Homicide Booms and Busts: A Small-N Comparative Historical Study

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Abstract

Homicide booms and busts are long-term phenomena that can best be studied with comparative historical methods. They cannot easily be explained by enduring socioeconomic inequalities because these persist during boom and bust periods alike. Historical changes that may help to lower homicide rates in the long run sometimes cause homicide booms in the short term. Modern policing methods have helped to end homicide booms without first resolving underlying social problems, but this may be possible only when the conditions are propitious.

Keywords

comparative, historical, methodology, structural causes, trends

Homicide booms and busts have long-lasting consequences, but they have been recalcitrant to analysis with the theories and methods that predominate in criminology (Lafree, 2007). Criminologists rely heavily on sophisticated statistical methods to untangle relationships between enduring social and psychological variables. This often works well with large cross-sectional data sets, but the variables that work well in cross-sectional studies are of limited value in explaining changes over time. Homicide booms and busts are infrequent and the data available for comparative statistical analysis are quite limited.

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In the most comprehensive comparative statistical study, LaFree and Drass (2002) constructed a 34 nation, 43 year data set (unfortunately since lost). Only 12 of the nations experienced homicide booms during the study period. They were unable to undertake a multivariate statistical analysis because of limitations in the availability of comparable data on all 34 nations. They found that homicide booms were more common in developing than industrialized countries, but they could not explain why some industrialized countries had booms and other did not. Their data were inconsistent with their hypothesis that the stresses of globalization made homicide booms an almost universal phenomenon, but consistent with the theory that booms sometimes happen when modernizing changes clash with older social patterns in developing countries. These findings are modest, but it is unlikely that much more can be accomplished with comparative statistical analysis because of the scarcity of consistent data from large numbers of countries over long periods of time.

Case study methods provide a rich body of descriptive information about specific homicide booms and busts, but attempts to use criminological theory and research findings to explain trends in specific cases have been disappointing. Pearson-Nelson used very sophisticated statistical methods and a comprehensive understanding of past theory and research in his analysis of what he calls the homicide "epidemic" in the United States in the late 1980s and early 1990s. But he was forced to give up in frustration, conceding that "a clear understanding of the epidemic remains elusive" and that "hypotheses based on the research on general homicide rates are not confirmed when applied to the parameters of the epidemic" (Pearson-Nelson, 2008, pp. 148-149).

An alternative approach is what Abbott (2004) calls the small-N comparative method. This method examines a small number of cases in moderate detail, drawing on descriptive case study accounts and using whatever statistical data are available even though they are not consistent enough to be combined in a single data set. The cases are selected to illustrate different outcomes. While it cannot offer the comfort of tests of statistical significance or measures of explained variance, the small-N comparative method draws on the qualitative insights of specialists in each of the cases examined. It may be the most appropriate use of the kinds of data available on many social science topics (Freedman, 1991; Goertzel and Goertzel, 2008; Zimring, 2007, p. 143).

This paper uses the small-N comparative method to examine homicide booms and busts in a number of countries over historical periods of time. The cases selected are ones for which useful data and analyses were available for a sufficiently long period of time, often a century or more. There are simply not enough cases available to justify drawing a sample of cases and attempting statistical generalization. The goal is to find general patterns that characterize many of the cases and that may usefully inform further research and practice.

European historical data. European researchers have by far the longest time series to examine. Based on these data, Gurr (1981) concluded that over very long historical periods the trend in homicide, at least in Europe, has been down. The data are uneven but they have been very carefully analyzed and many specialists believe that long-term trends can be established and that homicide was much higher in medieval Europe than
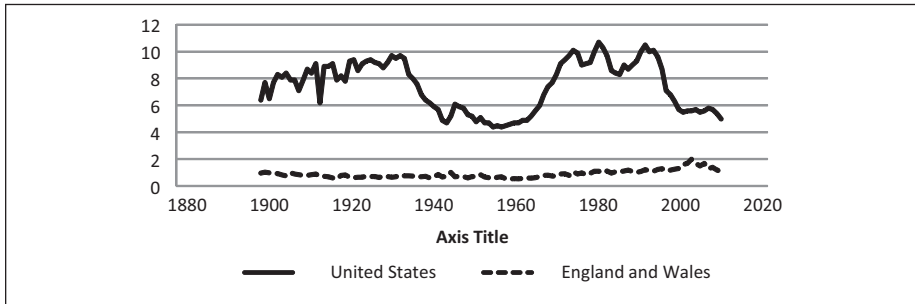
Figure 1. Homicides per 100,000 in the United States and England and Wales
Source: Eckberg, 2006; Archer and Gartner, 1984; Povney 2004; Statistical Abstract of the United States, 2012; United Nations Office on Drugs and Crime, 2011.

