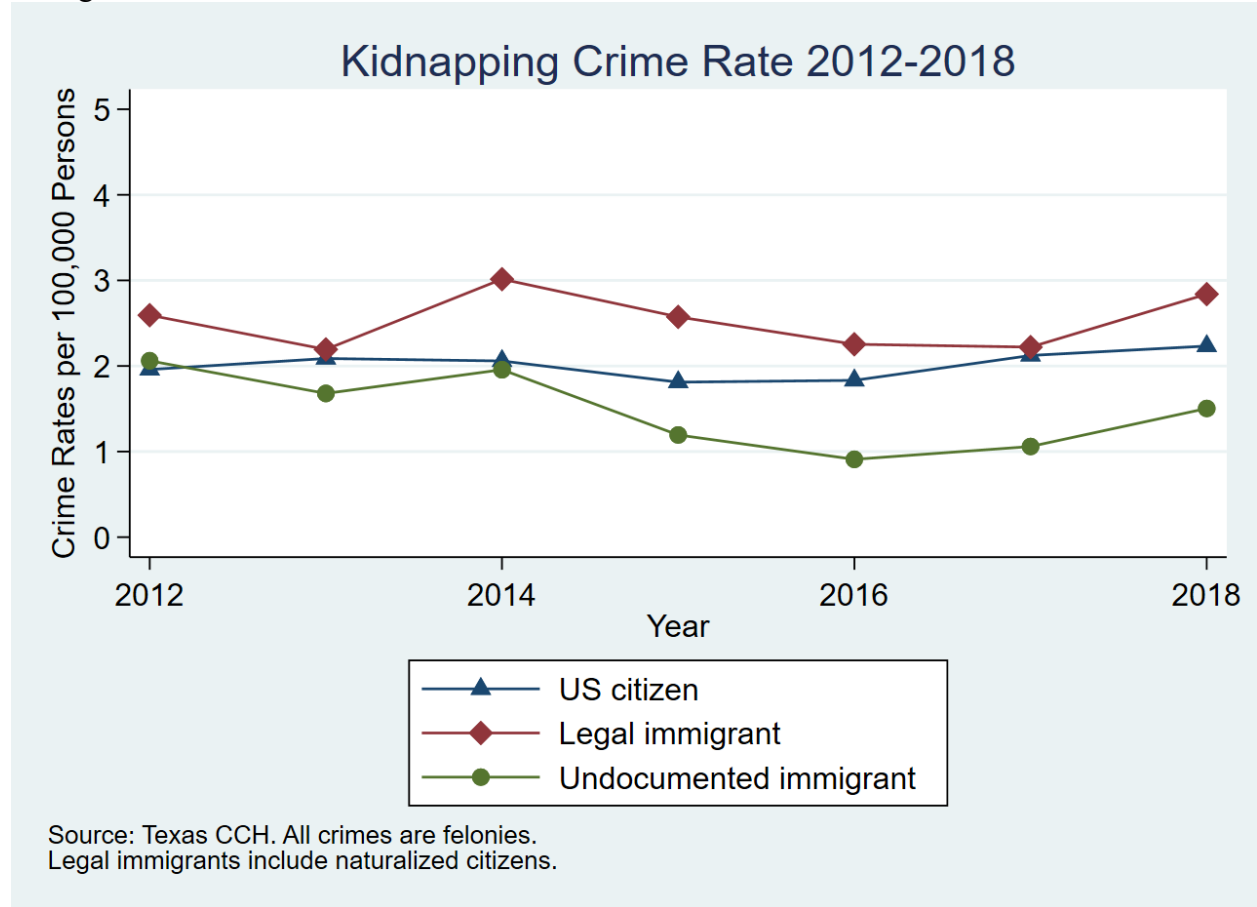
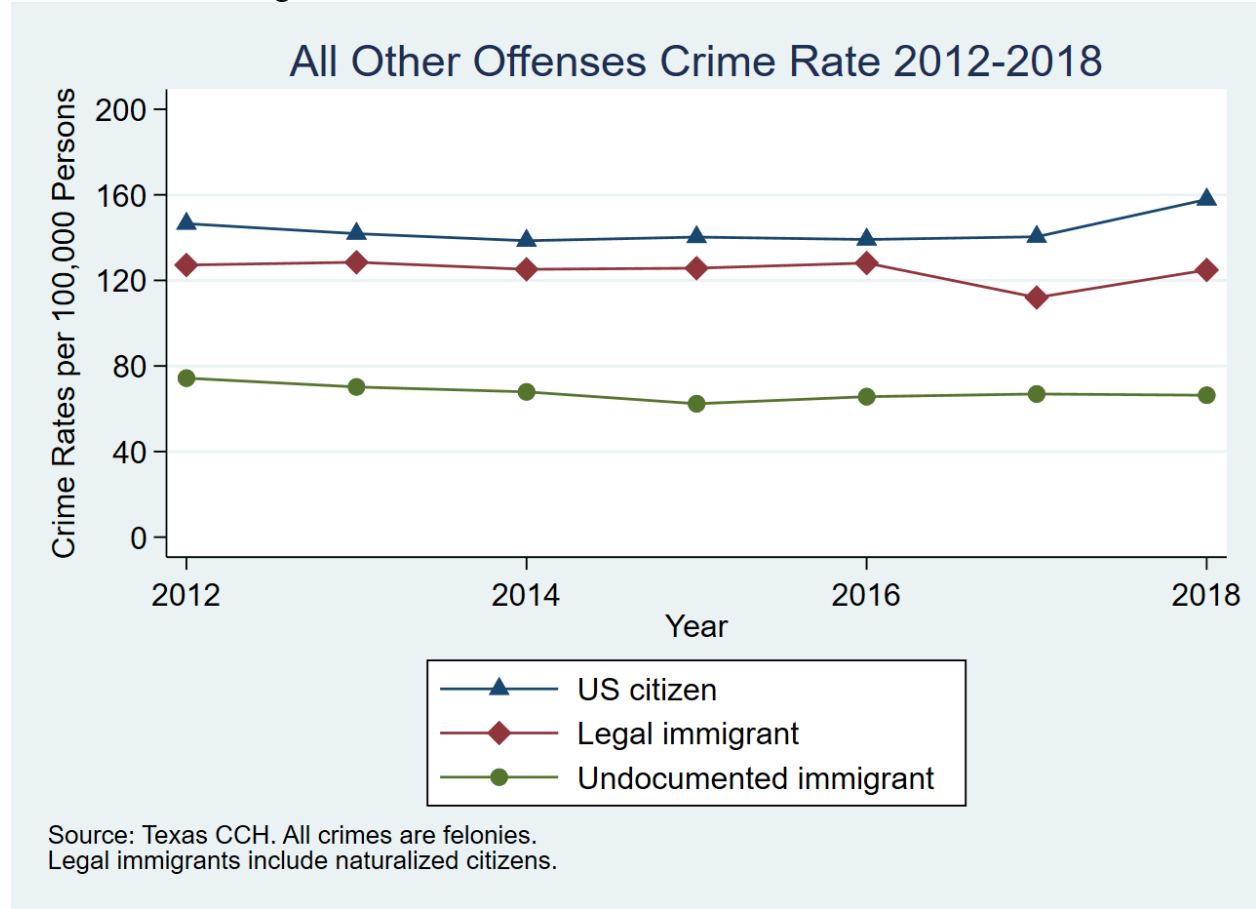


Figure S12. Trends of other felony offenses crime rates by citizens, legal immigrants and undocumented immigrants



Section III. Robustness check using the estimates of undocumented population from the Pew Research Center

Similar to CMS, Pew provides yearly estimates of the size of the undocumented immigrant population. The population estimates by Pew are slightly smaller compared to CMS. Between 2012 and 2017, the Pew estimates were 6.4 percent smaller on average. Table S3 reports the undocumented estimates in Texas according to the Pew and CMS from 2012 to 2018 (2017 is the most current data available from Pew).

