

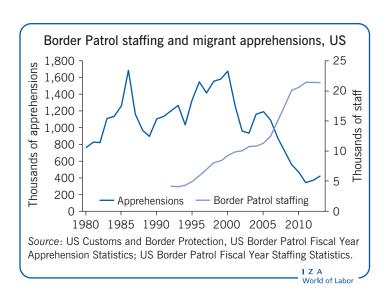
# Enforcement and illegal migration

## Enforcement deters immigration with many unintended consequences

Keywords: illegal immigration, border enforcement, interior enforcement

#### **ELEVATOR PITCH**

Border enforcement of immigration laws attempts to raise the costs of illegal immigration, while interior enforcement also lowers the benefits. Border and interior enforcement therefore reduce the net benefits of illegal immigration and should lower the probability that an individual will decide to migrate. While some empirical studies find that border and interior enforcement serve as significant deterrents to illegal immigration, immigration enforcement is costly and carries significant unintended consequences, such as an increase in fraudulent and falsified documents and rising border death rates as migrants undertake more dangerous crossings.



#### **KEY FINDINGS**

## **Pros**

- Border enforcement works as intended: it drives up the cost and risks associated with border crossings and deters illegal immigration.
- Border enforcement results in more positively selected migrant flows, possibly due to the higher costs of crossing.
- Preliminary evidence suggests that interior enforcement lowers the net benefits of migration, which should act as a deterrent.
- While the cost of enforcement is a burden on taxpayers, native workers may benefit when there is less competition from migrants entering.
- The unintended consequences of border and interior enforcement are reduced when accompanied by other immigration reforms, such as a regularization program.

#### Cons

- Intensified border enforcement leads to reduced circular migration, higher demand for smugglers, riskier crossings, and more migrant deaths.
- Using border enforcement to keep migrants out causes wages to rise in the destination country and fall in the source country, changes which counteract the higher crossing costs and can increase the incentives to migrate.
- Employer verification mandates correlate with lower employment and wages among unauthorized immigrants.
- Additional interior enforcement can increase informal sector employment, where workers and employers evade taxation and regulation.
- Immigration enforcement is costly and can divert resources from other federal and state law enforcement.

#### **AUTHOR'S MAIN MESSAGE**

There are many political and economic motivations for limiting illegal immigration. However, enforcement measures should be designed and regularly evaluated to minimize costs, distortions, detrimental impacts on legal migration and commerce, and other unintended consequences. Enforcement can be more effective and increase the net economic benefits of immigration to the destination country if implemented together with comprehensive reform that addresses the underlying forces that drive migration.

#### **MOTIVATION**

With illegal immigration on the rise, many governments are spending more on border and interior enforcement. But this is happening at a time of fiscal austerity, when other programs are being cut. Nowhere is this more apparent than in Europe, which is contending with surging immigration of asylum-seekers and with struggling domestic economies. The US, home to an estimated quarter of the world's unauthorized immigrants, spends close to US\$15 billion dollars per year on immigration enforcement. Despite record spending on enforcement, which includes border fences, aerial drones, detention centers, 20,000-plus border patrol agents, and much more, polls suggest that most Americans still feel the border is not secure. Given limited budgets and unintended consequences, it may be neither possible nor desirable to secure all borders by relying solely on enforcement tools.

#### **DISCUSSION OF PROS AND CONS**

## Modeling immigration enforcement

Increasing border enforcement has been the preferred response for confronting rising numbers of unauthorized immigrants. Voters and their governments view illegal immigration as undesirable for a number of reasons. Unauthorized immigrants are typically low-skilled and relatively poor. They bring little in the way of savings to invest or formal training to put to use in the destination country labor market. In many countries, although typically not in the US, they either work off the books or apply for asylum. Illegal immigration is also often viewed as symptomatic of the government's lack of control over its own borders. This is regarded as a politically unacceptable weakness in some quarters, especially in the context of concern about national defense and the need for protections against terrorism.

Governments may also intervene to protect the employment prospects of native workers. Research shows that low-skilled and relatively poor foreign workers tend to have a small negative effect on competing natives' wages. Research also shows that low-education immigrants cost more in public services than they contribute in taxes, making them a net fiscal burden on taxpayers.