in modern Europe (Johnson and Monkkonen, 1996; Spierenburg, 1996; Miethe and Regoeczi, 2004). This pattern has been confirmed by Eisner (2001, 2003) with a very large data base including approximately 390 estimates of premodern homicide rates from more than ninety publications in several languages. But the reasons for the decline in homicide are less certain.

Following Elias's (1982) theory of the civilizing process, Gurr reasoned that declining homicide rates over historical periods of time are the rule because societies become more civilized as they develop. Periods of rising rates, in his view, were exceptions. Gurr (1981) concluded that "each great upsurge of violent crime in the histories of the societies under study has been caused by a distinctive combination of altered social forces" (p. 146). He theorized that homicide booms could result from any social dislocation that isolated segments of the population from civilizing institutions and social norms. But Roth (2009) argues that "the civilization thesis does not fit the evidence" (p. 12) and that medieval people were no more violent than people today. He believes that most homicide victims before 1850 would have survived their injuries with modern medical care. Schwerhoff (2002) questions the legitimacy of drawing theoretical conclusions from these historical data, a critique which, Spierenburg (2002) argues, questions the entire enterprise of generalization from historical statistics.

More evidence from different historical periods and different countries should be helpful. Consistent with the tenets of civilizing process theory, some countries have had very low homicide rates for very long periods of time. Of those that reported very long data series to Archer and Gartner (1984) these include the Netherlands, England and Wales, Scotland, Portugal, and Norway. Homicide trends for England are included in Figure 1 for contrast with the United States to illustrate this difference. Including more low homicide countries in Figure 1 would overlap too closely with the trend for England. While there are no established norms for "normal" homicide rates, a number of countries have maintained rates under 2 per 100,000 for many years.

By the 20th century many European countries had developed stable social institutions and cultural patterns that produced low rates of homicide despite the tremendous strains caused by the century's wars and economic crises. The trend lines for England and the Netherlands were remarkably stable for the entire 20th century, a period that included both world wars and the great depression (although the Netherlands did not report data for 1944 or 1945). The British trends are so stable that the largest disruption, a minor peak in 2000, was due to one physician who was convicted of murdering 15 of his patients in that year. An inquiry identified a further 172 of his victims, all of whom were entered into the statistics at the same time (Povney, 2004).

Civilizing process theory describes long-term trends in many countries, but it cannot explain what Gurr (1981) called the "distinctive combinations of altered social forces" (p. 146) that cause homicide booms. It does not explain why some countries have homicide booms while neighbors with similar levels of cultural development do not. In a richly detailed analysis of Finnish history from medieval times to the early modern era, Ylikangas (2002) argues that the reasons for the decline in homicide were "historical—in other words, they were caused by definite factors. They were not anthropological developments automatically following laws of their own" (p. 67).

A key historical factor was the development of a centralized state with the capability of enforcing laws against homicide, in contrast to the medieval period when homicides were often settled by compensatory payments between families. This process happened earlier in Sweden (Karonen, 2001) than in Finland, which may explain why homicide rates declined much earlier in Sweden than in Finland. This is not to deny that Scandinavian countries became more civilized, but even countries with a long history of civilizing development, such as Estonia (Lehti, 2001), Belgium, Ireland (Roth, 2009), and Spain (Archer and Gartner, 1984) have experienced periods of high homicide at times of political and social crisis.

