

## IMMIGRATION POLICY AND CRIME

### Immigration Enforcement and Crime<sup>†</sup>

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Most governments impose quotas on the number of foreigners admitted in the country. However, many more immigrants enter unofficially each year, either by illegally crossing the border or overstaying temporary visas. As a result, the undocumented represent a high share of all immigrants, both in the United States and in Europe (see Hoefer, Rytina, and Baker 2012 and Morehouse and Blomfield 2011, respectively).

Undocumented immigrants typically face poorer legitimate income opportunities—as they cannot work in the official sector—and they should have, for this reason, a lower opportunity cost of engaging in crime. Baker (2013) and Freedman, Owens, and Bohn (2013) provide evidence consistent with this hypothesis by looking at changes in crime rates after the Immigration Reform and Control Act of 1986, which granted legal status to over 2.5 million undocumented immigrants in the United States. Pinotti (2014) and Mastrobuoni and Pinotti (forthcoming) reach the same conclusion based on two natural experiments occurring in Italy between 2006 and 2007. Overall, these findings suggest that lesser access to economic opportunities in the official sector increases the crime rate of undocumented immigrants.

The second important difference between regular and irregular immigrants is that the latter face the risk of being apprehended by the police

and expelled. This fact has less obvious implications for the number of crimes committed by immigrants in the destination country. On the one hand, expulsions reduce the pool of undocumented immigrants at risk of committing crimes, in a sense exerting an *incapacitation* effect similar to that of prison. Given that the crime rate of undocumented immigrants is typically higher than that of other immigrants, the reduction in the number of crimes committed in the destination country can be substantial.

At the same time, a tougher deportation policy would reduce the expected utility (and, thus, their opportunity cost of committing crimes) of the undocumented immigrants who are not expelled. Therefore, the relationship between immigration enforcement and the number of crimes committed by immigrants in the destination country remains ambiguous.

In this paper we empirically estimate the effect of immigration enforcement on the criminal activity of undocumented immigrants in Italy exploiting differences in the enforcement of migration restrictions toward immigrants of different nationalities. In particular, a few countries of origin signed bilateral agreements with Italy for the control of illegal migration, which allow for a quick and effective repatriation of unauthorized immigrants apprehended by the Italian police. In the absence of such agreements, immigrants of other nationalities typically receive only an injunction to leave Italy, but they are not actually expelled. We then compare the crime rate of regular and irregular immigrants coming from countries that signed and did not sign bilateral agreements for the control of illegal migration.

Consistent with previous studies, we find that the condition of illegality causes an increase in the probability of committing a serious crime in Italy. However such increase is smaller for immigrants subject to a stringent enforcement of

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migration restrictions. This result suggests that, for the specific case of Italy, the incapacitation effect of expulsions prevails over the potential increase in the number of crimes committed by immigrants that are not expelled.

### **I. Immigration Enforcement in Italy**

Italian migration policy has been traditionally based on a system of migration quotas by country of origin. At the end of each year, the central government decides the number of residence permits that will be awarded the following year to immigrants of different nationalities. The greatest majority of such permits are reserved for foreign workers sponsored by employers based in Italy. In principle, the (prospective) employer sends the application before the worker enters Italy. In practice, however, no employer would sponsor a foreign worker (s)he has never met before. Therefore, most immigrants enter in Italy unofficially—in most cases by simply overstaying tourist visas (Italian Ministry of Internal Affairs 2007)—and start working in the shadow economy, in the hope of being subsequently sponsored for a residence permit.

Undocumented immigrants are subject to removal by immigration authorities, yet such risk is generally low for two main reasons. First, deportations are very expensive, as deported immigrants must be accompanied back to the country of origin. Second, most irregular immigrants have no valid documents with them, so border authorities in the country of origin often oppose repatriations on the grounds that the nationality of deported individuals cannot be ascertained. As a matter of fact, immigrants escaping conflicts, persecutions, or extreme poverty in the country of origin often try to hide their true nationality.

