



One of the stated goals in President Barack Obama's crime and law enforcement agenda is to break down employment barriers for people who have a prior criminal record, but who have stayed clean of further involvement with the criminal justice system. To understand how many people are affected by some of these barriers, we only need look at the widespread computerization of criminal history records in the United States.

According to the Society for Human Resource Management, more than 80 percent of U.S. employers perform criminal background checks on prospective employees.¹ Add two additional factors to that equation — advances in information technology and growing concerns about employer liability — and we can begin to understand how complicated the issue of employing ex-offenders has become.

The numbers leave no doubt that we have reached a broad penetration of criminal history records into the fabric of our society:

- In 2006, nearly 81 million criminal records were on file in the states, 74 million of which were in automated databases.²
- Another 14 million arrests are recorded every year.³

What does this mean for employers? And what does it mean for ex-offenders who need a job?

Consider a 40-year-old male who was convicted of burglary when he was 18 years old and has committed no further crimes. Every time he applies for a new job, he tells the potential employer that he was convicted of a felony; even if he does not state this up-front, the employer is likely to do a criminal background check. In either case,

he probably will not get the job because many employers are unwilling to hire an ex-offender.⁴

This situation prompted us to ask the question: Is it possible to determine empirically when it is no longer necessary for an employer to be concerned about a criminal offense in a prospective employee's past?

Most people would probably agree that there should be some point in time after which ex-offenders should not be handicapped in finding employment. The question is when, precisely, should this occur? In the case of our hypothetical 40-year-old, when should a prospective employer no longer consider a burglary that was committed more than two decades earlier if the job applicant has stayed clean since then?

Currently, employers have no empirical guidance on when it might be considered safe to overlook a past criminal record when hiring an ex-offender for a particular job. Employers generally pick an arbitrary number of years for when the relevance of a criminal record should expire: five or 10 years, for example. It goes without saying that different types of employers will have different sensitivities about the potential employee's criminal record. Those serving vulnerable populations like children and the elderly would be particularly sensitive to a prior record involving violence, while a bank hiring a teller would be particularly sensitive to property crimes. A hiring crew for a construction company might be far less sensitive to most prior records.

The point is that determining when a potential employee's criminal record may no longer be relevant has, to date, been an arbitrary exercise. Although considerable research has been done on how to forecast possible criminal behavior, no empirical basis has been found for deciding when a person's record is stale enough for an employer to consider it no longer useful or relevant.⁵

Until now.

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The National Institute of Justice funded our study to "actuarially" estimate a point in time when an individual with a criminal record is at no greater risk of committing another crime than other individuals of the same age. Although our research is ongoing — and our findings, discussed in this article, are preliminary — we have created a model for providing empirical evidence on when an ex-offender has been clean long enough to be considered, for employment purposes, "redeemed." An in-depth discussion of our findings and research methods appears in the May 2009 issue of *Criminology*.⁶

What We Have Known for Years

It is well known — and widely accepted by criminologists and practitioners alike — that recidivism declines steadily with time clean.⁷ Most detected recidivism occurs within three years of an arrest and almost certainly within five years.⁸ But is it possible to identify when the risk of recidivism has declined sufficiently to be considered irrelevant in hiring decisions?

In our study, we obtained the criminal history records of 88,000 individuals who were arrested for the first time in New York state in 1980.⁹ First, we determined whether they had committed any other crime(s) during the ensuing 25 years or if they had stayed clean. Then we compared this data against two populations:

- (1) People in the general population who were the same age.¹⁰
- (2) People of the same age who had never been arrested.

We believe that our analysis provides the criminal justice community with the first scientific method for estimating how long is “long enough” for someone with a prior record to remain arrest-free before he or she should be considered “redeemed” by a prospective employer.

Our goal was to determine empirically at what point in time the risk of recidivism for people in our study group was no greater than the risk for our two comparison populations.¹¹ To do this, we plotted data curves to determine when the risk of re-arrest for individuals in our study group:

- Dropped below the risk of arrest for same-aged people in the general population.
- Approached the risk of arrest for people who had never been arrested.

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Determining the Hazard Rate

Our analysis was based on a statistical concept called the “hazard rate.” The hazard rate is the probability, over time, that someone who has stayed clean will be arrested. For a person who has been arrested in the past, the hazard rate declines the longer he stays clean.

To determine the hazard rate for our study group, we looked at two factors:

- Age at the time of the 1980 (first) arrest.
- Type of crime.

We then compared these hazard rates, as they declined over time, to people of the same age in the general population. For these data, we used the arrest rate (the age-crime curve) from the Uniform Crime Reports, maintained by the Federal Bureau of Investigation.