American exceptionalism. Throughout the 20th century, the United States experienced higher homicide rates than Australia, Canada, England and other countries with similar cultures at comparable levels of development (Roth, 2009). The United States also experienced significant homicide booms and busts in the 19th and 20th centuries. In an historical overview, comparing the United States with other countries, Roth (2009) developed the theory that high homicide rates occur when people lack confidence that their government is stable, that its leaders are legitimate, and that its institutions will protect them. Under these conditions, people are more likely to resort to violence to win respect and resolve differences. Roth argues that homicide rates go down when people feel solidarity with their communities and believe that the social hierarchy is legitimate. He argues that confidence in government and social solidarity have been lower in the United States than in other highly developed countries, accounting for the higher average homicide rates.

In Roth's view, the homicide booms and busts in American history can be attributed to historical events that disrupted political and social stability. There are no national data on homicide rates in the United States in the 19th century, but there are data for specific cities (Lane, 1997). Gurr's (1981) review of studies of 19th-century patterns

concluded that there was a stable and declining trend in the first part of the century, broken by a "pronounced upward swing which began shortly before the Civil War and persisted into the 1870s" (pp. 325-327) Historical accounts describe the Civil War and reconstruction era as a "tumultuous period of violence that had an overwhelming impact on subsequent decades" (Miethe & Regoeczi, 2004, p. 68).

The 20th century data for the United States are excellent (Eckberg, 2006) and show long, almost cyclical, waves lasting approximately a generation (Figure 1). Homicide increased in the early part of the century, a period of rapid urbanization and immigration. Alcohol prohibition was imposed in 1920 in the hope of reversing trends in violent crime and other social problems, but it was ineffectively enforced and led to high levels of violence between rival bootlegging gangs.

In 1933, right in the depths of the great depression, there was a dramatic and unexpected turning point and homicide rates plummeted. Brearley's pioneering study of *Homicide in the United States* had just been published in 1932, but he and other criminologists of the era had no inkling that the homicide rate was about to turn down. Nor did he offer any policy recommendations that might have contributed to ending the boom, opining quite erroneously that "to lay out a plan for the reduction of the rate of homicide would be almost equivalent to formulating a program for the betterment of society" (1932, p. 28).

Research done after the homicide bust of the 1930s suggests that a major factor was the ending of alcohol prohibition in 1933 (Zahn & McCall, 1999). Brearley (1932) knew that critics blamed prohibition for high homicide rates, but prohibition's supporters disagreed and he concluded lamely that "perhaps prohibition has increased the amount of homicide; perhaps it has not" (p. 47). Of course, there were other historical factors, and one cannot be certain that any one factor caused the bust. The beginning of Franklin Roosevelt's New Deal in 1933 gave people increased confidence in government and feelings of social solidarity (Roth, 2009). Homicide rates continued to decline when the economy worsened again in 1937.

Low homicide rates in the United States during World War II and the 1950s were followed by a very sharp homicide boom in the 1960s and early 1970s. This was the period of civil rights and antiwar activism when violent conflicts between students, black citizens and police in American cities led to a general decline in the legitimacy of state institutions (LaFree, 1998). The social disruption was generalized, including a rapid increase in divorce, robbery and many other indicators of social problems. Homicide rates were highest among young black males and in urban ghetto communities, but this was also true during periods with lower rates.

Homicide rates in the United States stabilized in the late 1970s and remained high until the early 1990s. Although there was some fluctuation, there is no evidence of an "epidemic" beginning in the late 1980s as Pearson-Nelson (2008) assumed. He did not trace the trends back before 1979, because the urban data sets he was using did not go back far enough. The national data suggest that the homicide boom began in the late 1960s and early 1970s, not in the late 1980s. It certainly ended in the early 1990s with a precipitous and unexpected homicide bust. This bust took American criminologists

by surprise because they had generally attributed the high homicide rates of the 1970s and 1980s to enduring racial and socioeconomic inequalities.