For all these reasons, undocumented immigrants apprehended by the Italian police often receive only a written injunction to leave the country, which in most cases remains unenforced. An important exception concerns immigrants coming from countries that signed bilateral agreements with Italy for the control of irregular migration, which allow for a quick and effective repatriation of unauthorized aliens. The first such agreement was signed with Poland in 1994, and 15 more had been established before 2007.

To better understand the implications of bilateral agreements for the enforcement of

migration restrictions, we exploit information contained in a report by the Italian Ministry of Internal Affairs (2007). For about 70 countries of origin, the report lists the number of irregular immigrants apprehended in Italy during the period 1999–2006; the fraction that was actually expelled; the existence of an agreement with Italy for the control of illegal migration; and the year in which it was signed. The evidence in Table 1 confirms that bilateral agreements increase dramatically the enforcement of migration restrictions, as measured by the percentage of apprehended immigrants that were actually expelled across countries of origin. This percentage increases from 25 to 41 percent in the presence of an agreement between Italy and the country of origin, see column 1 of the table.<sup>1</sup> The difference is partly explained by the countries signing an agreement being on average closer to Italy, which generally increases, quite intuitively, the incidence of expulsions. Still, even after controlling for the log of distance between Italy and the country of origin, the coefficient of interest remains close to 10 percentage points and strongly statistically significant (column 3). Additional control variables measuring living conditions in origin countries—log GDP per capita, incidence of serious wars, and catastrophic disasters—have no discernible impact on estimates (column 4).<sup>2</sup> In the last two columns of Table 1 we restrict to countries with which a bilateral agreement existed at some point between 1999 and 2006. We then regress the incidence of expulsions on the number of years the agreement had been in place during the period considered. Although these estimates should be taken with caution due to the limited number of degrees of freedom, we find that each additional year brings an average increase of 3–4 percentage points in the incidence of expulsions (columns 5 and 6).

### **II. Legal Status, Immigration Enforcement, and Crime**

The evidence in the previous section suggests that bilateral agreements for the control of

<sup>1</sup>The effect is larger when weighting cross-country observations by the number of apprehended immigrants from each country.

<sup>2</sup>All variables and data sources are described in the files posted online.

TABLE 1—BILATERAL AGREEMENTS AND EXPULSIONS

	(1)	(2)	(3)	(4)	(5)	(6)
Bilateral agreement	15.773*** (3.445)	14.926*** (3.644)	10.197*** (3.351)	9.247** (3.594)		
ln(apprehended)		0.680 (0.866)	0.271 (0.813)	0.498 (0.772)		−2.574 (2.030)
ln(distance)			−4.141*** (1.339)	−3.118** (1.406)		−12.780** (4.524)
Years agreement					2.921*** (0.769)	4.413*** (1.114)
Constant	24.946*** (1.369)	19.761*** (6.705)	57.380*** (13.695)	35.707** (16.355)	22.100*** (3.980)	172.671** (69.610)
Observations	68	68	68	66	16	16
Additional controls	No	No	No	Yes	No	Yes
R <sup>2</sup>	0.291	0.298	0.357	0.409	0.370	0.730

*Note:* The dependent variable is the percentage of undocumented immigrants apprehended by the Italian police during the period 1999–2007 that were repatriated to their country of origin.

\*\*\*Significant at the 1 percent level.

\*\*Significant at the 5 percent level.

\*Significant at the 10 percent level.

illegal migration greatly contribute to the effective enforcement of migration restrictions in Italy. To investigate the effect of enforcement on the criminal behavior of undocumented immigrants, we thus compare the differential crime rate of undocumented and legal immigrants coming from countries that signed and did not sign a bilateral agreement with Italy. To estimate the former differential, we exploit the fact that applications for residence permits must be sent electronically starting at 8:00AM of given “Click Days” of the year, and are processed on a first-come-first-served basis until exhaustion of the available migration quotas.

