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Evaluating Contemporary Crime Drop(s) in America, New York City, and Many Other Places

Eric P. Baumer and Kevin T. Wolff

This paper describes and evaluates some fundamental facts about the contemporary crime drop, summarizes the major explanations that have been offered for it, and assesses the validity of these explanations in light of observed trends. In contrast with much of the recent literature, we argue that the locus of the crime drop in the 1990s is not wholly consistent with the available data and that while New York City experienced substantial crime decreases, its uniqueness has been exaggerated. We suggest that it is important to partition the crime drop observed in New York City and elsewhere into global and more localized shifts, and we offer some observations about the factors that appear most germane to driving these different dimensions of recent crime drops. We conclude with some suggestions for future inquiry.

Keywords crime trends; 1990s crime drop; New York City

Introduction

It is now well known that crime rates in New York City dropped significantly during the 1990s. This phenomenon has been described as one of the latest “miracles” in New York City (Jacobson, 2005), and it has served as a focal point of discussions about “The Great American Crime Decline” (Zimring, 2007). Many are now convinced that something fundamental changed in America during the early 1990s (e.g. Blumstein & Wallman, 2006) and that New York

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City is a unique exemplar of those changes, holding within it valuable answers to the general mystery of how and why crime rates have declined dramatically during the past two decades (Zimring, 2011). These are understandable conclusions, for no one can credibly quibble with the observation that New York City has experienced a major drop in crime since the early 1990s. However, we propose that some of the basic claims that frame the conversation about New York City and recent crime trends more generally have not been sufficiently scrutinized and that a closer look reveals several unresolved issues that paint a somewhat murkier portrait of the recent crime drop than suggested in much of the literature. Additionally, though there are plenty of existing discussions of the many proposed explanations for the contemporary crime drop, we suggest that most of those discussions are overly parochial and largely disconnected from the broader theoretical literature in criminology. One element of this is that many discussions are inattentive to key distinctions about the factors most pertinent to aspects of the crime drop that appear to be international in scope, the factors unique to America, and those that might help us understand what happened differently in particular places (such as New York City). This special issue on the New York City crime drop is thus a welcomed arrival, in our judgment. It provides an opportunity to advance knowledge on the contemporary crime drop and the New York City experience by revisiting some fundamental matters that we think are critical for gauging the validity of the various explanations that have been proposed.

We address two general issues in the paper. First, we provide a critical assessment of key descriptive features of the crime drop, including *when* it started, *what* types of activities it has involved, and *where* it has been observed. The *when*, *what*, and *where* of the crime drop have received attention elsewhere (e.g. Blumstein & Wallman, 2006; Levitt, 2004; Parker, 2008; Zimring, 2007), but in our judgment, prior reviews have been too quick to conclude that (a) the 1990s is the clear epicenter of the contemporary crime drop; (b) that there has been a singular crime drop to which all crime types conform; and (c) that New York City is highly unique from other places with respect to recent crime trends. While we concede that each of these points is a reasonable way to read the available evidence, we think they are overly simplistic conclusions. In particular, while the early 1990s certainly signaled an important shift in the nature of contemporary crime trends in New York City and elsewhere, there were signs of a notable drop for many crimes (e.g. burglary, theft, rape, intimate partner violence, adult homicide, white homicide) much earlier than that. Additionally, while good arguments have been made that New York City is a unique entity with respect to the 1990s crime drop and that it might therefore serve as a useful laboratory within which to focus efforts to advance understanding of the phenomenon (Zimring, 2011), we think a view which incorporates a broader reading of the literature and the empirical evidence raises significant questions about such claims. Both of these issues—the timing of contemporary crime drops and the distinctiveness of New York City—strike us as key matters to consider within the context of this special issue.

Second, with the noted descriptive foundation as a backdrop, we consider the important question of *why* the crime drop occurred, and in some places, appears to be continuing to unfold. We do so by summarizing the most common explanations for contemporary crime trends and then assessing the validity of those explanations both generally (e.g. for explaining patterns shared across nations and many cities within nations) and for the specific patterns observed in New York City. Given that others have summarized well the many theoretical explanations for crime trends generally (e.g. LaFree, 1999; Parker, 2008) and the 1990s crime drop specifically (Barker, 2010; Blumstein & Wallman, 2006; Parker, 2008; Rosenfeld & Messner, 2009; Zimring, 2007), we keep our description of the major explanations relatively brief. We instead focus mainly on extending the literature by linking them to broader theoretical frameworks emphasized in the discipline (e.g. distinguishing arguments that link contemporary crime trends to notable decreases in levels of criminal motivation and propensity, increases in levels of constraint leveled at active and/or would-be offenders, and reductions in the quantity and quality of opportunities or situations that might give rise to criminal activity). We devote greater attention, however, to assessing the existing empirical research on recent crime trends. Though this, too, is a task to which several other sources have been devoted (Baumer, 2008; Chauhan, 2011; Levitt, 2004; Zimring, 2007), we go beyond prior efforts by synthesizing existing reviews and, most important, by highlighting the extent to which specified theoretical factors might be useful for explaining different dimensions of the contemporary crime drop, focusing on what we refer to as “global,” “national,” and “local” dimensions. As we elaborate below, we think that one critical point overlooked in much of the extant literature is that some dimensions of the crime drop have been more or less global (i.e. shared between many nations), some have been national in character (e.g. perhaps limited to the American experience, evident across many cities), and some have been highly unique to local areas (e.g. interventions in specific cities and/or neighborhoods). We organize our assessment of the existing empirical evidence along these dimensions, aiming to advance thinking in the area by linking specified factors to their potential for explaining global, national, and local shifts in crime.