After the fact, researchers described what came to be known as the "crime drop" (Blumstein & Wallman, 2000) but could not isolate a clear explanatory factor. In the most comprehensive study, Zimring (2007) concluded that it was "a classic example of multiple causation, with none of the many contributing causes playing a dominant role" (p. 197). If researchers had taken a longer historical view, they might have observed that it was not so much the crime drop that needed explanation but the crime boom of the preceding decades. Crime rates in the 1990s may have just been returning to more normal levels after the disruptions of the 1960s and 1970s settled down. Policy changes, such as improved policing methods, certainly may have helped, but these same policy changes might not have worked nearly as well if they had been attempted a decade or two earlier when social disruption was increasing.

Japan. Japan has had a steady decline in homicide since its defeat in World War II (Figure 2). Country specialists have been puzzled by this success because none of the standard criminological variables can explain it. Johnson (2008) reports that "satisfying explanations of that change are hard to come by" (p. 147). Specialists have expressed surprise that the decline has been especially pronounced among men in their twenties (Hiraiwa-Hasegawa, 2005), the category that generally has the highest rates in cross-sectional studies. Johnson reports that the present homicide rate for Japanese men is about one fifth of what it was in 1955 (Johnson, 2008, p. 148). From an historical comparative perspective, the answer may be that Japan has simply reached a "normal" homicide rate for a stable and prosperous society with low inequality and strong gun control. Researchers might study why it was higher before World War II, especially among young men. The remarkable drop during the war itself is thought to have happened because so many young men were serving in the military (Hiraiwa-Hasegawa, 2005).

Russia. Homicide statistics are available for Russia as far back as 1875, although there are long periods for which no data are available, and there are troublesome inconsistencies in the available data. The trends from 1875 to 1994 have been published by Bogoyavlenskiy (2001). For the period from 1964 to 1994, he used data from Meslé, Shkolnikov, Hertrich, and Vallin (1996) who carefully adjusted data from different years to make them consistent. They used formulas to redistribute deaths that were classified as due to "old age" or for "cause unknown" since the numbers of these varied widely from year to year (Meslé et al., 1996; Meslé, Shkolnikov, & Vallin, 1992). Their series also includes deaths caused by "injuries purposely inflicted by another person" [although not intended as homicides] and deaths due to legal execution. The data for 1875 to 1963 were collected by Bogoyavlenskiy from archival sources and recoded to be consistent with the Meslé series.

A consistent data series for 1995 to 2009 is available from Rosstat (2011). The definitions are not consistent with those of the Bogoyavlenskiy series since they include only deaths officially classified as homicides. We converted the frequencies in both data sets to rates per 100,000 using population data from Kumo, Morinaga, and Shida

(2007). Figure 3 presents the trends in both data series, including overlap for the years from 1990 to 1995.

Homicide rates were reported as stable and around 5 per 100,000 in Tsarist Russia, both according to the Bogoyavlenskiy series and according to Frank's (1999) data for peasant crime in rural areas. No homicide data are available for the Soviet period until 1955, although it is well established that there were millions of excess deaths from state repression during that period (Rosefielde, 1997). After Stalin's death in 1953, however, Soviet Russia settled into stable homicide rates comparable to those before the Soviet era.

Homicide rates began to increase in the late 1960s, from 6.0 per 100,000 in 1967 to 13.1 per 100,000 in 1979, then declined temporarily in the mid 1980s. Examining data for the period from 1965 to 1994, Meslé et al (1996, p. 55) find a strong correlation between violent death rates and alcohol consumption, a finding confirmed by Leon et al. (1997) for the period from 1984 to 1994. The decline in homicide in the mid 1980s corresponded to a campaign by the Gorbachev government that strictly limited alcohol production by state monopolies. Although this campaign was quite effective in reducing all measured categories of violent deaths, it was abandoned after only two years, from 1985 to 1987, because of popular discontent and the increase in home production of alcohol.

The phenomenal increase in homicide in Russia in the 1990s, concomitant with the end of the Soviet system, was part of a general increase in mortality that was "without parallel in the modern era, with the exception of some other parts of the former Soviet Union" (Leon et al., p. 384). The increase was not limited to homicide, but can be observed in the data for deaths from suicide, falls, drowning, accidental poisoning and auto accidents (Meslé et al., 1996). Meslé et al (1996) conclude that, "together with alcoholism, the increase in violent death is probably a response to the shock of economic reforms and the lowering of the standards of living, combined with the disintegration of the old political and administrative system" (pp. 59-60).