Table S5. Estimates of Undocumented Immigrants Population in Texas by Pew and CMS

<u>Year</u>	<u>Pew Estimates</u>	<u>CMS Estimates</u>
2012	1650000	1649000
2013	1650000	1726000
2014	1650000	1737000
2015	1650000	1758200
2016	1600000	1758300
2017	1600000	1792600
2018	Unavailable	1794800

To triangulate our analysis, we used the Pew estimates of the undocumented immigrant population as denominators to calculate the aggregated crime rates. The results are very similar to the results with CMS estimates as presented in the main text. Here, we show the crime rates from 2012 to 2017 by violent, property, drug and traffic felonies, as well as by detailed violent and property crime types. Crime trend plots are available in the replication package.

Figure S13. Total aggregated crime rates, replication with Pew estimates as denominators

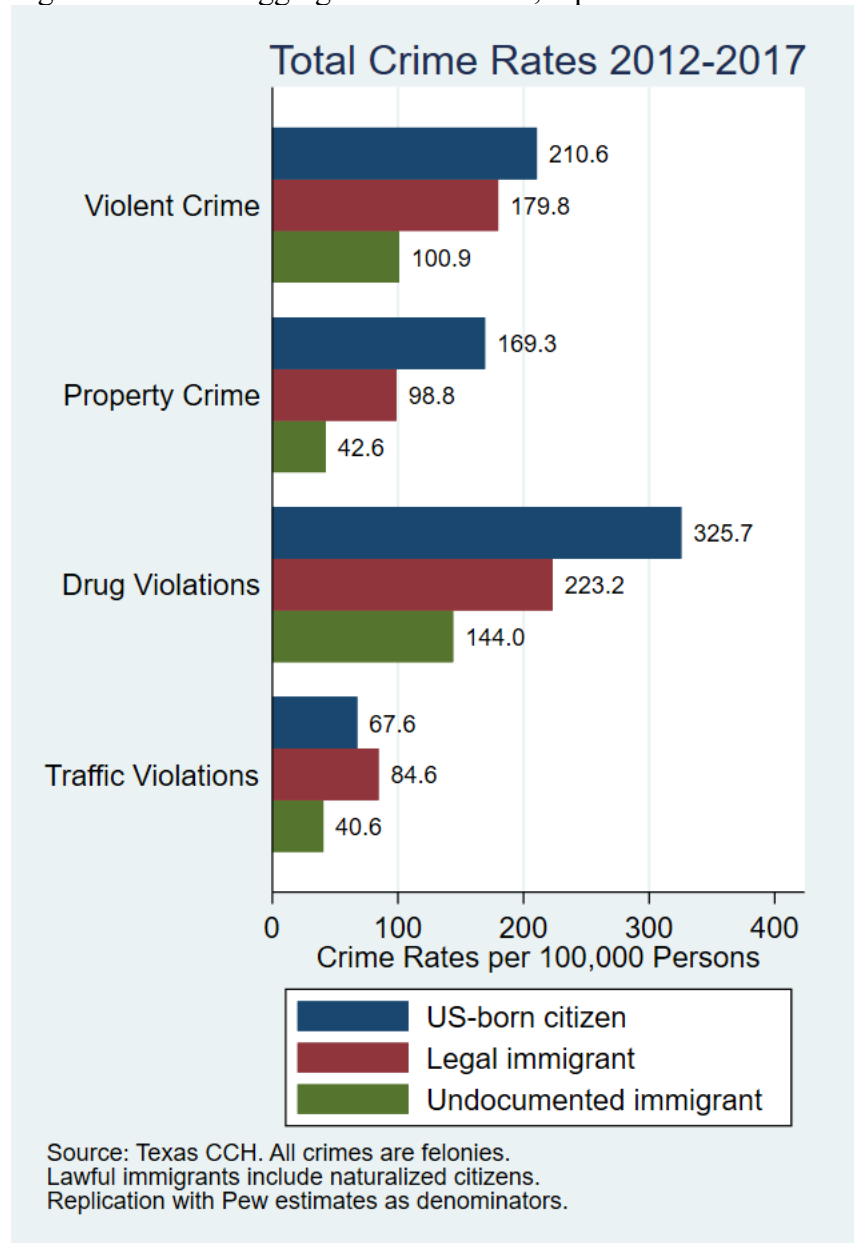
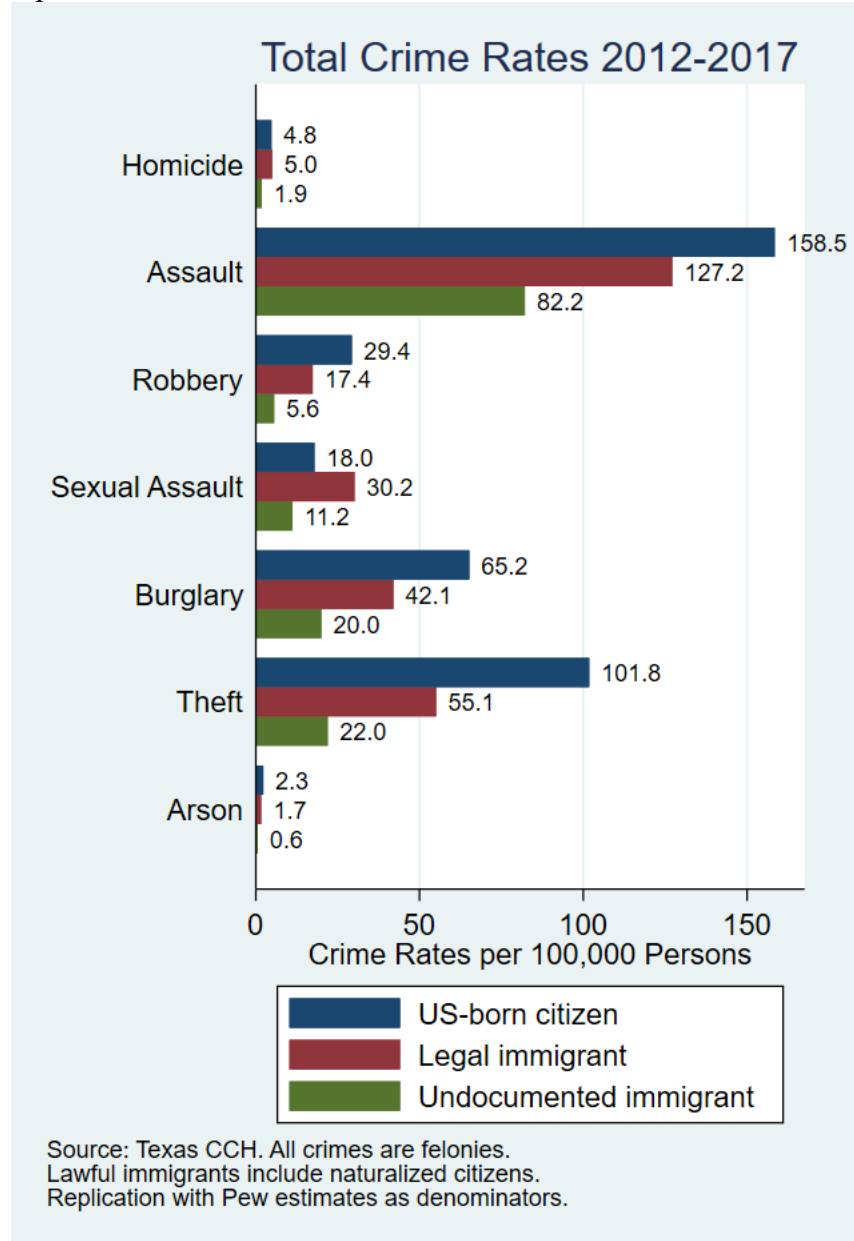