In the figure on page 13, we show the hazard rate for 18-year-olds when they were arrested for a first offense of one of three crimes: robbery, burglary and aggravated assault. The figure shows that for robbery, the hazard rate declined to the same arrest rate for the general population of same-aged individuals at age 25.7, or 7.7 years after the 1980 robbery arrest. After that point, the probability that individuals would commit another crime was less than the probability of other 26-year-olds in the general population.

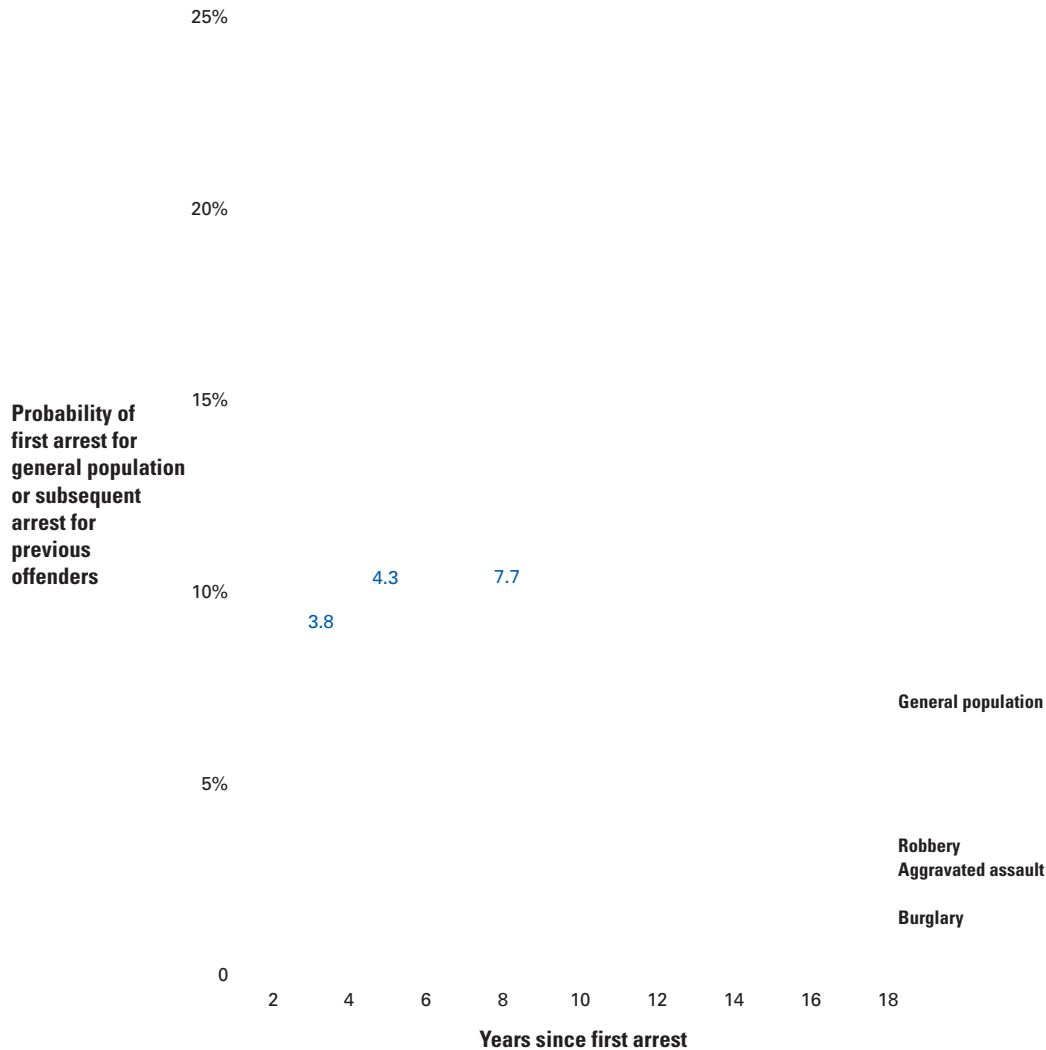
The figure also shows our analysis for burglary and aggravated assault. The hazard rates of people who committed burglary at age 18 declined to the same as the general population somewhat earlier: 3.8 years post-arrest at age 21.8. For aggravated assault, the hazard rates of our study group and the general population of same-aged individuals occurred 4.3 years post-arrest or at age 22.3.

Individuals who were arrested for robbery at age 18 had to stay clean longer than those who were arrested for burglary or aggravated assault to reach the same arrest rate as same-aged people in the general population.