Other researchers concur with this fundamental observation and add some additional details (Gavrilova, Semyonova, Evdokushkina, & Gavrilov, 1990; Stickley and Mákinen, 2005; Pridemore, 2003; Chervyakov, Shkolnikov, Pridemore, & McKee, 2002). Unlike the United States and Brazil, homicide in Russia has not been concentrated in the younger age groups, but distributed among the age groups including a large number of middle aged adults. More men are victims than women, but the trend lines for men and women are closely correlated. Firearms are rarely used; most homicides are committed with knives and other sharp objects. Although organized crime and political assassinations are important, the large majority of homicides are committed by acquaintances and family members. Unlike what happened in many other countries, the increase in homicide was not due primarily to drug gangs or other ghetto phenomena, but to a general increase in life stress. The decline in the last few years has come as the country has returned to more stable social patterns.

Brazil. Historical data on homicide in Brazil usually go back only to 1980 and even those can be hard to find (Ferreira, 2005). Homicide rates increased steadily from

1980 until 2004, leading most researchers to treat them as an enduring social problem rather than as an historical boom. Brazil's high levels of poverty and inequality were generally assumed to be a major factor, as demonstrated by the fact that homicide rates were highest among poor urban youth often involved in drug gangs. Economic stagnation during the debt crisis years of the 1980s accentuated these problems, as did the easy availability of firearms. Barata, Ribeiro, and Morais (1999) thought that another factor was "the progressive deterioration of state public institutions, with precarious carrying out of the judicial and public security functions, leading to the prevalence of impunity and injustice."

But why had state institutions deteriorated? This was a time when democracy was being restored after a period of military rule since 1964. During this transitional period, some Brazilian state governments were more concerned with curbing human rights abuses by the police than with cutting the rates of ordinary, nonpolitical crime. The climate of opinion among the Brazilian intelligentsia was largely antipolice, and crime was sometimes viewed as a form of class struggle (Zaluar, 1999). Hinton (2006) describes a sharp increase in violent crime in the city of Rio de Janeiro during this period. Democratic and left-wing politicians encountered substantial resistance from the police, and eventually from the general public, when their focus on curbing police abuse led to substantially increased violent crime rates. This may account for a spike that was observed in the homicide rate in Rio in 1989 (Goertzel & Kahn, 2009).

By the end of the 1990s, Brazilians generally thought of high violent crime rates as rooted in the fundamentals of Brazilian society. As late 2004, historian Luís Mir (2004) characterized São Paulo and Rio de Janeiro as "metropolises of death" and insisted that nothing could be done to cut the homicide rate until wealth and income were redistributed. Just like American criminologists in the 1990s (Wilson, 1995; Bennett, DiIulio, and Walters, 1996), he warned of worsening violent crime just at a time when crime was getting dramatically better.

Data on homicide rates for Brazil as a whole before 1980 are not available, but we have found data for the greater São Paulo area, Brazil's largest metropolitan area and one of the world's largest urban agglomerations. The (incomplete) data in Figure 4 show moderate homicide rates for the 1940s and before, a picture that coincides with qualitative historical accounts (Zaluar, 2003). They were higher in the early 1960s, a period of intense social activism and political conflict leading up to a military coup d'état in 1964. They then increased sharply with the transition to democracy in the 1980s.

