

Policy Brief



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Crime, Deterrence, and Democracy Weaker police was a major factor behind the rapid growth in crime after 1989

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A sharp increase in criminal activity has turned out to be an unexpected side effect of the transition from communism to democracy in the Czech Republic and more or less in all other Central and Eastern European countries. As FIGURE 1 shows, the murder rate in the Czech Republic has more than tripled, rising from approximately 1 murder per 100,000 inhabitants in 1989 to 3.3 in 1998. A mere three years after the Velvet Revolution of 1989, the police counted four times as many robberies and ten times as many thefts as they did during pre-revolution times.

Why did crime go up so much? The economic theory of criminal behavior predicts that weaker deterrence – that is, the probability and severity of punishment – leads to an increase in the number of offenses. After 1989, deterrence in the Czech Republic became a lot weaker as a conse-

The post-1989 growth in the number of robberies and thefts in the Czech Republic can be largely explained by a reduction in the probability that offenders will be apprehended and punished.

quence of a series of legislative reforms that made it more difficult to apprehend and convict offenders. For example, the maximum length of arrest and detention was reduced from 48 to 24 hours; the authority of police to wiretap phone calls was put under strict judicial overview; release on bail was made possible and the rights of defendants in the criminal procedure were greatly expanded. At the same time, alternatives to prison became a commonly more preferred methods of punishment.

Economic theory also predicts that the number of offenses would increase if the gains from committing crime increase. There are indeed numerous channels through which crime is much more profitable in a free society than in a communist one: open borders make it easier to sell stolen goods abroad; higher incomes and imports of foreign luxury goods raise the value of goods that can be stolen; crowds of tourists are potential targets of robbers and thieves; entrepreneurial activity gives rise to new types of conflicts that potentially may be resolved by violence; unemployment reduces the opportunity costs of criminal activities especially among young men with poor education. All such factors undoubtedly contributed to an initial increase in criminal activity and started a “viscous circle” of more crime leading to less deterrence leading to more crime: As the number of offenses rose, the police and