We also looked at the effect of the arrestee’s age at the time of his first arrest in 1980. We examined the hazard rates for three ages of people in our study group — 16, 18 and 20 years old — who were arrested for robbery in 1980. Based on the criminal histories of these people, we found that individuals who were first

Hazard Rate for 18-Year-Olds: First-Time Offenders Compared to General Population

The probability of new arrests for offenders declines over the years and eventually becomes as low as the general population.



arrested when they were 18 years old had the same arrest rate 7.7 years later as a same-aged individual in the general population. In contrast, those whose first arrest occurred at age 16 crossed the curve for a same-aged individual in the general population 8.5 years later, and individuals who

were first arrested at age 20 crossed their curve 4.4 years after their first arrest.

Thus, our analysis showed that the younger an offender was when he committed robbery, the longer he had to stay clean to reach the same arrest rate as people

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his same age in the general population. We also performed the same analysis for the first offenses of burglary and aggravated assault and found similar results.

Comparing Hazard Rates to the Never-Arrested

As noted earlier, our study also compared hazard rates to people who had never been arrested. Needless to say, the hazard rates for people in our study group (because they had been arrested) would never be the same as the hazard rate for people who had never been arrested. But it is reasonable to expect that an ex-offender's hazard rate gets close enough — the longer he stays clean — for an employer performing a criminal background check to determine acceptability for a particular position.

The higher an employer's risk tolerance — that is, the closer a prospective employer would have to get to the hazard rate of the never-arrested — the longer an ex-offender would have to stay clean.

How Robust Were Our Results?

Our preliminary results are limited to people who were arrested in New York state in 1980. Our next step will be to determine if the data hold true at other times and in other places. For example, we want to see whether we get similar results if we draw upon a sample of people who were arrested for the first time in 1985 and in 1990 because these years were quite different from 1980 in a number of important ways:

- 1980 was a peak crime year due to demographic shifts of baby boomers aging out of the high-crime ages.

- 1985 saw a “trough in crime rates” before young people were recruited to sell crack as older crack sellers were sent to prison.
- 1990 was near a peak before the beginning of the crime drop in the 1990s.¹²

If we find that the hazard rates for ex-offenders in these years are similar to what we have found in our preliminary analysis, the usefulness of our hazard-rate analysis method would be strengthened.

Note that our analysis looked at any crime as the marker for when a second arrest occurs; we would also like to examine the relative risk of a specific second crime because, as we stated earlier, different types of employers have different risk tolerances for particular crimes.

We also want to test our risk-analysis model with data from different states. Although it is possible that variations in local populations and arrest practices may affect the results, we anticipate that they would be reasonably close.

Another aspect of future research will explore the possibility that some of the individuals in our study group who looked clean in New York state might have been arrested in another state. We will access FBI records to determine if an individual with no further arrests in New York may have been arrested in New Jersey or Florida, for example.

Public Policy Implications

We believe that our preliminary findings and ongoing research offer an opportunity to think about when an ex-offender might be “redeemed” for employment purposes — that is, when his or her criminal record empirically may be shown to be irrelevant as a factor in a hiring decision.

People performing criminal background checks would find it valuable to know when an ex-offender has been clean long enough that he presents the same risk as other

people in the general population. Employers also might be more likely to use this type of analysis if there were state statutes protecting them against due diligence liability claims when they adhered to reasonable risk-analysis findings.

We also believe that our findings could play an important role in policy discussions about the maintenance of and access to criminal record databases. Considerable policy control rests with those who oversee state criminal history repositories. These decision-makers could establish policies that prevent repositories from distributing records that are determined by hazard-rate analysis to be no longer relevant. Or repositories could seal or even expunge old records if they are deemed, based on such an analysis, to be no longer relevant to assessing future risk. Such policy decisions would inevitably vary from state to state and be driven by other relevant considerations, but policymakers may find valuable guidance in our research findings and methods for considering such decisions.

For example, officials who manage repositories of criminal records could inform prospective employers (and others who access criminal history records) when such records are “stale” — that is, when a recidivism risk analysis demonstrates that a prior arrest or conviction is no longer meaningfully relevant. Pardon boards, too, could use this type of analysis to decide when to grant a pardon to an applicant.

Where to From Here?

At a meeting of the American Society of Criminology in the early 1970s, one of the panelists argued against computerization — that was just then beginning — of criminal history records. Computers, he maintained, didn’t understand the Judeo-Christian concept of “redemption.” Another panelist challenged him, stating that paper records certainly did not understand that concept ... but at least computers could be “taught.”

We believe that these findings represent the first empirical evidence on “redemption times” and how these could affect policies aimed at enhancing employment opportunities for ex-offenders.

Our research is looking at what we might “teach” those computers.

As we said at the beginning of this article, our research is ongoing and needs much further robustness testing to ensure that findings apply more universally, beyond our study group of first-time 1980 arrestees in New York. Nonetheless, we believe that these findings represent the first empirical evidence on “redemption times” and how these could affect policies aimed at enhancing employment opportunities for ex-offenders.