The article proceeds as follows. We begin with a brief description of the timing of the contemporary crime decline, which also necessitates a discussion of the types of crimes that were encompassed. As will become clear, we question the exclusive focus on the 1990s as the epicenter of the crime drop. We highlight evidence that some forms of property crime, especially burglary but also personal theft, had been declining in America for at least a decade before the onset of the so-called “Great American Crime Decline” (Zimring, 2007). This is noteworthy both in its own right and because trends in property crime may be causally relevant for understanding trends in violence (e.g. Rosenfeld, 2009). Other forms of crime (e.g. adult, as well as white homicide, intimate partner violence, and rape) also show signs of a decline well before the 1990s, suggesting that perhaps the “real” contemporary crime drop in America began

in the early 1980s and was merely interrupted by a relatively short-lived youth violence binge. After making the case for this assertion, we discuss the geography of the contemporary crime drop, highlighting its apparent spatial breadth. During the past few years, evidence has mounted in favor of a conclusion that it was not limited to America and may not have varied as much within America or between American cities as implied in the extant literature. We dig into this issue a bit in an attempt to reveal insights into how much of the contemporary crime drop represents “shared” experiences across nations, cities, and neighborhoods, and how much might reflect unique experiences. Assessing these issues closely sets the stage for the last section of the paper, which focuses on a description and assessment of the validity of the major explanations that have been proposed for the crime drop. Thus, after highlighting important features of the nature, timing, and location of the contemporary crime drop, we move to a discussion about proposed explanations in which we highlight how some of the often discussed factors are especially useful for enhancing understanding of global trends, some are more targeted at national deviations from the global trend, and some are particularly germane for explaining sub-national departures from a national trend. We close with a summary of the key points that emerge in our study and a discussion of future research needs.

The Contemporary Crime Decline: When, What, and Where?

When did the Crime Drop Begin and What did it Encompass?

Is it reasonable to dictate the early 1990s as the beginning of the crime drop in America? The answer is yes if we take a relatively myopic view of crime trends in America that gives preference to short-term fluctuations, youth crime trends, and select forms of crime disproportionately committed by youth. Drawing on data from Baumer and Wolff (2011), Figure 1 illustrates trends in overall homicide, robbery, and motor vehicle theft rates from the Uniform Crime Reporting

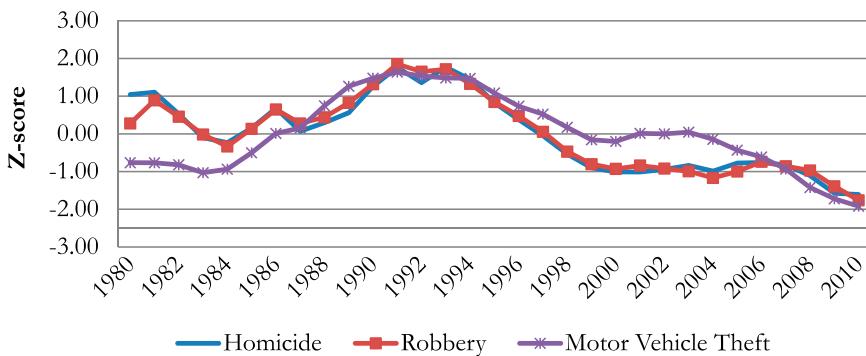


Figure 1 Trends in UCR homicide, robbery, and motor vehicle theft rates for 76 large US cities, 1980–2010.

(UCR) program for 76 large cities from 1980 to 2010. Since we wish to highlight trends in rates, rather than differences in levels, and to facilitate easy comparisons across crime types, each series is expressed using standardized scores. As Figure 1 shows, rates of homicide, robbery, and motor vehicle theft fluctuated in the 1980s but declined sharply from the early 1990s through the early 2000s, with signs of continued but more modest decreases in the last few years of the decade. Data from the National Crime Victimization Survey (NCVS) on non-lethal assault, robbery, and motor vehicle theft exhibit similar patterns (Baumer & Wolff, 2011). Other scholars have shown that the noted declines in violence during the 1990s were experienced by both males and females and by members of different racial and ethnic groups (Fox & Zawitz, 2007; Lauritsen & Heimer, 2010; Parker, 2008). Additionally, the decreases in the 1990s were especially sharp in large cities, and with respect to incidents arising from arguments, those involving guns, and those that occur in public spaces (Zimring, 2007), but noteworthy declines also have been observed in other contexts as well (e.g. smaller cities, private spaces). These patterns suggest that it may make good sense to designate the early 1990s as the initiation of a major crime drop in America and to study trends that unfold from that point.