The striking drop in the homicide rate in greater São Paulo, from 52.5 per 100,000 in 1999 to 11.5 in 2008, is, so far as we have been able to determine, the largest homicide bust ever recorded in a large jurisdiction (approximately 15 million people). São Paulo's drop of 41 homicides per 100,000 is almost twice the size of New York City's drop of 22 per 100,000 in the 1990s (Zimring, 2007, p. 142). São Paulo's drop was much larger and earlier than the homicide drop in the rest of Brazil, just as New York City's was in the United States. Just as in New York, the São Paulo bust is often attributed to the effective use of modern policing methods including intensive efforts to get guns off the streets (Goertzel and Kuhn, 2009). Also as in New York, these measures
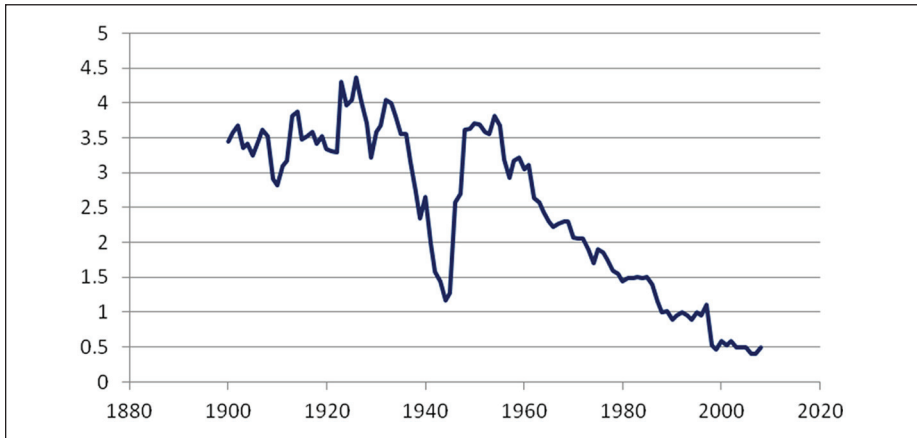
Figure 2. Homicides per 100,000 in Japan
Source: Archer and Gartner (1984); United Nations Office on Drugs and Crime.
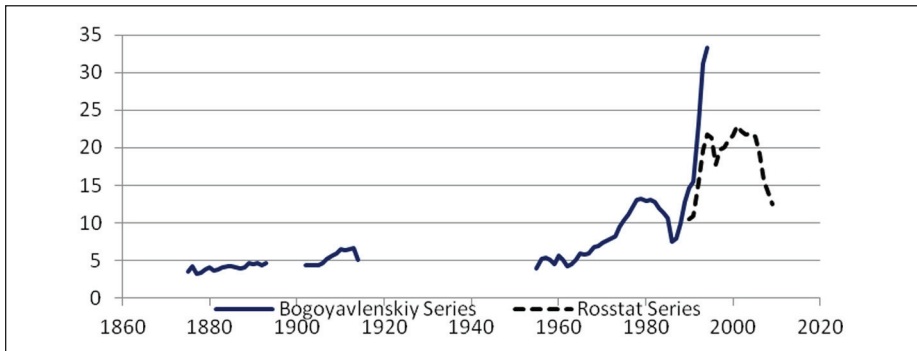
Figure 3. Homicides and attempted homicides per 100,000 in Russia: 1875-2009
Source: Bogoyavlenskiy (2001); Rosstat (2011).

took place in the context of generally stabilizing social conditions. In Brazil's case the end of hyperinflation in 1994 stabilized the economy and ushered in a period of economic growth and improving social indicators.