In a previous paper, Pinotti (2014), we provide a thorough description of this peculiar allocation mechanism, and we match the universe of male applicants for residence permits in year 2008 with police criminal records for the year before and after Click Days. We then leverage variation in the timing of applications to estimate the effect of legal status on the probability of committing crimes.

Here we build on the same data and identification strategy, and we exploit additional variation in the enforcement of migration restrictions toward immigrants coming from different countries. In column 1 of Table 2 we compare the probability of committing a crime in the year after Click Days across applicants that obtained

and did not obtain legal status, instrumenting the latter variable by an indicator for having applied before or after the cutoff time at which quotas got exhausted. After restricting to (male) applicants within a symmetric one-hour bandwidth around the cutoff—110,337 individuals in total—and controlling for a smooth polynomial in the timing of application, applicants are as-good-as-randomly assigned on either side of the cutoff.<sup>3</sup>

Then, in column 2, we include an additional dummy variable for immigrants subject to higher immigration enforcement (due to the existence of bilateral agreements between Italy and the country of origin) and we interact it with the indicator for undocumented immigrants. Taken together, the results in columns 1 and 2 suggest that being undocumented generally increases the probability of committing crimes in the year after Click Days, but the effect is larger for immigrants subject to a lower enforcement of immigration restrictions. Importantly, both effects emerge only after Click Days,

<sup>3</sup>Notice there is ex ante uncertainty about the timing of the cutoff point—as the latter depends, ex post, on the timing of all applications—which provides a compelling argument in favor of quasi-random assignment; see Pinotti (2014) for further discussion as well as direct evidence on this issue based on balance and density tests.

TABLE 2—BILATERAL AGREEMENTS, LEGAL STATUS, AND CRIME

	(1)	(2)	(3)	(4)	(5)
Undocumented	0.006* (0.004)	0.008* (0.004)	0.006* (0.004)	0.008* (0.004)	0.008* (0.004)
Undocumented × Agreement		−0.006** (0.003)		−0.004** (0.002)	−0.005** (0.002)
Agreement		−0.006 (0.008)			
Constant	0.005 (0.004)	0.008 (0.006)			
Observations	110,337	110,337	110,317	110,317	110,317
Nationality FE & Age	No	No	Yes	Yes	Yes
Province FE	No	No	No	No	Yes
First stage <i>F</i> -stat. (excl. instr.)	317.36	141.87	310.84	131.82	125.83

*Notes:* The dependent variable is a dummy for having committed a serious crime in the year after the Click Day. The first stage instrument for undocumented status is a dummy for having applied before the cutoff and all regressions include a quadratic polynomial in the timing of application (see text for details).

\*\*\*Significant at the 1 percent level.

\*\*Significant at the 5 percent level.

\*Significant at the 10 percent level.

while neither the coefficient of legal status nor the interaction term are different from zero in the year before Click Days.<sup>4</sup> The estimates are largely unaffected when we include individual age, both linear and squared; nationality fixed effects, to control for all residual differences across nationalities; and province fixed effects, to control for differences in enforcement and labor market conditions across different areas of Italy (columns 3 to 5 of the table).

The differential effect of legal status across immigrants subject to higher and lower enforcement is quantitatively relevant. Being refused legal status increases by 0.6 percentage points the probability of committing a serious crime in Italy over the following year (on a baseline crime rate of 0.9 percent). However, the increase is only 0.3 percentage points for immigrants subject to a higher probability of expulsion, while it reaches 0.8 percentage points for all other immigrants.

### III. Conclusions

The results above suggest that, for the specific case of Italy, the incapacitation effect of expulsions prevails over the decrease in the opportunity cost of crimes for immigrants that are not expelled. The main policy implication is that once migration quotas are set at a given level—often as the outcome of a complex political process—such levels should be strictly enforced. Whenever this is unfeasible, due to increasing migration pressures, legalization policies could be considered instead. In any case, government and migration authorities should avoid the formation of large pools of unauthorized immigrants with a low opportunity cost of committing crimes.

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<sup>4</sup>These results are not reported for space reasons but they are available upon request.

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