A broader view of contemporary crime trends, however, reveals that in contrast to the isolation of the early 1990s as the epicenter of the crime drop, there were modest declines in police-based measures of homicide among adults (Fox & Zawitz, 2007) and whites (Parker, 2008), and fairly substantial decreases in both police- and survey-based rates of intimate partner violence, rape, burglary, and theft from the *early 1980s onward* (Bureau of Justice Statistics, 2011; Dugan, Nagin, & Rosenfeld, 2003; Rennison & Welchans, 2000). Consider, for example, Figure 2 that shows normalized trends in rates of NCVS burglary and theft from 1980–2009 for the nation and UCR burglary rates from 1980–2010 for the same 76 city sample for which UCR trends in violence were described above. The figure points to a steady decline in non-violent property crime in the USA since the early 1980s that has only recently leveled off. As noted, others have documented similar declines in crime since the early 1980s for rape as well as lethal violence among adults, whites, and intimate partners (Baumer & Wolff,

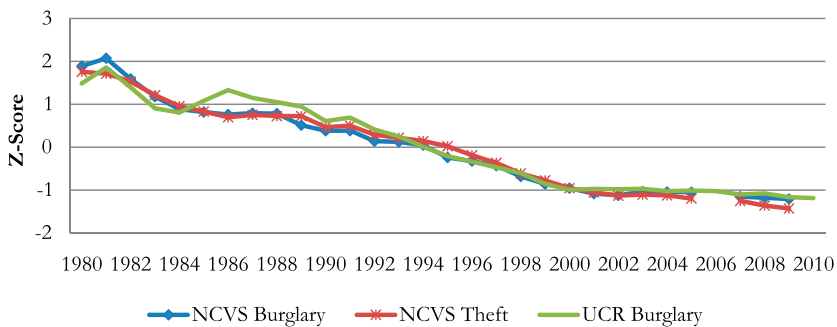


Figure 2 National trends in rates of ncvS burglary and theft (1980–2009), and UCR trends in burglary for 76 large US cities, 1980–2010.

2011; Parker, 2008). In light of these patterns, we propose that if researchers were to consider the full gamut of serious criminal activity, the picture that emerges about the temporal epicenter of the “great American crime drop” is not as clear cut as much of the literature suggests and, at a minimum, prompts us to take a serious look at the early 1980s as a critical juncture.

We explore possible city variation for these and other crime types below, but at this point, we want to highlight that the patterns observed in New York City during this period were, with a few exceptions, generally similar to those described here for the nation (see Fagan, Zimring, & Kim, 1998; Joanes, 2000). The trends in motor vehicle theft, robbery, and total homicide in New York City mirror those shown above for the nation (Baumer & Wolff, 2011). Trends in overall adult homicide and intimate partner homicide rates in New York show more volatility in the 1980s than the national patterns described above, but others have documented notable declines in non-gun homicide rates among adults in New York City during the 1980s (Fagan et al., 1998). The national decline in rape and larceny for the nation also was not as evident in New York City, but trends in burglary rates were virtually identical, showing steep declines that begin in the early 1980 (Baumer & Wolff, 2011).

Piecing all of this together suggests that, with a few exceptions (e.g. motor vehicle theft rates in urban areas), there has been a relatively long-term decline in property crime in the USA and New York City dating from the early 1980s onward, with some acceleration in this trend during the 1990s and a slight flattening of the trend during the 2000s. For violence, the general pattern that emerges can be described in two ways. One view is that there was an abrupt drop in violence emerging in the early 1990s in the aftermath of the crack epidemic and associated wave of youth violence. This is the view implicit in discussions of the 1990s crime drop, and it draws our attention to social, economic, legal, and cultural conditions that may have shifted (or manifested) at that time to generate the downward trend. Another vantage point, though, is that there was a general and fairly widespread decline in violence that began in the early 1980s (i.e. most forms of street crime in America declined during the first five or six years of the 1980s), which was interrupted by an “aberrant,” relatively brief violence epidemic among youth and young adults in urban areas during the late 1980s and early 1990s (see also Donohue, 1998; Messner, Deane, Anselin, & Pearson-Nelson 2005). This view would nudge us to consider the early 1980s as fertile ground for locating potential explanations for contemporary crime declines.

We are not dismissing the often made observation that the 1990s was a special decade for crime trends. Yet, the noted ambiguity surrounding the beginning point of the American crime decline suggests that we ought to be cautious in using “timing” as a strong rationale for accepting or rejecting given explanations of the crime drop. A more general caution that emerges from the contrasting views described above for the temporal patterning of significant crime decreases in America is that it is misleading to reference a *singular* crime drop. While there is clearly something interesting about the 1990s that

spurred significant reductions in crime, the crime drop as it pertains to burglary, theft, intimate partner homicide, adult homicide, white homicide, and rape had been ongoing for about a decade already by the time the 1990s rolled around, and thus efforts to explain trends in these crimes should also consider the conditions present during (or that manifested in) the 1980s.