South Africa. In the euphoria that accompanied the relatively peaceful transition to racial democracy in South Africa in 1994, few anticipated that "criminal violence" would be "a dominant feature of the post-apartheid landscape" (Shaw, 2002, p. xii). Homicide statistics for South Africa before 1994 are problematic, but the big jump in the homicide rate was from 1989 to 1990 when the number of homicides went from just under 12,000 to over 18,000 (Louw, 1997, p. 142). Since 1994, the homicide rate has declined slowly as authorities have struggled to convert a police force historically
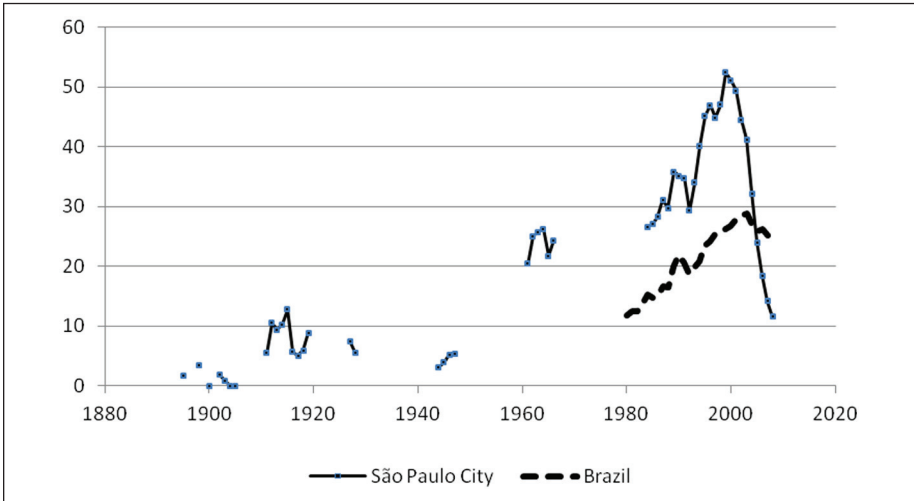
Figure 4. Homicide rates in metropolitan Sao Paulo and in Brazil: 1895-2008
Source: Repartição (1896) and later years; Anuário (1947) and later years; Goertzel and Kahn (2009).

focused on maintaining white supremacy to a modern one aimed at controlling crime in all communities.

Venezuela and Colombia. These two neighboring South American countries provide an instructive contrast. Colombia has long history of violent conflict and very high homicide rates exacerbated by violent political conflicts and struggles with drug gangs. Its homicide rates were among the highest in the world in the 1950s and again in the 1990s, but have turned down sharply in the last decade (Figure 5).

Venezuela, which reported much lower homicide rates before 1970, has been experiencing a homicide boom in recent years (Avilán Rovira, 2000; Infosec, 2010; Romero, 2010). Politically, Venezuela is in the midst of a "twenty-first century social-ist" revolution intended to lessen class and racial inequalities. The Venezuelan gov-ernment does not publish homicide statistics, but they are available from nonprofit organizations, one of which concludes that "criminality and impunity are growing daily at an accelerated rate, but the courts, judicial processes and sentences are not doing the same, making it clear that institutional insufficiency has become effective system of registering or controlling firearms, and the number of firearms in the coun-try appears to be increasing." All categories of homicide appear to be high, including homicides by acquaintances and family members, violence between drug gangs, and homicides associated with robberies.

Columbia has a more conservative government that is violently suppressing drug gangs and a long Marxist insurgency. The police (Colombian National Police, 2005) are proud of their success in reducing kidnapping and extortion. They attribute their
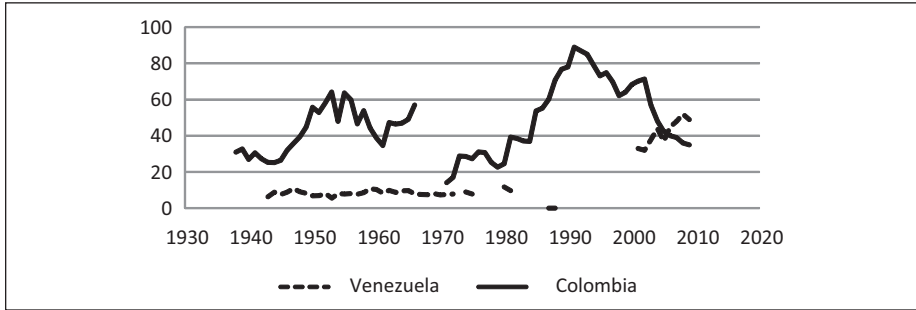
Figure 5. Homicides per 100,000 in Venezuela and Colombia
Source: Archer and Gartner (1984); http://www.uh.cu/centros/cesbh/Archivos/bvirtual/tesis4.pdf; http://www.anm.org.ve/FTPANM/online/2000/Enero_Marzo/07. Avilán JM (41-50).pdf

success to a network of informants who are rewarded for information on armed guerrilla groups that are responsible for mass kidnappings. They do not report any specific policies aimed at reducing the homicide rate; rather the decline seems to be a consequence of the increase in stability and prosperity resulting from the suppression of armed criminal and revolutionary gangs (Alcaldia, 2002; Nuñez, 2004).