Figure S14. Total aggregated rates by detailed categories of violent crime and property crime, replication with Pew estimates as denominators



Section IV. Replication with conviction rates

In this section, we replicate the main crime rate comparison using conviction data. A potential concern with using arrest charges as an indicator of crime would be if one group is more likely to be arrested regardless of the amount of underlying criminality. Attempting to correct for differential contact, we followed every felony arrest charge through its criminal case processing to determine whether it resulted in any conviction or deferred adjudication. When using conviction rates, the overall crime rates will necessarily decrease because most arrest charges do not result in a conviction. Comparing the conviction rates in Figures S15 and S16 to the arrest rates in Figures 1 and 2 in the main text, it is clear that the conviction data yields substantively identical results. Across all crime categories, the conviction rates for undocumented immigrants are substantially smaller than the conviction rates for US-born citizens.

Figure S15. Total aggregated conviction rates

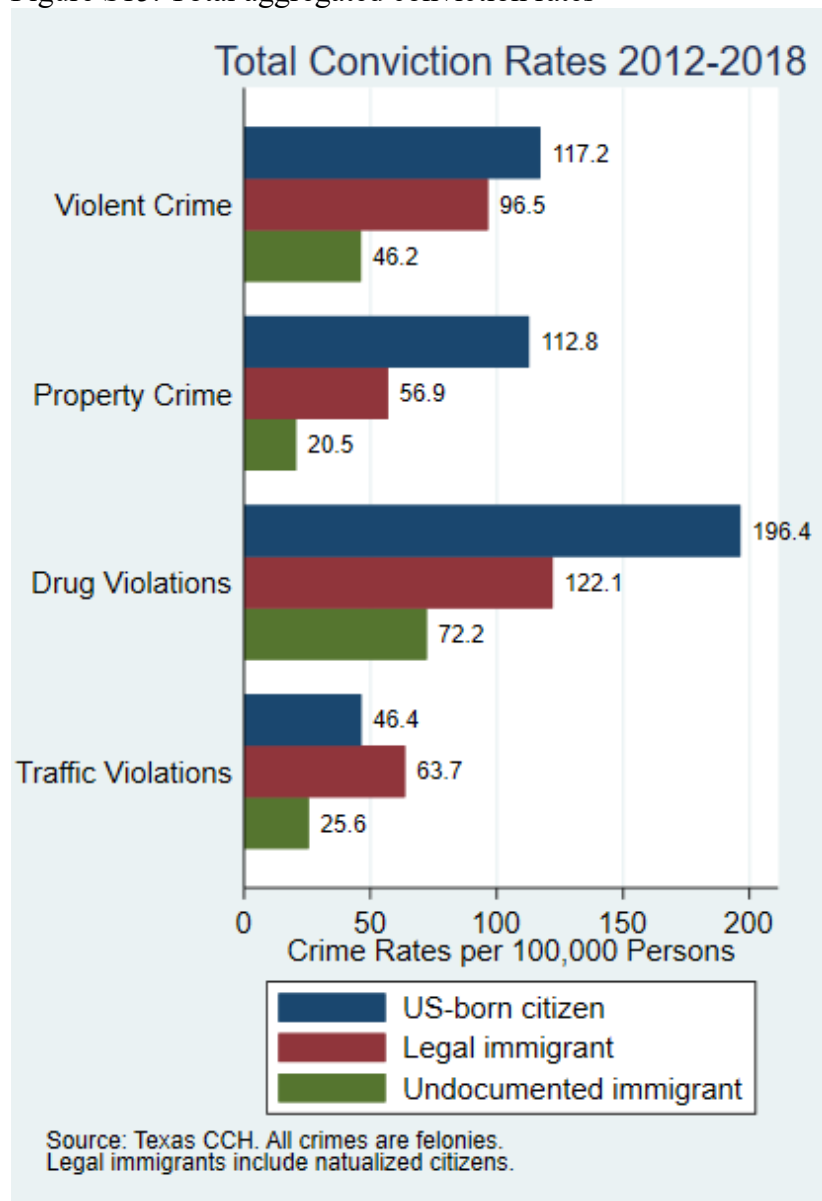
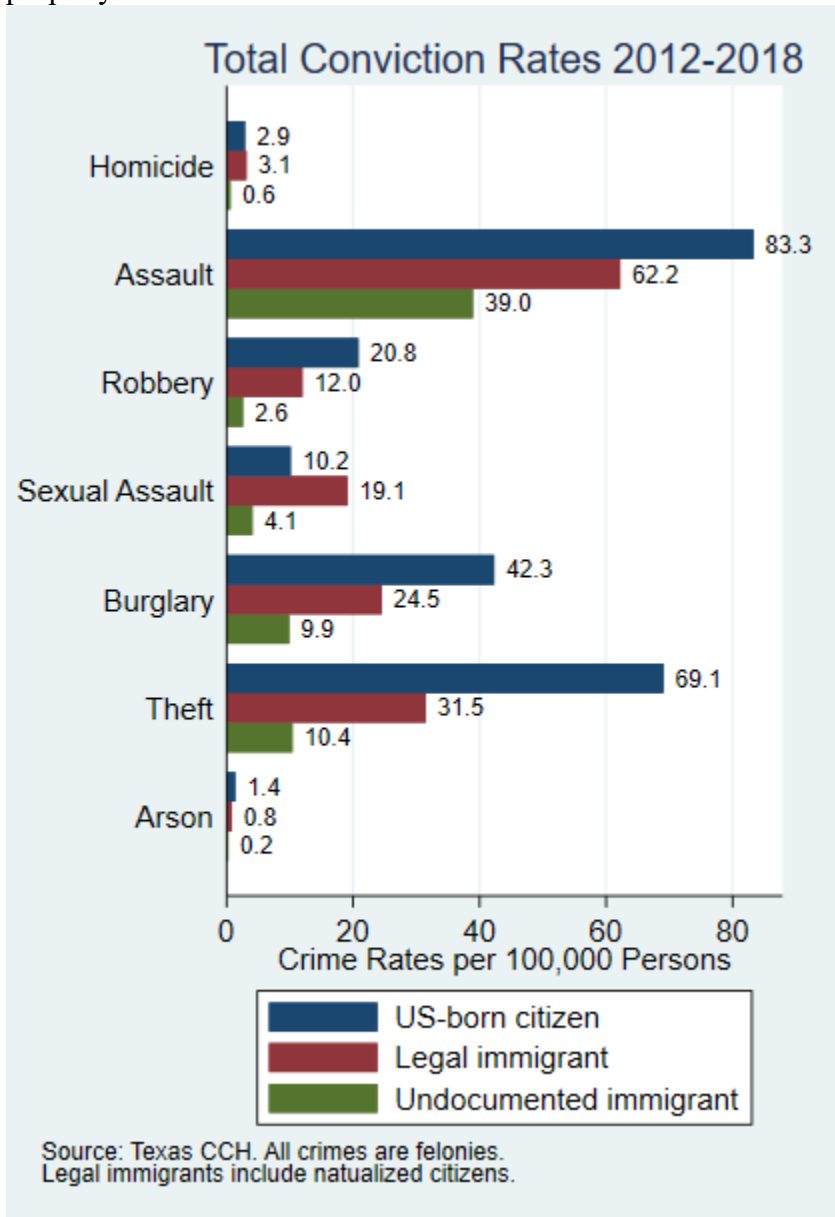