Where did the Crime Drop(s) Occur? The Importance of “Global,” National, and Local Factors

Many observers now acknowledge that significant decreases in crime since the early-to-mid 1990s have been widespread, occurring across many cities in the USA, other parts of North America, as well as many places overseas. This raises important questions about whether New York City may have exhibited contemporary crime trends that diverge notably from other places. Further, it highlights how addressing in some detail “where” the crime drop has occurred can reveal insights into distinguishing between the portion of the observed patterns in New York City that were shared with other cities, the nation, and internationally, and the portion that can reasonably be considered as unique to the city and the neighborhoods that compose it. This, in turn, is important for identifying explanations that might be relevant to these different components of the contemporary crime drop.

Thinking “Globally”

It appears that the 1980s decline in burglary and theft observed in the USA was not widespread across nations, but there is mounting evidence that the patterns seen for most crimes in the USA during the 1990s also were witnessed in many other countries, even if the international crime drop occurred a bit later (Baumer, 2011). Figure 3 shows a supportive pattern for selected nations, focusing on overall citizen-reported victimization trends as reported in the International Crime Victimization Survey (ICVS). Consistent with these data, Tseloni, Mailley, Farrell, and Tilley (2010, p. 375) examine cross-national crime victimization

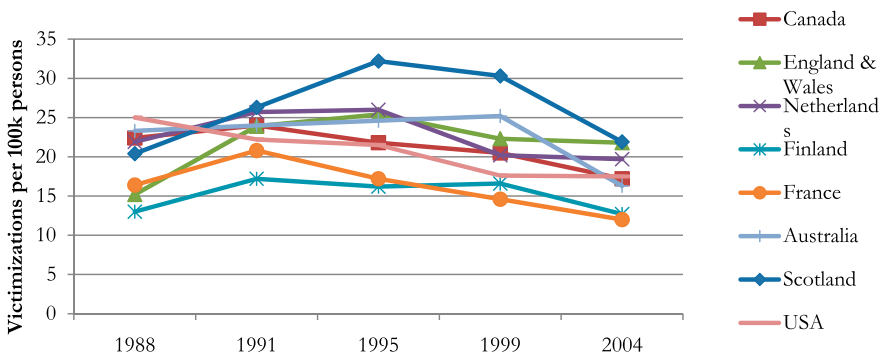


Figure 3 Overall victimization trends for selected nations, ICVS 1988–2004.

trends in a more elaborate manner using multi-level statistical modeling; they show that between 1995 and 2004 rates of property crime victimization rates fell significantly in most of the 26 nations they considered (spread widely across the globe), with average reductions of “77.1% in theft from cars, 60.3% in theft from person, 26.0% in burglary, 20.6% in assault, and 16.8% in car theft.”

There are comparatively fewer analyses of cross-national trends in police-recorded data, but Barclay and Tavares’ (2003) study revealed significant declines in police-based burglary and motor vehicle theft rates for several European nations. Aebi and Linde (2010) also show significant declines in property crime among Western European nations, but suggest that the patterns are less consistent for violent offenses. Yet, Eisner’s (2008, pp. 310–311) data on homicide indicate that since the early 1990s, “homicide rates in most European countries have been falling, in some cases quite dramatically.” Eisner singles out significant drops in homicide from the early 1990s onwards in Austria, Germany, Italy, France, Switzerland, and Portugal. Mouzos (2003) adds Australia to the mix, documenting that homicide rates fell by about 43% from the early 1990s through the middle of the 2000s, and several have pointed out comparable trends for Canada (Gartner & Doob, 2010; Zimring, 2007). One implication of the parallel drop in crime across many nations during the 1990s is that a potentially large portion of the US trend may have little to do with America, per se. Instead, it may reflect broader “global” (i.e. widely shared) shifts.

How much of the recent crime drop was shared across nations and how much of the American pattern is due to unique circumstances within its borders? There are several ways we might parse shared “global” influences on recent crime trends, but McDowall and Loftin (2009) recently proposed a method that we find straightforward and intuitive. We applied the procedure they describe to cross-national trends in burglary rates between 1993 and 2006 for the USA and nine European nations using data from Rosenfeld and Messner (2009), observing that about half of the temporal variation in burglary rate trends for these nations over the period is common between them (results not shown in tabular form). We also conducted a parallel analysis of cross-national trends in homicide across nations for the same period using data from the United Nations. The results were sensitive to the inclusion of nations in which lethal violence is rare (yielding highly volatile trends in rates), but for the nations with an average homicide rate of 2 per 100,000 or greater during the period ($n=28$), we find a modest degree of commonality (squared partial correlation=0.20) in international homicide trends. Thus, these exploratory analyses suggest that between one-fifth and one-half of the observed crime drop across many nations reflects shared experiences.