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For More Information

- Blumstein, A., and K. Nakamura, "Redemption in the Presence of Widespread Criminal Background Checks," *Criminology* 47 (2) (May 2009).
 - See *Criminology & Public Policy* 7 (3) (August 2008): Uggen, C., "Editorial Introduction to 'The Effect of Criminal Background Checks on Hiring Ex-offenders,'" 367-370; Freeman, R., "Incarceration, Criminal Background Checks, and Employers in a Low(er) Crime Society," 405-412; Stoll, M.A., and S.D. Bushway, "The Effect of Criminal Background Checks on Hiring Ex-offenders," 371-404; and Western, B., "Criminal Background Checks and Employment Among Workers With Criminal Records," 413-417.
 - See also Holzer, H.J., S. Raphael, and M.A. Stoll, "Perceived Criminality, Criminal Background Checks, and the Racial Hiring Practices of Employers," *Journal of Law and Economics* 49 (2) (October 2006): 451-480.
4. Holzer, H.J., S. Raphael, and M.A. Stoll, "Perceived Criminality, Criminal Background Checks, and the Racial Hiring Practices of Employers," *Journal of Law and Economics* 49 (2) (October 2006): 451-480.
 5. Research has shown that the risk of offending for those with criminal records converges toward the risk for those without a record as substantial time passes. See Kurlychek, M.C., R. Brame, and S.D. Bushway, "Scarlet Letters and Recidivism: Does an Old Criminal Record Predict Future Offending?" *Criminology & Public Policy* 5 (3) (September 2006): 483-504; and Kurlychek, M.C., R. Brame, and S.D. Bushway, "Enduring Risk? Old Criminal Records and Predictions of Future Criminal Involvement," *Crime & Delinquency* 53 (1) (2007): 64-83.
 6. See Blumstein, A., and K. Nakamura, "Redemption in the Presence of Widespread Criminal Background Checks," *Criminology* 47 (2) (May 2009).
 7. Maltz, M.D., *Recidivism*, Orlando, FL: Academic Press, August 1984.
 8. Beck, A.J., and B.E. Shipley, *Recidivism of Prisoners Released in 1983*, Special Report, Washington, DC: Bureau of Justice Statistics, April 1989 (NCJ 116261), available at www.ojp.usdoj.gov/bjs/pub/pdf/rpr83.pdf; and Langan, P.A., and D.J. Levin, *Recidivism of Prisoners Released in 1994*, Special Report, Washington, DC: Bureau of Justice Statistics, June 2002 (NCJ 193427), available at www.ojp.usdoj.gov/bjs/pub/pdf/rpr94.pdf.

Notes

1. Burke, M.E., *2004 Reference and Background Checking Survey Report: A Study by the Society for Human Resource Management*, Alexandria, VA: Society for Human Resource Management, 2006.
2. Bureau of Justice Statistics, *Survey of State Criminal History Information Systems, 2003*, Criminal Justice Information Policy Report, Washington, DC: Bureau of Justice Statistics, February 2006 (NCJ 210297), available at www.ojp.usdoj.gov/bjs/pub/pdf/sschis03.pdf.
3. Federal Bureau of Investigation, *Crime in the United States, 2007*, Washington, DC: Federal Bureau of Investigation, September 2008, available at www.fbi.gov/ucr/cius2007.
9. Data were provided by the New York State Division of Criminal Justice Services; we thank David van Alstyne, a research manager in that office, for his support in this research study. All data were provided with no individual identifiers — that is, all names and other identifying information were removed before the data were given to us.
10. "General population" included people with no arrests as well as ex-offenders who had served their time and were back in the general population.

11. All of the findings reported in this article are based on arrest records. As our research continues, we will address case disposition. We anticipate that hazard rates in our ongoing analyses will be somewhat higher because they will not include individuals who were not charged or who were found to be not guilty.
12. Blumstein, A., and J. Wallman, eds., *The Crime Drop in America*, 2nd ed., Cambridge: Cambridge University Press, 2006.



To Protect and To Serve: Policing in an Age of Terrorism

David Weisburd, Thomas E. Feucht, Idit Hakimi, Lois Felson Mock and Simon Perry, eds.

Since Sept. 11, the threat of terrorism has become a key issue in police agencies throughout the world. How should the police change to counter terrorism threats? What implications do such changes have on law enforcement's traditional responsibilities? *To Protect and To Serve: Policing in an Age of Terrorism* brings together distinguished American and Israeli policing scholars to shed light on what has happened to policing since the turn of the century and what trends can be expected over the next few decades.

To Protect and To Serve discusses how terrorism raises new questions for democratic societies and explores the role that law enforcement should play in preventing and responding to threats. The book also presents strategies and tactics that agencies use to prevent and combat terrorism and examines how police agencies have responded organizationally to the added responsibilities of fighting terrorism.