In formal models of illegal immigration and the application of border and interior enforcement, unauthorized immigrants are usually assumed to be low-skilled and relatively poor [1]. Increased border enforcement raises the unskilled wage, which helps unskilled workers, but it also raises taxes to fund enforcement, which hurts native skilled workers. By raising the unskilled wage and thus increasing the gains from migration, border enforcement is counterproductive. Interior enforcement does the opposite, pushing down the wages of unauthorized workers (assuming that employers can distinguish between legal and unauthorized workers, which is not always the case).

By increasing the costs of migration, enforcement affects both the volume and the composition of migrant flows. Research shows that when the costs of migration are high, possibly due in part to increased enforcement, low-education, low-income workers simply may not be able to afford to migrate. For example, Mexican migrants with low levels of education are deterred more by increased border enforcement than their better-educated peers, resulting in positive selection among unauthorized migrants [2].

## The migration decision

Migration can be forced, voluntary, or a combination of the two. Civil war or famine may leave people with little choice but to migrate. With voluntary migration, theory posits that a potential migrant will decide to migrate if the expected benefits — typically earnings from a job — exceed the costs, such as travelling expenses, smugglers' fees, and the costs of adapting to the destination country [2]. This basic model falls short of explaining several well-established patterns, such as return migration. Return migrants may be motivated by target saving—the desire to accumulate a predetermined sum to pay off a debt or invest in a business. Moreover, the migration decision is often made at the household rather than the individual level [3]. People may migrate to reunite with earlier migrants (network migration). People living in countries with incomplete financial markets and weak social safety nets may migrate not only to increase income but also to diversify risk to household income from economic crises, crop failures, and similar shocks.

Whatever the details of the migration model, migration costs figure prominently for two reasons. First, pecuniary costs have to be paid up front, which requires access to savings or credit (borrowing). Second, illegal migration is more costly than legal migration because unauthorized migrants typically pay a smuggler in addition to risking their lives. Their trips are also generally longer, which entails more lost work time, particularly if migrants are apprehended and detained before they are deported, as is increasingly the case along the US-Mexico border [4].

Migration models highlight the importance of the income gap, which is driven by wages and job opportunities in both destination and origin countries. There is typically much higher responsiveness of illegal than legal migration to changing economic conditions [5], [6]. This was apparent in southern Europe during the economic boom in the early 2000s (preceding the sovereign debt crisis). Unauthorized migration to the US has a long history of disproportionately large response to changes in labor demand, particularly in construction [6]. Border patrol apprehensions are highly correlated with construction permits for single-family housing, and illegal immigration plummeted during the 2007–2009 recession and housing bust [6], [7].

In addition to business cycle factors, which tend to be temporary, there are long-term supply-side factors such as demographics. Large birth cohorts in origin countries depress relative wages as young men enter the workforce, which widens the income gap and contributes to emigration. Similarly, declining fertility rates depress population growth, speed up aging, and reduce emigration. In Mexico, fertility rates fell from 6.8 children per woman in the late 1970s to 2.2 children per woman in 2010, contributing to falling emigration and making resumption of mass emigration from Mexico unlikely [6], [7].

#### Trends in border enforcement

Tougher immigration enforcement has been the trend around the world since the 1990s. Australia implemented mandatory detention in 1992, which puts all unauthorized immigrants into detention camps while their cases are resolved, a process that can take years. More recently, the EU implemented its own border enforcement, adding border guards and sea patrols and creating the European Agency for the Management

of Operational Cooperation at the External Borders of the Member States of the European Union, or Frontex, in 2004. US border enforcement has risen sharply since the mid-1990s. The number of US Border Patrol agents assigned to the Southwest border rose from 3,226 in 1990 to 18,506 in 2011, and the Border Patrol budget rose more than 360% in real terms. The Border Patrol also invested in advanced technology, including double fences, watch towers, ground sensors, remote video monitoring, and aerial and marine surveillance. By 2012 about one-third of the Southwest border was fenced [6], [8].