“National” influences on crime trends in America

Though there is a growing acknowledgment that something far and wide appears to have happened to bring down crime across many nations, especially since the mid-1990s, much of the literature continues to at least implicitly

highlight America as a unique case with respect to the breadth, depth, and magnitude of the recent crime drop (e.g. Zimring, 2007). It is not unreasonable to do so, for even with the noted shared experiences across nations with the recent crime drop, there remains significant variability in the observed trends between nations, and the crime drop appears to have occurred earlier in America and its magnitude appears to be notably larger than that observed in many other nations (Eisner, 2008). Additionally, some of the factors thought to be relevant to the reducing crime have been implemented much more heavily in America than elsewhere, especially the growth in police forces and prison populations and the reduction of open-air drug markets (Zimring, 2007). Finally, the full list of factors relevant to explaining crime rate changes within America need not be the same as those that produce changes in crime elsewhere, and a given factor may have differential explanatory power across nations. In other words, after adjusting for the apparent common crime drop across nations, the factors relevant to the *American* crime drop may be unique and/or the estimated relationships between trends in a given set of factors and crime trends may be stronger or weaker in America than observed elsewhere. Thus, it is worthwhile to focus attention on the *American* crime drop.

Though there has been significant attention devoted to variation in the contemporary crime decline within the United States, there is compelling evidence that a significant portion of the observed sub-national trends (e.g. state, city, and county-level trends) reflect broader *national* influences. One source of support for this contention is the relatively high degree of correspondence in recent crime trends across sub-national units (see also, McCall, Land, & Parker, 2011). For example, McDowall and Loftin (2009) report that for the period 1960–2004, a substantial amount (between 50 and 75%, depending on the crime type) of the observed trends in crime rates across relatively large cities (cities over 100,000 population) represents a shared trend, presumably driven by national-level conditions or factors that do not vary substantially across cities. We replicated the analysis reported in McDowall and Loftin (2009) for a larger sample of cities ($n=195$) and separately for the specific periods that better capture the recent crime drops (i.e. 1980–2001 for burglary; 1993–2001 for homicide, robbery, and motor vehicle theft). The results (not shown in tabular form) reveal slightly smaller squared partial correlations for each crime type than McDowall and Loftin (2009) obtained for their 45 year period, which might be anticipated from removing the very widespread American crime epidemic observed in the 1960s and 1970s, but the estimates remain fairly large, ranging from 0.45 (motor vehicle theft) to 0.62 (robbery). The estimated squared partial correlation for city burglary trends from 1980 to 2001 (estimated at 0.69) also revealed a strong common trend. These patterns suggest that something quite broad in scope has changed in America during the past few decades to facilitate the noted crime drops of the 1980s and 1990s. Interestingly, with the exception of motor vehicle theft, parallel estimations for UCR city crime trends from 2002 to 2009 reveal much lower levels of correspondence across cities. This may be due to the short-term spike in crime

experienced in selected cities in 2005–2006 (see Rosenfeld & Oliver, 2008) or to differential crime responses to the economic recession of the late 2000s (Baumer, Rosenfeld, & Wolff, 2012).

The take-away message from this part of the story is that for purposes of formulating explanations of contemporary crime decreases in America, the available evidence points to the importance of *national-level* conditions for generating the 1990s American crime drop, or in other words conditions that were experienced in many areas of the country simultaneously or that do not tend to vary dramatically across areas within the nation. These could represent the same “global” conditions referenced above (which happened to be shared to some degree across nations and across US cities) and/or they could reflect national-level shifts unique to America. Some of the commonly mentioned potential causes of the crime drop do appear to vary considerably *within* the United States (e.g. the move to order-maintenance policing, increased immigration, changes in gun laws and gun prevalence), and thus, they may not be highly relevant for explaining the shared national trends just described. But, as elaborated below, factors such as broad shifts in subjective economic perceptions (Rosenfeld, 2009) or a general rise in punitiveness (Garland, 2001) might be useful for explaining the shared national component of the crime drop.

Localized effects and the utility of looking closely at New York City

Zimring (2007) justifies a central focus on New York City based on data that suggest the crime drop was highly unique there compared to other places, with crime rates dropping more than twice as much between 1990 and 2000 in the city than observed for the nation as a whole. Based on such evidence, he highlights the potential utility of assessing the factors that made New York City unique and which might have enabled this deviation from “the norm” (i.e. the rest of the nation). This argument is persuasive and is presented masterfully by Zimring (2007), but it is limited in an important way. Specifically, though New York City clearly ranks high among US cities in the magnitude of the crime drop observed in the 1990s, the conclusions one draws about which cities experienced the greatest crime drops during this period and whether New York City is highly unique are sensitive to the comparison group. Further, those conclusions are sensitive to the specific years one uses for the bookends to denote the start and end points of the crime decline, largely because of variance across cities in the ebbing of the crack epidemic.