Figure S16. Total aggregated conviction rates by detailed categories of violent crime and property crime



Section V. Detailed results of linear trend and ADF tests

This section presents the full statistical results from linear trend tests and the ADF tests of the monthly data from 2012 to 2018. Table 1 in the manuscript summarizes the coefficients of the month indicator (t) from Table S6 and the rows for “Trend” in Table S7, where the suffixes indicate the number of lagged terms included.

Table S6. Linear trend tests of the percentage of undocumented immigrant arrest

	Total felony	Violent	Property	Drug	Traffic
Month Indicator (t)	-0.002*** (-7.51)	-0.001 (-1.80)	-0.002** (-2.92)	-0.004*** (-7.91)	-0.003*** (-4.73)
Constant	1.066*** (70.64)	1.116*** (49.14)	0.550*** (14.31)	1.173*** (47.86)	1.379*** (38.53)
N	84	84	84	84	84

Notes: t statistics in parentheses
 $^* p < 0.05$, $^{**} p < 0.01$, $^{***} p < 0.001$

Table S7. ADF tests of the log transformed percentage of undocumented immigrant arrests

	Total felony	Violent	Property	Drug	Traffic
L. (ln) Percent Undocumented	-0.956* (-2.64)	-0.845*** (-7.39)	-0.965*** (-8.44)	-0.776 (-2.81)	-0.775*** (-5.10)
LD. (ln) Percent Undocumented	-0.058 (-0.18)			-0.245 (-0.99)	-0.013 (-0.11)
L2D. (ln) Percent Undocumented	-0.026 (-0.10)			-0.141 (-0.69)	
L3D. (ln) Percent Undocumented	-0.012 (-0.07)			0.036 (0.23)	
Trend	-0.002 (-1.98)	-0.001 (-1.59)	-0.002* (-2.30)	-0.003* (-2.52)	-0.003** (-2.77)
Constant	1.014* (2.58)	0.949*** (7.26)	0.515*** (6.88)	0.927** (2.82)	1.077*** (4.95)
N	56	77	77	56	70

Notes: t statistics in parentheses* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The augmented Dickey-Fuller (ADF) test fits this model: $\Delta y_t = \alpha + \beta y_{t-1} + \sigma t + \phi_1 \Delta y_{t-1} + \phi_2 \Delta y_{t-2} + \dots + \phi_k \Delta y_{t-k} + \epsilon_t$. The coefficient of (ln) Percent Undocumented corresponds to the estimate of β in the equation, which reflects whether the time series follows a unit root (random walk) process (the null hypothesis), or stationary process (the alternative hypothesis) after accounting for trends and autocorrelations. LD. (ln) Percent Undocumented, L2D. (ln) Percent Undocumented and L3D. (ln) Percent Undocumented correspond to ϕ_1, ϕ_2 and ϕ_3 , which are the coefficients of the lag terms. The sample sizes differ across models because of the different number of lag terms included. For the stationarity test, the 5% critical Z(t) values are -3.494 (N=56), -3.473 (N=77) and -3.480 (N=70), and the test results can be learnt by comparing the t statistics in parentheses with the corresponding Z(t) values. To evaluate the decrease or increase of the time-series, we rely on the coefficient of the variable Trend, which corresponds to σ in the equation.

Section VI. Misdemeanors

Relative to felonies, misdemeanor arrests are a far more common form of criminal justice contact. In addition, they now play a critical role in immigration enforcement. In 2011, for example, 29 percent of those deported through the Secure Communities program after a local arrest were convicted of only misdemeanors.[†] For these reasons, it is important to consider whether misdemeanor arrests alter the picture of undocumented criminality. By law, local officials must report all Class A and B misdemeanors to the CCH. Class C misdemeanors, which are punishable by a fine only (up to \$500), are not mandatorily reported. Many Class C misdemeanors, however, are voluntarily reported. Over our study period, 3,312,812 Class A and B misdemeanor arrest charges and 694,182 Class C misdemeanor arrest charges were reported in the CCH. Given these reporting distinctions, we examine misdemeanor arrests in three different ways. First, Figure S17 reports arrest rates for all Class A and B misdemeanors from 2012 to 2018 for native-born citizens, legal immigrants, and undocumented immigrants. Figure S18 reports all misdemeanor arrests (including Class Cs) for each group. And Figure S19 reports arrest rates for all felonies and misdemeanors combined. Two findings stand out. First, unsurprisingly, misdemeanor arrest rates are substantially higher for each group (compare to Figure 3 in the main text). Second, the relative comparisons between native-born citizens, legal immigrants, and undocumented immigrants in misdemeanor arrests largely mirror those for felony arrests. That is, native-citizens have the highest misdemeanor arrest rates (variously defined), undocumented immigrants have the lowest rates, and legal immigrants fall in between. Moreover, the gap between undocumented immigrants and native citizens for all misdemeanor comparisons is substantial. Combined, regardless of whether one focuses on misdemeanors or felonies, the evidence consistently suggests undocumented immigrants have lower arrest rates than legal immigrants and native-born U.S. citizens in Texas.

[†] See Waslin, Michele. 2011. *The Secure Communities Program: Unanswered Questions and Continuing Concerns*. American Immigration Council. Washington DC.