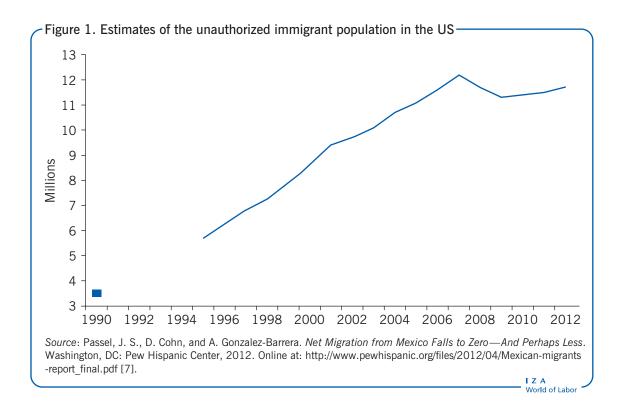
There has also been a trend toward harsher punishments for migrants apprehended at US borders. Historically, the great majority of apprehended migrants were from Mexico; they signed "voluntary departure contracts," after which they boarded a bus back to Mexico. Some observers referred to this policy as the "revolving door" of US border enforcement because the departed migrants typically attempted another border crossing within a day or two. This process repeated itself until the migrant was successful [8]. Two important changes spelled the beginning of the end of this practice. One, the Border Patrol began fingerprinting all apprehended migrants, which allowed them to identify and prosecute repeat crossers. Two, Congress began mandating harsher consequences for apprehended migrants. The Illegal Immigration Reform and Immigrant Responsibility Act, passed in 1996, implemented expedited removal, interior repatriation, and three- and ten-year admission bars for previously admitted unauthorized immigrants seeking to be admitted legally to the US. Several other initiatives followed, including "zero-tolerance" policies such as Operation Streamline, which subjects unauthorized immigrants to federal criminal prosecution [8]. While most offenses are misdemeanors and result in very short jail terms, the proliferation of zero-tolerance practices along the US-Mexico border marks a dramatic shift from the days of voluntary departure.

During this time of massive border buildup and tougher consequences, migrant apprehensions first rose sharply, peaking at 1.7 million (rounding) apprehensions in fiscal 2000, and then plummeted, falling to just over 400,000 in fiscal 2013 [6], [8]. Meanwhile, the unauthorized immigrant population rose from just 3.5 million to 12.2 million between 1990 and 2007 before declining to 11.7 million in 2012 (see Figure 1) [7], [8]. The US is home to an estimated one-quarter of the world's unauthorized immigrants. Not all unauthorized immigrants cross the border illegally, however. Some 25-40% of unauthorized immigrants in the US are believed to have entered legally and either overstayed their visa or otherwise violated its terms (such as working on a tourist visa) [8].

## Is border enforcement an effective deterrent?

Border enforcement, by increasing the probability of apprehension or the severity of punishment, should deter illegal immigration. Despite this clear prediction, the US experience since the 1990s suggests that massive increases in border enforcement are consistent with both rising and falling inflows of unauthorized immigrants. Clearly, border enforcement is just one of many migration determinants.

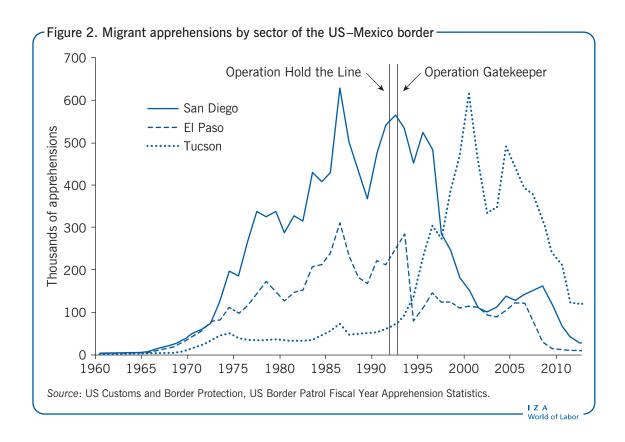
The first attempts at border buildups were likely more effective in diverting migrants than deterring them [3]. Earlier studies on Mexico-US migration find little direct



evidence of deterrence effects of border enforcement on migration but considerable evidence of migrants' adaptive behavior. For example, large, localized ramp-ups in border enforcement in the US such as Operation Hold the Line in El Paso in 1993 and Operation Gatekeeper in San Diego in 1994 led to steep declines in migrant apprehensions in these sectors but increases in Tucson (see Figure 2) [3]. Instead of crossing through urban areas in West Texas and Southern California, migrants went through the deserts of Arizona [3]. By forcing migrant crossings to desolate areas, US Border Patrol increased the risk of migrant injury and death. Enforcement also encourages other adaptive behavior, such as inventive crossing techniques, including the use of decoys and tunnels.