Table 1 displays city rankings and the percentage decrease in homicides, robberies, burglaries, and motor vehicle thefts for US cities that rank in the top 10 among large US cities (populations > 100,000) using three different approaches. Panel A adopts the strategy used by Zimring (2007), denoting 1990 and 2000 as the bookends to compute the percentage decrease in the crimes considered. Panel B shows parallel information using 1993 and 2001 as the bookends, a period that many have identified as the beginning and ending of the American 1990s crime drop. Finally, Panel C lists the values obtained when

Table 1 Rankings in the magnitude of the crime drop across large US Cities (> 100,000) using different parameters for the beginning and ending point of the decline

(A) Percentage Decrease between 1990–2000.												
City	Homicide			Robbery			Auto theft			Burglary		
	Rank	% Decline	City	Rank	% Decline	City	Rank	% Decline	City	Rank	% Decline	City
Boston	1	-73	New York City	1	-70	New York City	1	-78	El Paso	1	-79	
New York City	2	-73	Newark	2	-68	Pittsburgh	2	-69	New York City	2	-72	
Fresno	3	-70	Long Beach	3	-66	San Antonio	3	-68	Anaheim	3	-70	
San Antonio	4	-67	Anaheim	4	-64	San Diego	4	-65	Santa Ana	4	-70	
Houston	5	-66	Miami	5	-63	Newark	5	-63	Long Beach	5	-66	
Toledo	6	-66	San Diego	6	-63	Fort Worth	6	-63	San Antonio	6	-64	
Santa Ana	7	-66	Bakersfield	7	-62	Anaheim	7	-62	San Diego	7	-63	
San Diego	8	-64	Fort Worth	8	-61	El Paso	8	-60	Oakland	8	-62	
Henderson	9	-63	Boston	9	-60	Houston	9	-59	Boston	9	-61	
Jacksonville	10	-61	Los Angeles	10	-59	Tulsa	10	-58	Fort Worth	10	-60	

(B) Percentage Decrease between 1993–2001.												
City	Homicide			Robbery			Auto theft			Burglary		
	Rank	% Decline	City	Rank	% Decline	City	Rank	% Decline	City	Rank	% Decline	City
Anaheim	1	-80	Newark	1	-69	New York City	1	-73	New York City	1	-68	
Santa Ana	2	-74	San Francisco	2	-69	El Paso	2	-68	Newark	2	-64	
Raleigh	3	-70	New York City	3	-68	San Francisco	3	-60	Anaheim	3	-62	
Portland	4	-70	San Diego	4	-65	Anaheim	4	-59	San Francisco	4	-60	
Wichita	5	-68	Long Beach	5	-64	San Antonio	5	-55	Santa Ana	5	-60	
New York City	6	-66	Miami	6	-62	Pittsburgh	6	-55	Oakland	6	-59	

(Continued)

Table 1 (Continued)

(B) Percentage Decrease between 1993–2001.

City	Homicide		Robbery		Auto theft		Burglary	
	Rank	% Decline	Rank	% Decline	Rank	% Decline	Rank	% Decline
San Diego	7	-65	7	-59	7	-53	7	-59
Seattle	8	-65	8	-58	8	-53	8	-59
San Francisco	9	-65	9	-58	9	-53	9	-58
Charlotte	10	-64	10	-57	10	-51	10	-57

(C) Percentage Decrease between Maximum Crime Rate in the "Crack Era" and the Minimum Crime Rate Thereafter.

City	Homicide		Robbery		Auto theft		Burglary	
	Rank	% Decline	Rank	% Decline	Rank	% Decline	Rank	% Decline
Virginia Beach	1	-91	1	-84	1	-94	1	-84
Forth Worth	2	-87	2	-82	2	-90	2	-82
Minneapolis	3	-82	3	-82	3	-90	3	-82
Glendale	4	-82	4	-79	4	-89	4	-79
Santa Ana	5	-82	5	-78	5	-89	5	-78
New York City	6	-82	6	-78	6	-85	6	-78
Anaheim	7	-81	7	-76	7	-81	7	-76
El Paso	8	-80	8	-75	8	-80	8	-75
Portland	9	-80	9	-75	9	-80	9	-75
Riverside	10	-80	10	-74	10	-79	10	-74

using each city's maximum crime rate during the crack-era (1986–1996) and each city's minimum crime rate subsequent to that point, through 2009 (to minimize the impact of extreme values, Panel C omits cities with average homicide rates over the past two decades below 4 per 100,000).

Each panel in Table 1 illustrates that New York City exhibited substantial declines in crime rates during the past few decades, regardless of how one computes the magnitude of the decreases. Zimring (2007, pp. 13, 137, 140, 145) capitalizes on the large absolute figures shown for New York City in Panel A to show that, compared to the nation as a whole and many other cities, the magnitude of the 1990s crime decline was substantially greater, roughly twice the national crime decline.