Conclusions. The preference for rigorous statistical methods may have led criminologists to emphasize socioeconomic variables that explain variance in large cross-sectional data sets at the expense of historical factors that can best be studied qualitatively. The small-N comparative method is a way of comparing and consolidating the insights of historical researchers who have examined specific cases in detail. The analysis is necessarily qualitative and the cases are not statistically representative of a larger population of cases. The skills required are more journalistic than econometric, and the data sources are of variable quality. We have even relied on Wikipedia, a source many researchers use but are afraid to cite (Spiro, 2008). Despite its limitations the method can produce interesting and potentially useful conclusions worthy of serious consideration by policy makers, criminal justice practitioners and researchers. The cases reviewed here suggest the following conclusions, some of which are well supported, others of which are more tentative.

First, booms and busts are defined by the history of each country, region or city. An increase that is considered a "boom" in a jurisdiction with a history of low or moderate homicide rates may seem quite modest when compared to rates in a jurisdiction with a history of high homicide rates. The homicide rate in Colombia has declined significantly in the last few years, but it is still higher than that in the United States in the peak boom years. The variables that explain the differences in average rates between countries are not the ones that explain the booms and busts within each country.

Second, homicide cycles are not inherent in the social system in the way that economic cycles are inherent in market economies. It is possible for countries to maintain very low homicide rates for very long periods of time, despite sharp fluctuations in economic and social variables. Although the time series data for the United States in

the 20th century may appear to show long cycles, these were due to specific historical events that undermined confidence in the legitimacy, stability and effectiveness of government. There is no reason why the bust in recent years must be followed by a boom. Indeed, there is no reason why the rate should not be pushed down further in the United States.

Third, there is evidence that modern police methods can respond to homicide epidemics without first solving underlying social or economic problems. The best evidence of this is from New York City, greater São Paulo, and Colombia. But it is important to note that all three of these successes happened in countries where underlying trends were positive. In the United States and Brazil, the improvements in the largest cities were followed by improvements in the rest of the country. Improvements in policing may give the best results when underlying social conditions are improving and a country is approaching a tipping point. If underlying trends were negative, improved policing might still be effective in limiting the extent of an approaching boom, but this might not be apparent to the public or even to researchers because they often focus on recent rather than long-term trends. Evaluation research should be careful to consider underlying trends, often best done by comparing the effects of policies in several jurisdictions.

Fourth, homicide booms are a likely consequence of any event that disrupts the social order, even if the disruption is desirable and necessary to achieve important long term goals. Rapid social change, however laudable it may be for other reasons, is likely to aggravate the stresses that lead to increased homicide rates. Confronted with dramatic social changes, such as those recently experienced in the Middle East, public officials should prepare to cope with an epidemic of conventional, nonpolitical homicide, as well as other kinds of violent crime.

Fifth, the fact that homicide declined sharply when alcohol prohibition was ended in the United States in 1933 suggests that ending drug prohibition might have a similar effect. There are, however, no other cases of the ending of substance prohibition in our study, so the evidence for this tentative conclusion is weak. Experiments in specific states would be very helpful in testing this hypothesis. Cross-sectional data on the relationship between drug abuse and crime, on the other hand, is not likely to be helpful in predicting trends.

Predicting trends in homicide and other crimes is of more than just academic interest. Officials in Russia and South Africa could have been better prepared for the homicide epidemics in their countries if they had been sensitized to the fact that even progressive social changes are likely to cause homicide booms. Brazilians might have moved more quickly to improve policing if they realized that it could be effective without first solving the country's persistent socioeconomic problems. Researchers in the United States were perhaps overly discouraged in the 1980s because policy innovations rarely seemed to work. Then, surprisingly, crime rates dropped and everything seemed to work. If they had been more sensitive to the long-term factors that drive booms and busts they might have been more realistic in evaluating policies and allocating resources.

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