Figure S17. Trends of Class A and B misdemeanors crime rates by citizens, legal immigrants and undocumented immigrants

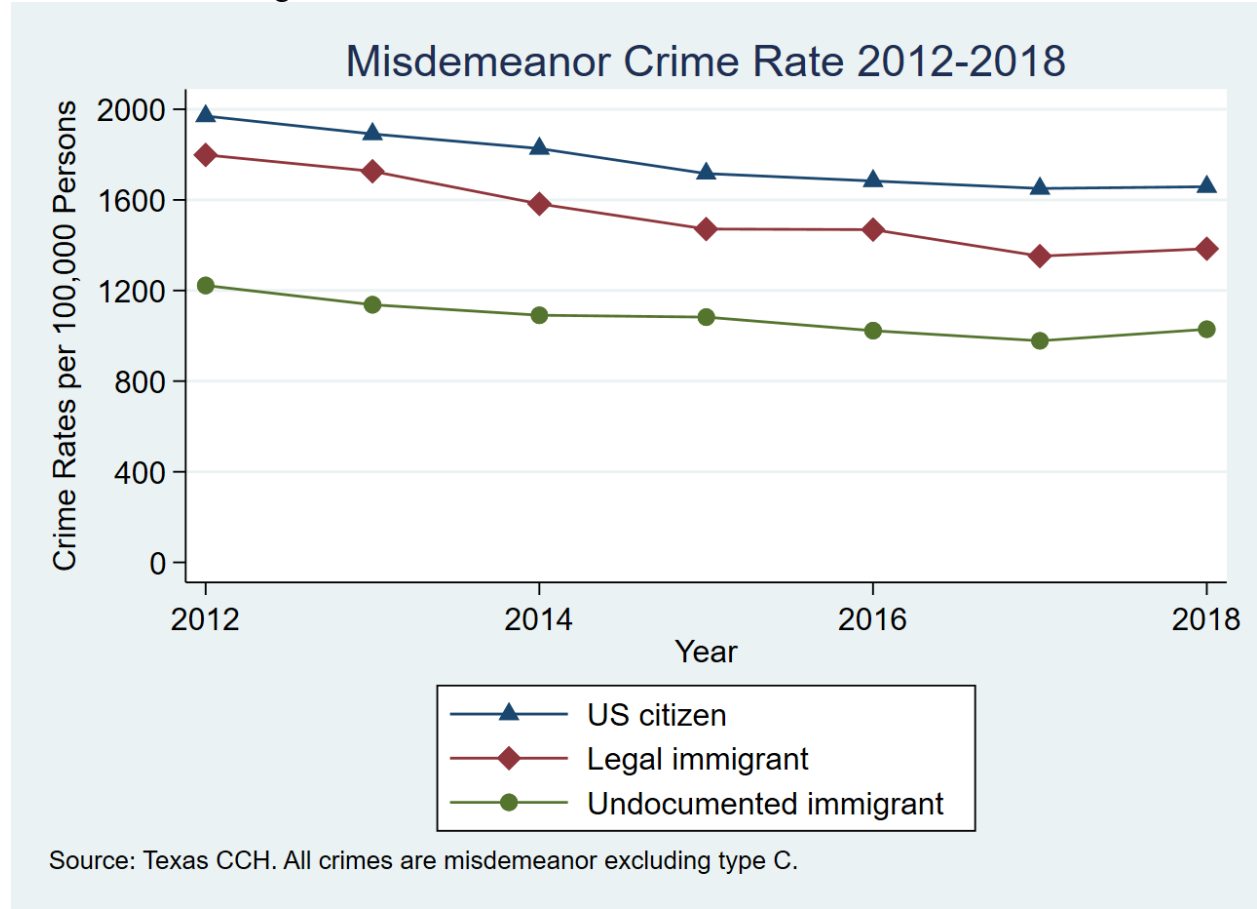


Figure S18. Trends of all misdemeanors crime rates (including Class Cs) by citizens, legal immigrants and undocumented immigrants

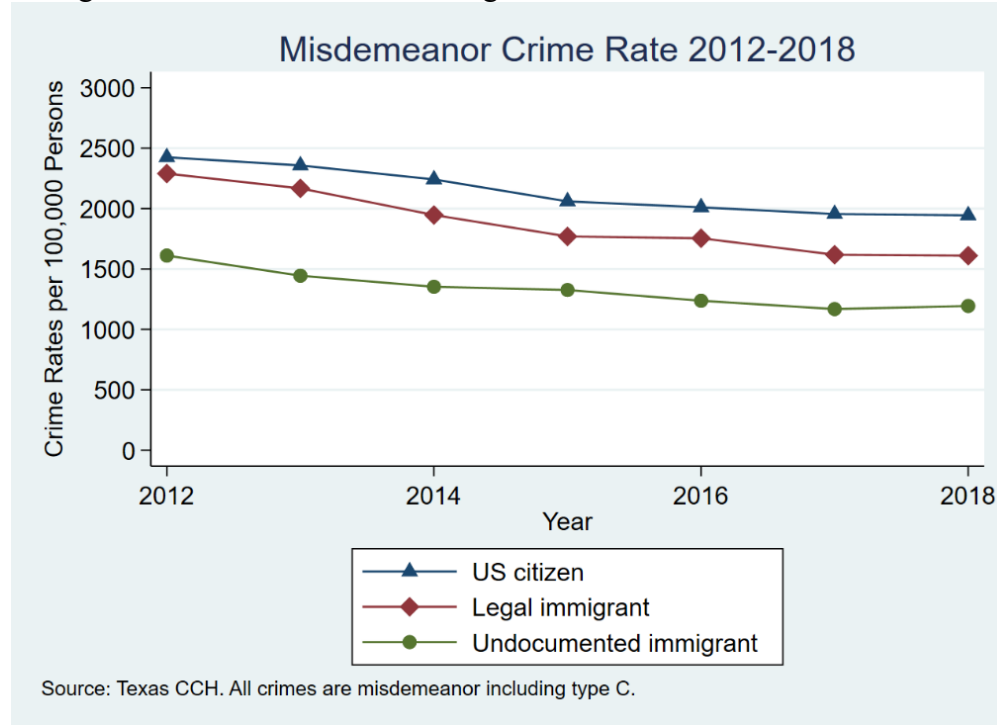
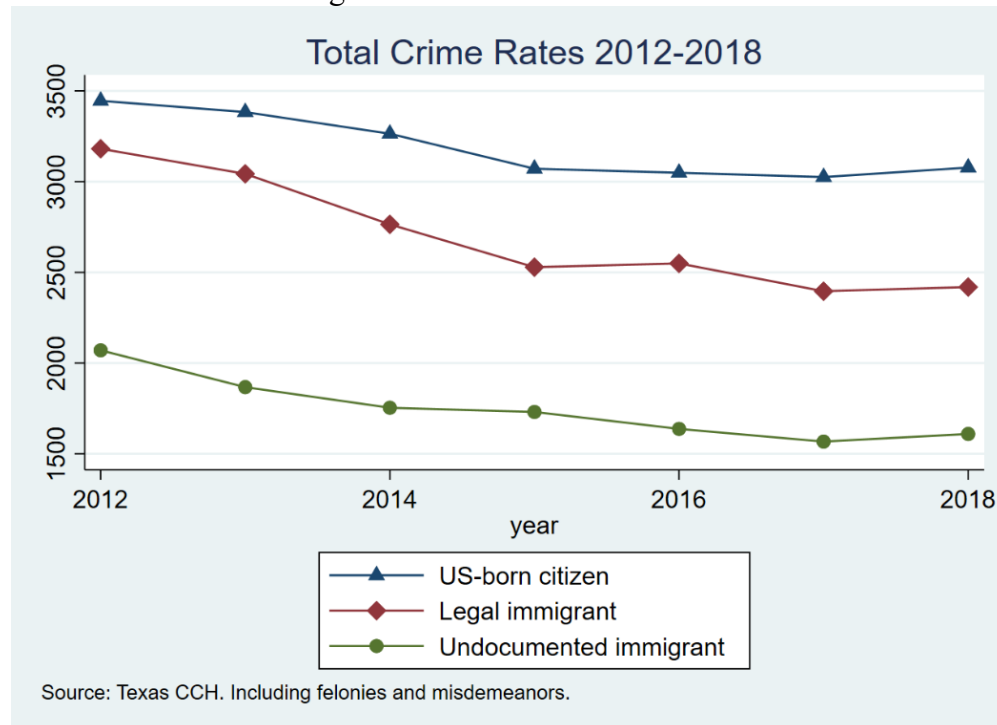