Figure 1: Crime Rates

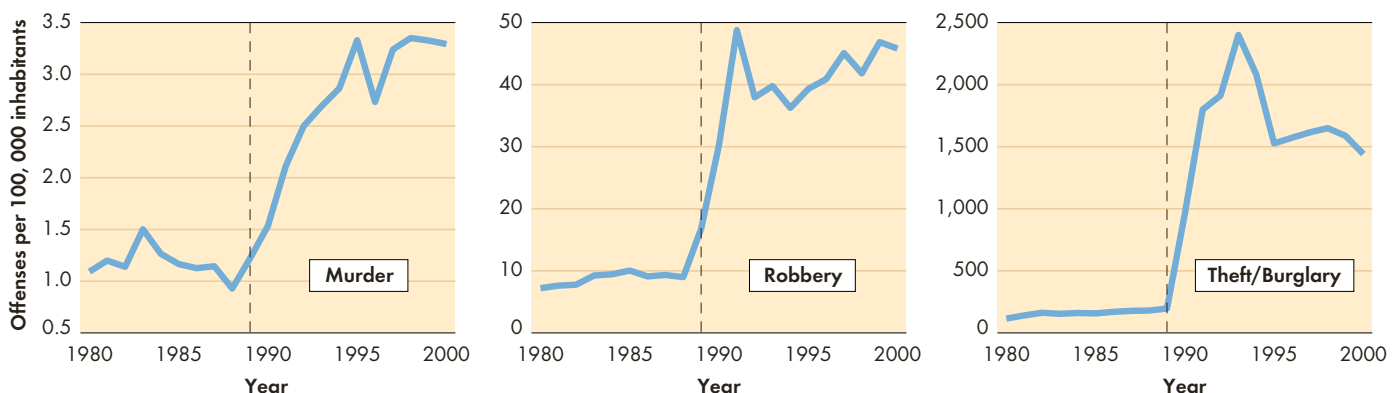
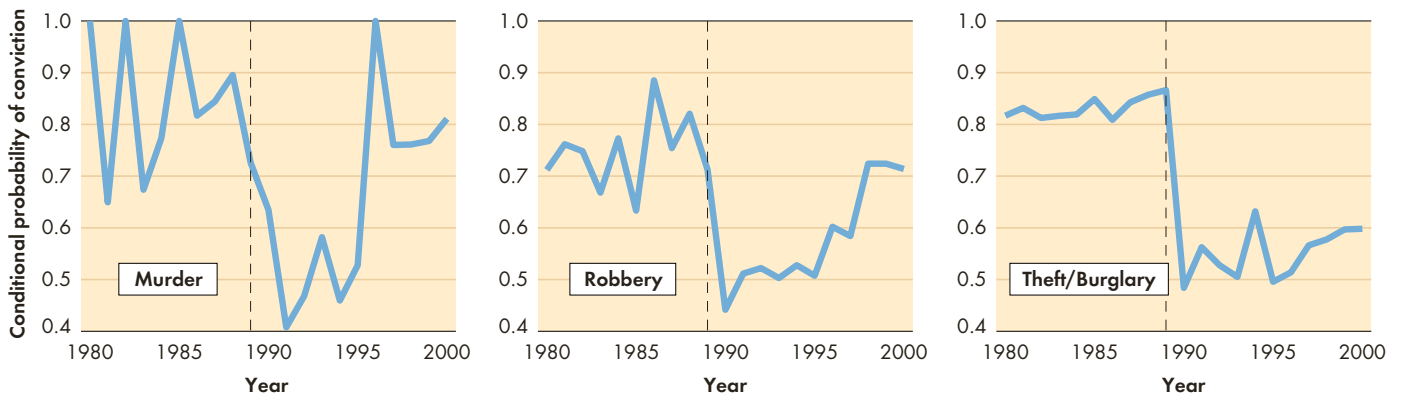


Figure 2: Conditional probability of conviction



Conditional probability of conviction was computed as the total number of persons convicted for the respective offense in a given year divided by the total number of persons charged with that offense in that year.

courts became quickly overloaded with cases and were thus less able to prosecute new cases. For potential offenders, this implied a lower probability of punishment and therefore a greater incentive to commit crime.

As a result, the likelihood that an offender is punished fell dramatically. For example, in 1988 the ratio of people charged with robbery to the number of robberies was 78%, whereas, four years later, only 36% of robberies translated into charges. FIGURE 2 demonstrates that the courts got “softer” in convicting offenders. Under the communist judiciary, 96%, 77%, and 83% of people charged with murder, robbery, and theft, respectively, were convicted. Soon after the change in regime, these probabilities dropped to 72, 61, and 55 percent. Such a variation in deterrence is rarely observed in datasets covering a single jurisdiction, which makes the Czech experience an attractive “quasi-natural