Increased US border enforcement has had several other effects that also deter migration. The probability of using a smuggler increased from 80% in 1990 to 90% in 2012, perhaps because fewer migrants were willing to cross alone through the wilderness [8]. Smuggler fees also rose along with demand, and successful crossings grew more difficult and took longer [4]. Migrant surveys indicate that smuggler prices for Mexicans rose in inflation-adjusted terms from less than US\$1,000 a trip in 1990 to US\$2,500 in 2010 [6]. Only some of the increase can be attributed to more border enforcement, however, and the rest to other demand and supply factors. One study found that the border buildup between 1986 and 2004 raised smugglers' prices by only 17% while increasing crossing time by two to five days [4]. Higher smuggler and opportunity costs should translate into a lower probability of migrating. Indeed, another study found that a 20% rise in smugglers' prices led to a 13–21% decline in the probability of migrating [8].

Among studies that measure the direct relationship between border enforcement and illegal immigration, one set of estimates suggests that a 10% increase in border patrol linewatch hours reduces illegal inflows by 4-8% and that this effect has increased over



time [9]. Another study finds that a 0.5 million increase in linewatch hours—the average increase between 1990 and 2003—reduced intentions to re-migrate among a sample of male return migrants by roughly 14% [10]. Tougher border enforcement is also correlated with lower wages in Mexican border cities, suggesting that enforcement prevents or delays illegal entries into the US [5]. Taken together, these findings show that border enforcement is an effective "at the border" deterrent—increasing border patrol watch hours reduces the probability that migrants intend to repeat border crossings or delays their attempts [6]. Studies that find that border enforcement raises smuggling prices and thus depresses migration at the origin document a form of "behind-the-border" deterrence, which prevents the potential immigrant from attempting a crossing [6].

#### Trends in interior enforcement

Interior enforcement has been ramped up in many countries, but perhaps nowhere as drastically as in the US, which has deported a record 1.5 million immigrants since 2009. While the Immigration Reform and Control Act of 1986 made it illegal to hire unauthorized immigrants, the law was rarely enforced. The lack of interior enforcement, at worksites and elsewhere, meant that an unauthorized immigrant who managed to bypass border enforcement and reach the country's interior could in many cases live a fairly comfortable life. The 1996 Illegal Immigration Reform and Immigrant Responsibility Act laid the groundwork for changes to this situation by launching Basic Pilot, a precursor to E-Verify.

E-Verify allows employers to check the legal working status of new hires against Social Security records and a federal immigration database. E-Verify is now mandatory for federal government contractors and is used to varying degrees in 19 states, though

less than 10% of US employers used it in 2013 [6]. The period following the attacks of September 11, 2001, has also witnessed worksite raids during the Bush administration and increased audits under the Obama administration, as well as implementation of the Secure Communities Program, which checks the records of arrested individuals against immigration databases [6]. In addition, Arizona and several other states have passed legislation mandating that all employers use E-Verify and giving local law enforcement greater powers to question individuals' immigration status and take them into custody.

There is little empirical evidence on the effectiveness of interior enforcement. However, a few recent studies find adverse labor market effects among likely unauthorized immigrants, which should serve as a deterrent for future immigration. For instance, implementation of the 2007 Legal Arizona Workers Act, which requires employers to use the E-Verify program, resulted in a large shift out of wage and salary employment and into self-employment among non-citizen Hispanic immigrants, a group with a high share of unauthorized workers [11]. Another empirical analysis finds that E-Verify mandates more broadly have a large negative impact on the hourly earnings of immigrants who are most likely to be unauthorized, suggesting that such programs may be successful in reducing the rewards of illegal immigration [12]. Meanwhile, there is some evidence that E-Verify raises wages for competing groups of US workers, including Hispanic natives and naturalized immigrants.

## Unintended consequences

## Interior enforcement can lead to negative fiscal impacts and document fraud

As the theory suggests, an important advantage of interior enforcement over border enforcement is the negative effect on unauthorized workers' wages, which reduces labor market pull factors and should deter future migration [1]. Does it follow that this policy will encourage unauthorized immigrants to leave and return to their country of origin? Immigrants may leave the states where these policies are implemented, but there is no evidence yet that a policy such as E-Verify will make them leave the country [11]. Unauthorized workers make up more than 5% of the US labor force; a majority of these workers are long-time US residents and many of them have children who are US citizens.