Figure S19. Trends of all felonies and misdemeanors crime rates by citizens, legal immigrants and undocumented immigrants



Section VII. *Naturalized U.S. Citizens*

Legal immigration can be understood as a formal selection process whereby applicants are vetted based on requirements articulated in immigration law. In the case of naturalized citizens, this process involves selection on both residency requirements and a lack of serious criminality. For these reasons, it may be important to consider this group separately from other legal immigrants. We do so in Figures S20-S24 where we report the trends in total, violent, property, drug, and traffic felony arrests between 2012 and 2018 for four distinct groups: native-born U.S. citizens, naturalized U.S. citizens, other legal immigrants, and undocumented immigrants. Though not identical in all cases, the general pattern observed in these figures suggests that felony arrests rates for naturalized citizens are relatively comparable to other legal immigrants.

Figure S20. Trends of total felonies crime rates by native-born U.S. citizens, naturalized U.S. citizens, legal immigrants and undocumented immigrants

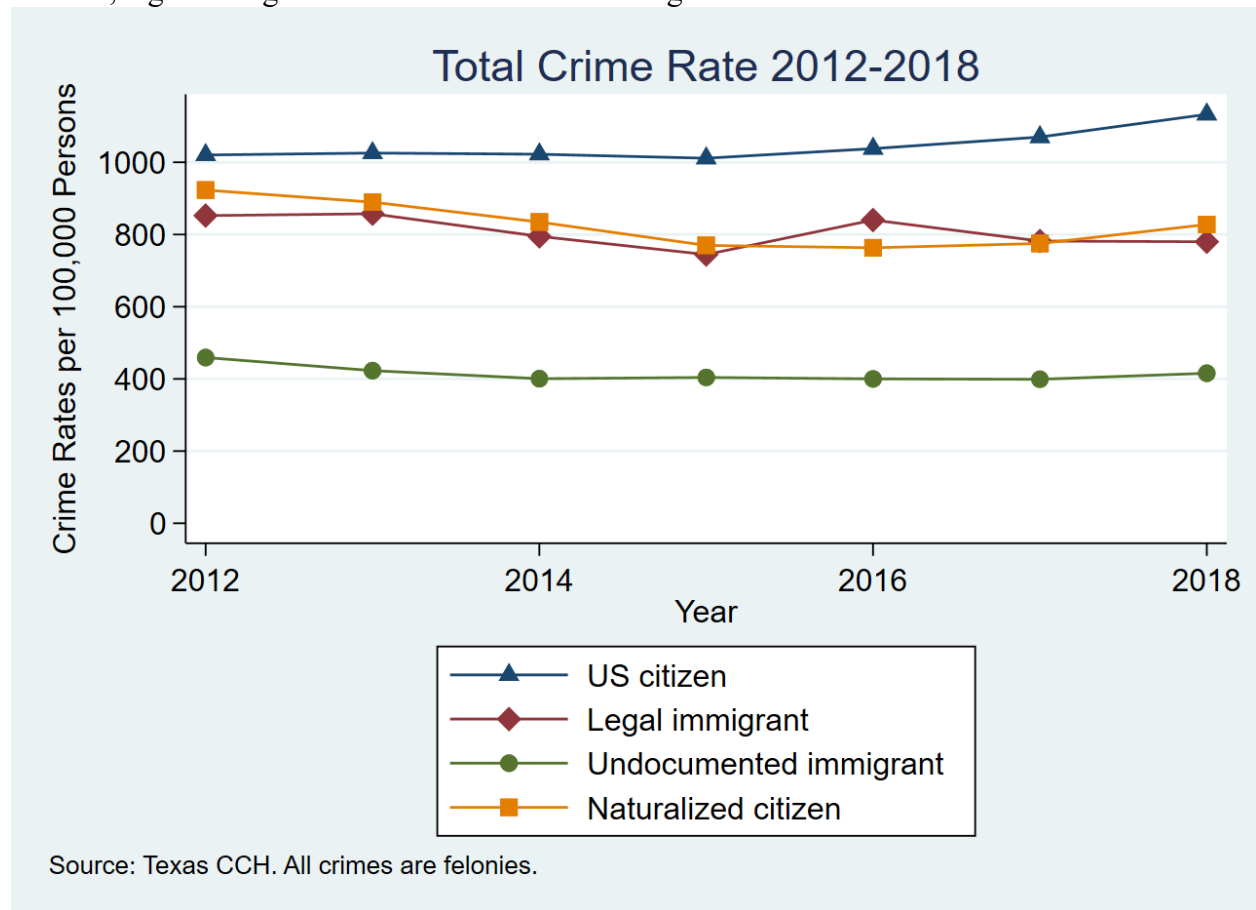


Figure S21. Trends of violent crime rates by native-born U.S. citizens, naturalized U.S. citizens, legal immigrants and undocumented immigrants