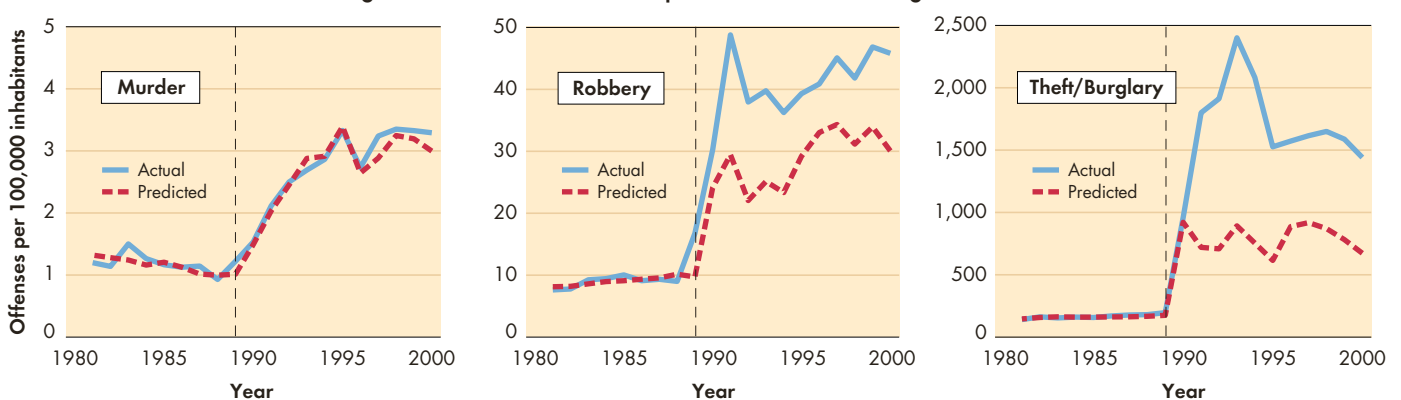
experiment” which we exploit to test the relationship between deterrence and crime.

We employ several statistical methods to investigate whether the rapid growth in crime rates in the Czech Republic after 1989 was at least partly caused by weaker deterrence. We use a panel dataset of Czech regions covering the years 1980–2000. The data contains information on the number of offenses for several categories of offenses, and criminal justice variables from which we constructed measures of deterrence such as the probability of being charged, the conditional probability of conviction, and the expected prison sentence faced by a convicted offender. We regress the crime rates on our measures of deterrence, socio-economic control variables such as unemployment and income inequality, and region and year dummy variables that capture unobservable shocks to crime that are common to a particular region over time or common to all regions in a given year.

We also adopt a simultaneous equations model that captures the “vicious circle” adjustments of deterrence to the past levels of crime rates. The major finding is that deterrence has statistically and economically significant effect on robberies, thefts, intentional injuries, and to a smaller extent, failure to support. For example, a 1 percent increase in the probability that the police apprehends an offender results in a 0.5-percent reduction in the number of robberies and a 0.7-percent reduction in the number of thefts. However, the relationship between deterrence and the number of murders and rapes is not statistically significant.

Interestingly enough, we find no evidence of a structural break in the data after 1989 – it appears that criminals are as sensitive to the incentives they face today as they used be to under the communist regime. We have secured the robustness of our estimates by conducting alternative econometric specifications.

Figure 3: Crime rates: actual vs predicted under unchanged deterrence



The predicted crime rates are national aggregates of the fitted values from a 3SLS model. For the post-1989 years the probability of being charged, probability of conviction and the length of prison sentence are held at their 1989 levels.

Our regressions allow us to predict how the crime rates would have evolved if the democratic government had somehow preserved the communist level of deterrence. FIGURE 3 summarizes our predictions by plotting the actual crime rates and the crime rates predicted by the model under the assumption that all measures of deterrence remain at their 1989 levels. As it is obvious from the graph, stronger deterrence would not have eliminated the growth in murders. Nevertheless, the offenses that are more “economic” in nature, namely robberies and thefts, would have increased

much, much less had deterrence been kept at the 1989 level. About 54% of the post-1989 increase in robberies and 61% of the increase in thefts can be accounted for by weaker deterrence.

However, the fact that crime would be lower if deterrence was stronger does not imply that policymakers should try to bring deterrence back to its pre-1989 levels. Quite the contrary, our findings also indicate that doing so would be extremely expensive. For example, the police would have to employ five times more policemen in order to be able to apprehend the same fraction

of offenders as it used to apprehend during the communist period. The costs and benefits of crime deterrence are apparently very much different in a free society, and voters are apparently willing to tolerate more crime. Our analysis of the Czech experience concurs with other international studies on the relationship between crime and democracy, showing that democracies indeed tend to have more crime (especially “petty” crime) than totalitarian countries, and a large part of the difference is attributable to weaker deterrence. In this sense, crime is indeed a “price for democracy”. ■

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