Though one cannot seriously question that the crime drop has been dramatic in New York City, the comparisons of New York City that Zimring makes with the rest of the nation are not highly meaningful given that the latter incorporate so many places with very little crime. According to data reported in the UCR for 1990 and 2000, a large majority of US cities (e.g. more than two-thirds) experience no homicides in a typical year, and a small proportion of cities (i.e. the largest 10% on the basis of population size) account for the lion's share of the overall volume of crime observed in America.¹ Further, a careful glance at Table 1 shows that where New York City lands in the rankings is somewhat sensitive to the parameters used, and more importantly, many other cities experienced substantial decreases in crime rates over the period examined as well, a finding that is not surprising given the evidence about shared "global" and national influences described above. We do not wish to minimize the wonderful story of the New York City crime drop, but it seems to us that it is at least somewhat ambiguous whether the decreases observed in the city over this period are sufficiently unique to warrant a concentrated effort to search for special conditions that may have been present there and not elsewhere. Clearly, the crime drop was not twice as large in New York City as it was in many of the other cities shown in Table 1, and, more generally, several other cities emerge as viable candidates for additional investigation if we focus on how they deviate from the national pattern during the 1990s. In additional analyzes (not shown here), we observed a similar pattern during the 2000s based on a comparison of crime rates from 2001 to 2009. Over this period, New York City continued to outpace many cities in crime reductions during this period, but the city was even less "dominant" than in the 1990s and several other cities also emerge as potentially interesting candidates for additional scrutiny during the 2000s owing to comparatively large crime reductions. Such patterns question the prominence placed on New York City in discussions of the American crime drop and the credit for crime reductions claimed by

1. More than 11,000 cities reported crime data into the UCR program in 1990 and 2000; the largest 10% accounted for more than 75% of the total reported crime, while the other 90% of cities accounted for the remainder (author calculations, available upon request).

politicians and criminal justice personnel in the city (see also Joanes, 2000; Rosenfeld, Fornango, & Baumer, 2005).

In sum, a broad view of recent crime trends challenges the wisdom of an exclusive focus on the 1990s and on America or New York City. In America, many forms of property crime and some forms of violence appear to have been falling for nearly a decade before the so-called 1990s crime drop started. Additionally, the latter was not exclusive to America and does not appear to have been highly unique to New York City; other cities experienced dramatic declines in crime during the 1990s as well. These observations have important implications for assessing the validity of the major explanations that have been proposed for contemporary crime drops, an issue to which we now turn.

Describing and Assessing the Validity of the Major Explanations for Contemporary Crime Declines

A Brief Description of the Major Explanations

The list of possible explanations for the crime drop is long and impressive. Provocative arguments have been made for the primacy of the following: objective and perceptual economic shifts, changes in the quantity and quality of policing and punishment practices, public and personal security efforts, the stabilization of drug markets, increases in immigration, changes in abortion laws, regulations of and changes in lead gas exposure, increased video gaming, rising civility and self-control, transformations of family arrangements, reduced alcohol consumption, and increased use of psychiatric pharmaceutical therapies. Most discussions of the crime drop categorize the various factors along dimensions organized by types of variables (e.g. criminal justice, demographic, economic, etc.) which may or may not be pertinent in terms of empirical validity, with little or no reference to theoretical framing or orientation (e.g. Baumer, 2008; Levitt, 2004). Rather than simply reiterate the standard story, we briefly describe the major explanations that have been offered, explicitly situating our review in the broader theoretical literature that distinguishes between (a) conditions that serve to reduce the criminal motivation or propensities of the population at given points in time; (b) conditions that constrain or channel the conduct of a population away from illegitimate activities; and (c) shifts in physical and/or social settings that decrease the degree to which criminal propensities are activated and/or that permit existing constraints to operate more effectively.

Crime Dropped because of Reductions in Criminal Motivation/Propensities and/or Increases in Constraints

Levels of crime can be expected to decline significantly over time if the pressures, motivations, or inclinations toward crime in the population are

reduced and/or if the constraints to criminal behavior are increased. Notable shifts in crime levels through such mechanisms can occur in a neighborhood, city, or nation because of changes in contemporaneous conditions (i.e. this year, last year, maybe a few years prior) in a geographic area that stimulate or retard criminal behavior and/or past conditions to which people have been exposed throughout their lives, especially in early childhood and adolescence when criminal propensities tend to be developed. The former are often referenced as “period” conditions, while the latter represent propensity-based arguments.

Propensity-based arguments

A relatively large body of research in criminology and related fields suggests that much youth and adult crime is the manifestation of predispositions that are shaped at early ages by a wide variety of conditions. This makes propensity-based arguments potentially useful for understanding the recent crop drop (Cook & Laub, 1998). The primary conditions that might give rise to major aggregate-level shifts in criminal propensity (e.g. changes in fertility outcomes, environmental conditions, and parenting practices) often change across many places simultaneously, which makes them particularly useful for explaining national or global shifts in crime.