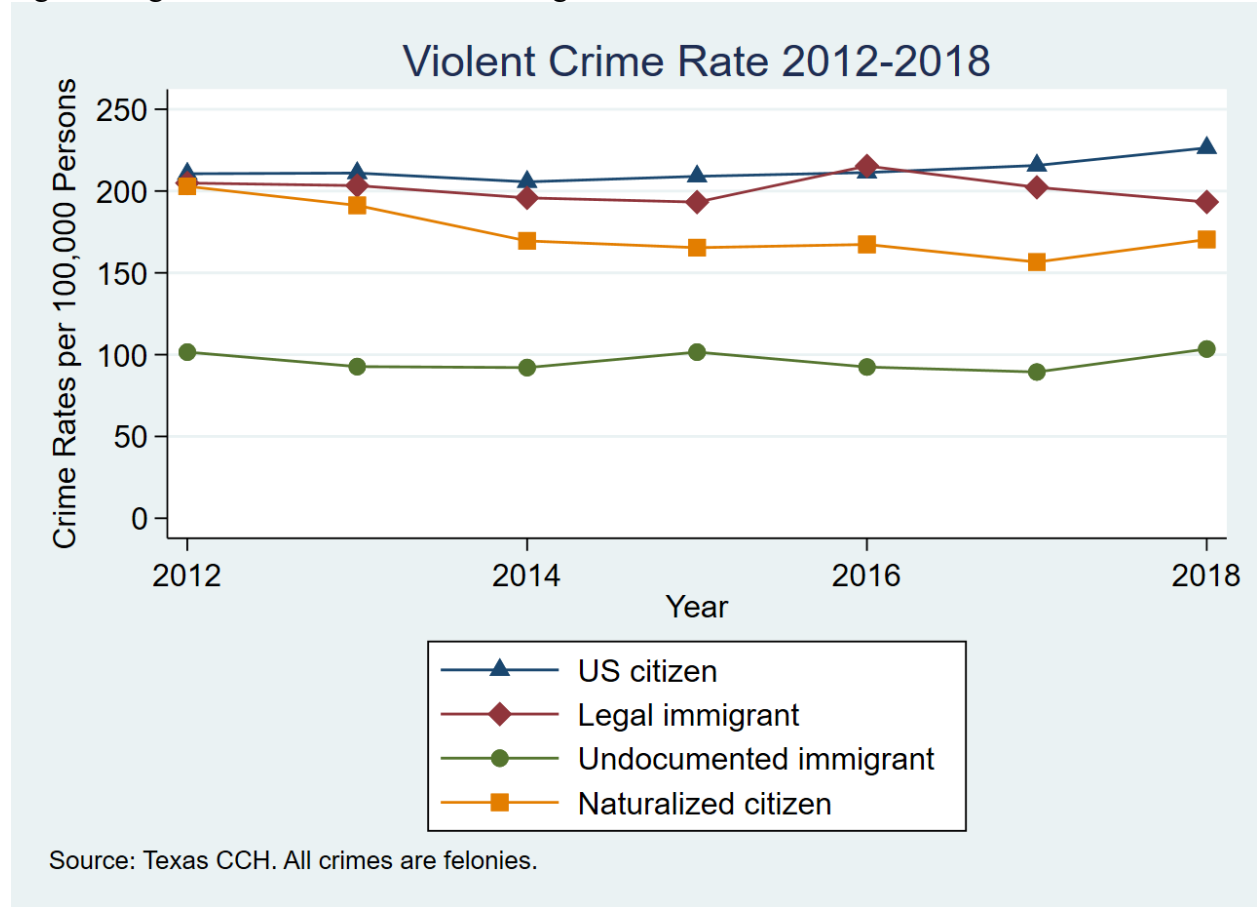
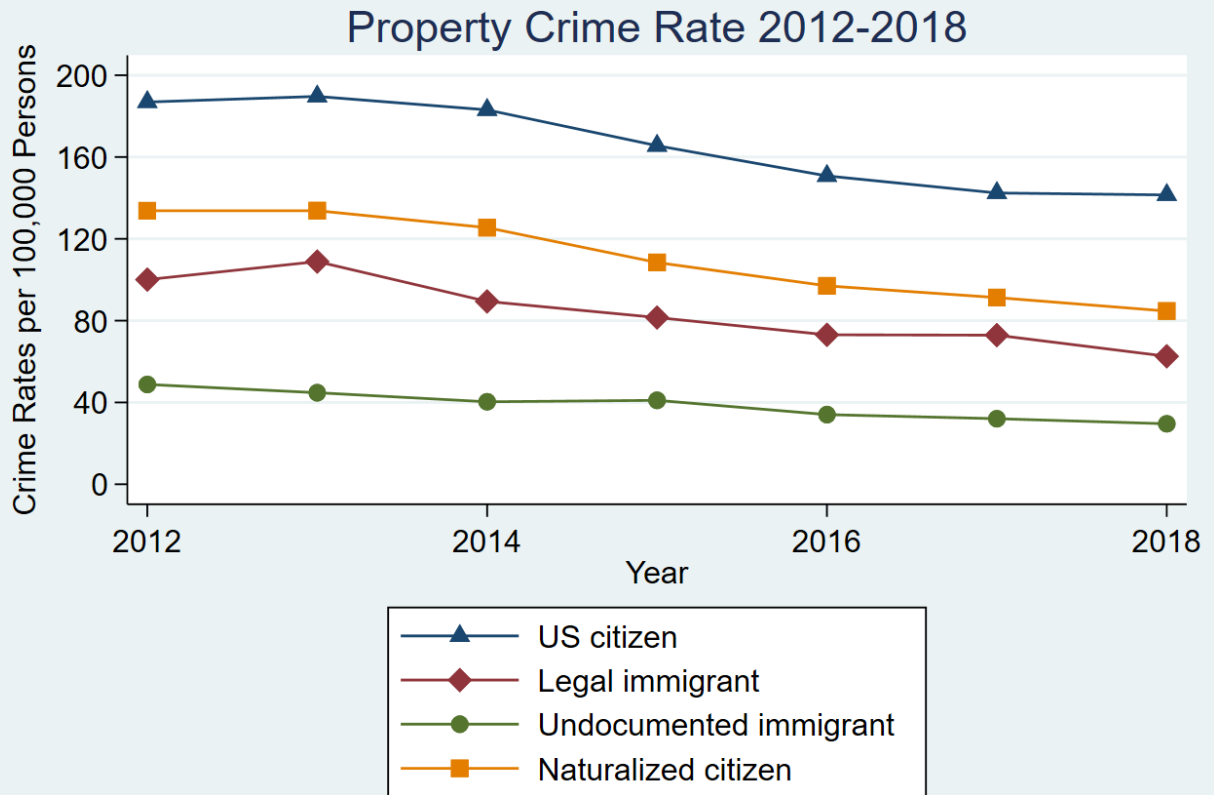
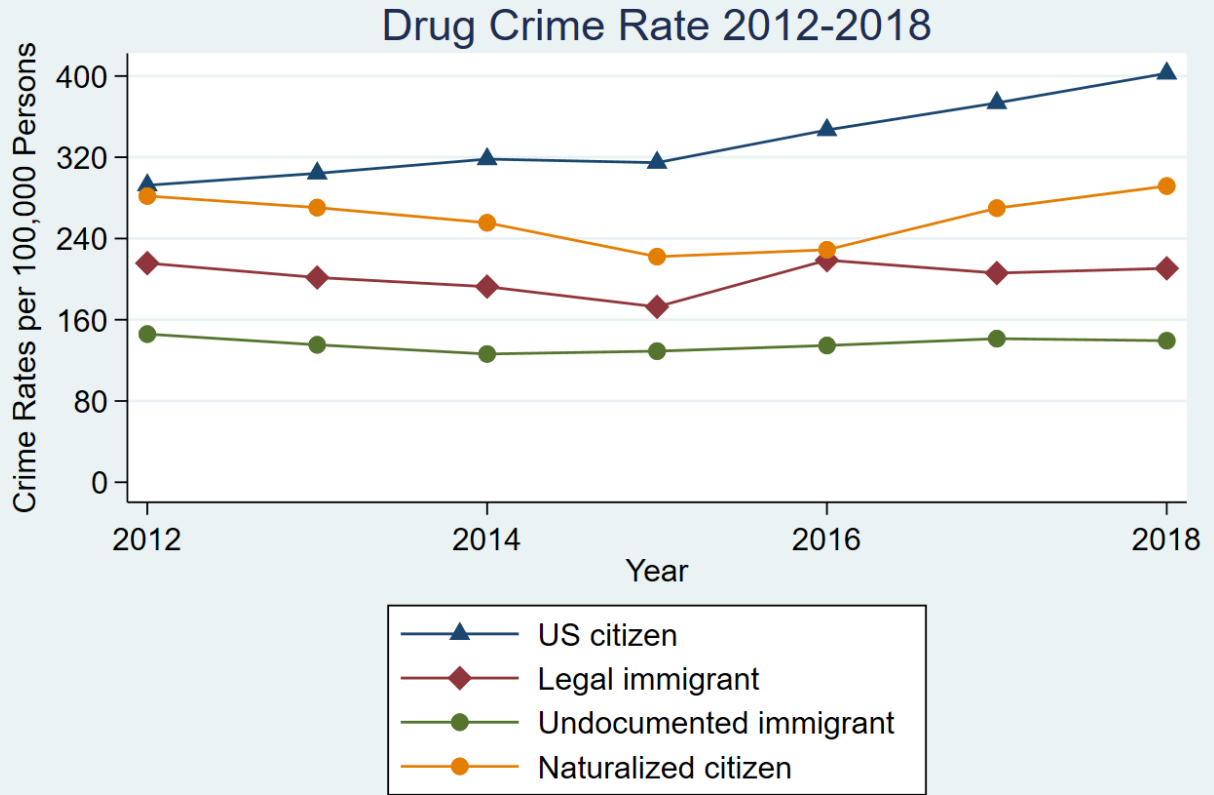