Falling household income resulting from E-Verify policies is more likely to lead to increasing needs for public assistance than to emigration. At the same time, unauthorized immigrants' tax contributions will decline, as these workers may be diverted into self-employment or into the informal sector, where workers and firms do not pay taxes and employers likely skirt health and safety laws. Implemented universally and in the absence of a legalization program, interior enforcement policies such as E-Verify can worsen the negative fiscal impact of illegal immigration.

Another likely consequence of electronic verification policies is a surge in fraudulent and falsified documents. Identity fraud can undermine the accuracy of interior enforcement programs that do not apply biometric measures, such as fingerprints or photographs, as a safeguard. Reports have found that identity fraud was the main driver of inaccuracies in E-Verify—in its early stages, the program gave authorized employment for 54% of unauthorized workers screened.

#### Border enforcement can lead to rising deaths and longer migration spells

Border enforcement has unintended consequences in addition to its intended effect of stopping and deterring illegal immigration. The US Border Patrol's strategy of pushing migrants to more remote areas of the border has led to rising death rates, often from dehydration or exposure to extreme temperatures [3], [8]. Death rates among migrants rose an estimated threefold in the late 1990s following implementation of Operation Hold the Line and Operation Gatekeeper [3]. Despite large declines in illegal immigration since 2000, deaths have likely not fallen but have probably continued to rise. In Europe, deaths among unauthorized migrants are at record levels that now rival fatalities in the US. According to UN Refugee Agency estimates, about 500 migrants drowned or went missing while attempting to cross the Mediterranean in 2012 and 2013; more than 1,500 people are believed to have perished in 2011.

The most commonly cited and widely documented unintended consequence of increased border enforcement is longer migration spells and reduced circularity. In the US, border enforcement as measured by border patrol linewatch hours has a significant negative effect on migrant outflows to Mexico, as well as inflows, which implies that tougher enforcement increases the duration of stay by deterring return migration. That encourages more permanent settlement among unauthorized immigrants from Mexico [9].

Among those who illegally cross borders, the demand for smugglers has grown commensurate with rising border controls. This may expand the role of organized crime in illegal immigration. At the US-Mexico border, drug cartels seem to be engaging increasingly in the business of human smuggling, particularly of Central Americans [8]. This incursion may represent a national security issue as well as increase the danger to migrants themselves, as the flows of illegal goods become more closely entwined with crossings of unauthorized migrants.

Finally, increased enforcement can have a chilling effect on legitimate commerce; to the extent that ramp-ups in border security are associated with increased wait times at ports of entry, which may slow and even deter the legitimate flow of goods and people across borders, harming regional and national economies. In countries with long mountainous and maritime borders, such as Italy, Greece, and Spain, heavily fortified roads and ports may deter tourism, an important source of income. More generally, distributing more border patrol resources toward enforcing immigration laws rather than toward facilitating commerce may have adverse economic consequences.

## **LIMITATIONS AND GAPS**

Quantifying the costs and benefits of immigration enforcement from a policy perspective requires reliable data on its application and outcomes. A recent National Research Council report in the US urged the Department of Homeland Security to gather and release more detailed and frequent data on staffing, apprehensions, and migrant characteristics. This would allow independent researchers to better model border crossing attempts and develop measures of enforcement effectiveness [8]. The report also urged the three immigration enforcement arms within the department to integrate their databases.

Integrating data on border and interior apprehensions would allow researchers to track individuals and enforcement initiatives over time and across space, which could provide valuable insights into migrant destinations and the relative effectiveness of border and interior enforcement. Administrative data could then be combined with survey data in the origin and destination countries to look at migrant populations before, during, and after migration.

Given the clandestine nature of illegal immigration, the National Research Council recommendations are relevant for all immigration destination countries. No one survey or set of administrative data can adequately describe this population and its interactions with law enforcement. Moreover, given the extent of adaptive behavior, as well as constant modifications to enforcement, any model of illegal immigration has to be dynamic and frequently tested against the data.

#### **SUMMARY AND POLICY ADVICE**

Immigration enforcement is necessary—the political and economic motivations for limiting illegal immigration are numerous. However, considering the high costs of implementing enforcement and the considerable human costs of dispensing it, enforcement measures should be carefully designed and regularly evaluated. Immigration policy should also take into account conditions in origin countries. Workbased migration can be accommodated in a temporary visa or guest worker program, while humanitarian migration may require other measures.