Figure S22. Trends of property crime rates by native-born U.S. citizens, naturalized U.S. citizens, legal immigrants and undocumented immigrants



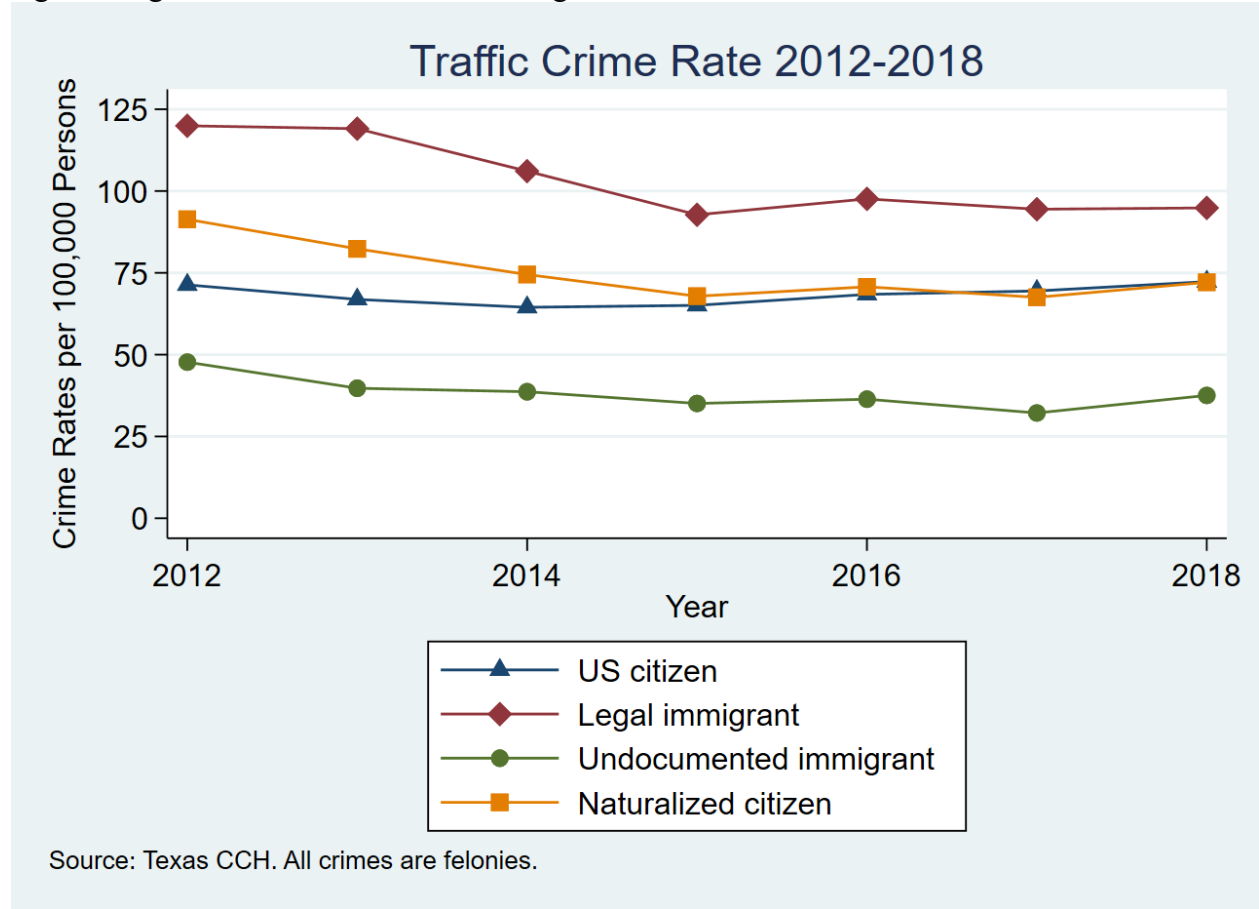
Source: Texas CCH. All crimes are felonies.

Figure S23. Trends of drug crime rates by native-born U.S. citizens, naturalized U.S. citizens, legal immigrants and undocumented immigrants



Source: Texas CCH. All crimes are felonies.

Figure S24. Trends of traffic crime rates by native-born U.S. citizens, naturalized U.S. citizens, legal immigrants and undocumented immigrants



Section VIII. *Untransformed trends analyses*

Table S8. Trends in the undocumented percentage of arrest charges: Augmented Dickey-Fuller Time-Series test and linear trend test results

Undocumented percentage	Estimated value	Trend	Type	Number of lag terms
ADF test				
Total Felony	-0.006	Trendless	Random walk	3
Violent	-0.002	Trendless	Stationary	0
Property	-0.003*	Decrease	Stationary	0
Drug	-0.009*	Decrease	Random walk	3
Traffic	-0.010**	Decrease	Stationary	1
Linear trend Test				
Total Felony	-0.006***	Decrease		
Violent	-0.002	Trendless		
Property	-0.004**	Decrease		
Drug	-0.011***	Decrease		
Traffic	-0.013***	Decrease		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table S9. ADF tests of the percentage of undocumented immigrant arrests

	Total Felony	Violent	Property	Drug	Traffic
L.Percent Undocumented	-0.933*	-0.833***	-0.916***	-0.734**	-0.765***
	(-2.61)	(-7.28)	(-8.08)	(-2.90)	(-5.14)
LD.Percent Undocumented	-0.083			-0.275	0.044
	(-0.26)			(-1.20)	(0.36)
L2D.Percent Undocumented	-0.043			-0.144	
	(-0.17)			(-0.74)	
L3D.Percent Undocumented	-0.007			0.0562	
	(-0.04)			(0.37)	
Trend	-0.006	-0.002	-0.003*	-0.009*	-0.010**
	(-1.98)	(-1.52)	(-2.15)	(-2.60)	(-2.89)
Constant	2.696*	2.569***	1.577***	2.425**	3.109***
	(2.55)	(7.13)	(7.57)	(2.91)	(4.95)
<i>N</i>	56	77	77	56	70

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table S10. Linear trend tests of the percentage of undocumented immigrant arrest

	Total felony	Violent	Property	Drug	Traffic
Month	-0.006 ^{***}	-0.002	-0.004 ^{**}	-0.011 ^{***}	-0.013 ^{***}
Indicator (<i>t</i>)	(-7.75)	(-1.74)	(-2.89)	(-8.18)	(-4.94)
Constant	2.904 ^{**}	3.065 ^{***}	1.749 ^{***}	3.229 ^{***}	4.018 ^{***}
	(74.37)	(45.54)	(29.01)	(48.94)	(32.22)
N	84	84	84	84	84

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$