Efficient enforcement minimizes distortions, costs, detrimental impacts on legal migration and commerce, and unintended consequences. In many countries, comprehensive immigration reform that combines efforts to create legal pathways for migration with improvements in enforcement methods can ease pressure at the border and in the interior, while increasing the net economic benefits of immigration to the destination country. Governments can aid research in this area by gathering and publicly providing consistent, comprehensive, and timely data on migration and enforcement.

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## **Competing interests**

The IZA World of Labor project is committed to the IZA Guiding Principles of Research Integrity. The author declares to have observed these principles.

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#### **REFERENCES**

## Further reading

National Research Council. "The process of unauthorized crossing at the US-Mexico border." In: Carriquiry, A., and M. Majmundar (eds). *Options for Estimating Illegal Entries at the US-Mexico Border*. Washington, DC: The National Academies Press, 2013; pp. 15–37.

OECD. Clandestine Immigration: Economic and Political Issues. SOPEMI Report (Part III). Paris: Organisation for Economic Co-operation and Development, 1999.

Roberts, B., E. Alden, and J. Whitley. *Managing Illegal Immigration to the United States: How Effective is Enforcement?* Washington, DC: Council on Foreign Relations, 2013. Online at: http://www.cfr.org/immigration/managing-illegal-immigration-united-states/p30658

## **Key references**

- [1] Ethier, W. J. "Illegal immigration: The host-country problem." *The American Economic Review* 76:1 (1986): 56-71.
- [2] Orrenius, P. M., and M. Zavodny. "Self-selection among undocumented immigrants from Mexico." *Journal of Development Economics* 78:1 (2005): 215-240.
- [3] Massey, D. S., J. Durand, and N. J. Malone. *Beyond Smoke and Mirrors: Mexican Immigration in an Era of Economic Integration*. New York: Russell Sage Foundation, 2002.
- [4] Gathmann, C. "Effects of enforcement on illegal markets: Evidence from migrant smuggling along the southwestern border." *Journal of Public Economics* 92 (2008): 1926–1941.
- [5] Hanson, G. H., and A. Spilimbergo. "Illegal immigration, border enforcement, and relative wages: Evidence from apprehensions at the US-Mexico border." *American Economic Review* 89:5 (1999): 1337–1357.
- [6] Roberts, B., E. Alden, and J. Whitley. *Managing Illegal Immigration to the United States: How Effective is Enforcement?* Washington, DC: Council on Foreign Relations, 2013. Online at: http://www.cfr.org/immigration/managing-illegal-immigration-united-states/p30658
- [7] Passel, J. S., D. Cohn, and A. Gonzalez-Barrera. *Net Migration from Mexico Falls to Zero—And Perhaps Less*. Washington, DC: Pew Hispanic Center, 2012. Online at: http://www.pewhispanic.org/files/2012/04/Mexican-migrants-report\_final.pdf
- [8] National Research Council. "The process of unauthorized crossing at the US-Mexico border." In: Carriquiry, A., and M. Majmundar (eds). *Options for Estimating Illegal Entries at the US-Mexico Border*. Washington, DC: The National Academies Press, 2013; pp. 15–37.
- [9] Angelucci, M. "US border enforcement and the net flow of Mexican illegal migration." *Economic Development and Cultural Change* 60:2 (2012): 311–357.
- [10] Amuedo-Dorantes, C., and C. Bansak. "The effectiveness of border enforcement in deterring repetitive illegal crossings attempts." In: Gans, J., E. M. Replogle, and D. J. Tichenor (eds). *Debates on US Immigration.* Thousand Oaks, CA: MTM Publishing, 2012; pp. 153–161.
- [11] Bohn, S., and M. Lofstrom. "Employment effects of state legislation." In: Card, D., and S. Raphael (eds). *Immigration, Poverty, and Socioeconomic Inequality*. New York: Russell Sage Foundation, 2013; pp. 282–314.
- [12] Orrenius, P. M., and M. Zavodny. *How Do E-Verify Mandates Affect Unauthorized Immigrant Workers?* Federal Reserve Bank of Dallas Working Paper No. 1403, 2013.

The full reference list for this article is available from the IZA World of Labor website (http://wol.iza.org/articles/enforcement-and-illegal-migration).