The most frequently cited argument about shifting propensities and contemporary crime trends is Donohue and Levitt’s “abortion dividend” thesis. Donohue and Levitt’s (2001) main argument is that the legalization of abortion in the early 1970s yielded immediate reductions in the proportion of persons born to high-risk mothers and/or into high-risk circumstances, which in turn translated into less crime decades later because such conditions are among the known correlates of criminal propensity. Nevin (2007) makes another propensity-based argument by suggesting that reductions in lead exposure during the 1970s represent an alternative reason for why youth and young adults in the 1990s might have started to exhibit lower criminal propensities (see also Reyes, 2007). This work highlights the adverse effects that lead exposure during childhood can have on neurological development, which can in turn shape one’s propensity for early anti-social conduct and criminal behavior at later ages (Farrington, 1995). Using similar logic, Eisner (2008) speculates that the recent drop in crime in the USA many other nations since the early-to-mid 1990s may be a product of sweeping cultural changes, including shifts in child-rearing, that brought an increased focus on instilling self-control and discipline, and which may have generated higher levels of self-control—a common marker of criminal propensity—among youth and young adults in the 1990s.

Period conditions, motivation, and constraint

Though propensity-based arguments are plausible from a theoretical standpoint, scholarship devoted to articulating or testing potential explanations for contemporary aggregate-level crime trends has focused much more heavily on

contemporaneous “period conditions” thought to have either significantly increased or lessened the volume of crime in recent decades. Some of these proposed explanations highlight potential shifts in the level of criminal motivation (or the quantity of motivated offenders) in the population, others emphasize changes in conditions that serve to constrain or channel behavior away from crime, and still others have blended these two themes.

Demographic shifts are often included among the possible explanatory candidates when crime rates exhibit notable changes, in part because demographic trends are routinely monitored but also because certain elements of the demographic profile of populations have long been linked to offending rates. Three features of demography have been highlighted in the literature on crime trends: age structure, immigration patterns, and marriage rates.

First, for a variety of reasons that encompass both motivational and constraint mechanisms, crime is disproportionately committed by teenagers and young adults (e.g. those 15–29), and offending rates among older persons tend to be very low. Given this and the evident “graying” of America and several other nations over the past few decades, it is understandable that shifts in age structure have been one of the factors highlighted in discussions about the contemporary crime drop, particularly with respect to its potential for explaining widely shared “global” trends (Gartner & Doob, 2010).

Second, shifts in relationship union formation also tend to be fairly diffuse both within and across many nations. Consistent with this notion, extant research has documented a significant retreat from marriage in the USA and several other nations since the 1970s (OECD, 2011; Stevenson & Wolfers, 2007). Though some of this decline has been offset by parallel increases in rates of non-marital cohabitation, Rosenfeld (1997) points out that the overall trend equates to a significant decline in “domesticity” since the early 1980s which may have served to constrain intimate partner violence, and especially spousal violence, by limiting the types of interactions and situations that give rise to such incidents. This could have implications, in particular, for the observed “global” crime decline.

Finally, immigration has increasingly been mentioned in discussions of the 1990s crime drop both because of evidence that some recent immigrants tend to exhibit lower crime rates than natives (Sampson, Morenoff, & Raudenbush, 2005) and because a large influx of immigrants might reduce crime indirectly by increasing levels of informal social control or by lessening pressures to engage in illicit conduct (e.g. Sampson, 2008). Unlike age structure and marriage propensities, immigration streams tend to be highly uneven across and within nations (Martinez, Stowell, & Lee, 2010; Stowell, Messner, McGeever, & Raffalovich, 2009). As such, shifts in immigration may be more relevant for explaining national deviations in crime trends from global patterns or how local areas (e.g. cities or neighborhoods) of dense immigration experience crime trends that diverge from the jurisdictions in which they are embedded.

Most of the other period explanations for recent crime declines de-emphasize changes in the number or nationality of persons in the population and

highlight instead various pressures and constraints in the environment that may have managed to make crime less likely, irrespective of population composition. For instance, the use of alcohol and many other illicit substances has been linked to violence and property crime (e.g. Fagan, 1990), and some have suggested that recent crime declines may reflect reduced use of such substances (e.g. Blumstein & Wallman, 2006; Parker & Cartmill, 1998). Alcohol consumption has declined significantly since the early 1980s in the USA and many other nations (National Institute on Alcohol Abuse and Alcoholism, 2009; OECD Health Data, 2011). Trends in other forms of illicit substance abuse are more difficult to gauge, but the weight of the evidence from school and general population surveys suggests that, with some notable exceptions (e.g. the precipitous rise in crack cocaine in the mid-to-late 1980s in America), many forms of illicit drug use have declined somewhat since the early 1980 (Johnston, O'Malley, Bachman, & Schulenberg, 2011; National Center for Health Statistics, 2002). On the other hand, Marcotte and Markowitz (2011) note that the treatment of many forms of mental illness and common mood disorders changed dramatically in the late 1980s and early 1990s in ways that may have implications for crime trends. Specifically, they document significant growth in mental health treatment overall, and especially large increases in the use of various pharmaceutical therapies (e.g. antidepressants, antipsychotics). Drawing on theoretical literature that links mental illnesses and negative affective mood states to crime, Marcotte and Markowitz (2011) suggest that these changes may have played a role in the 1990s crime drop.

Shifts in economic conditions also have loomed large in discussions of period effects on the crime drop. Changes in economic conditions have been linked to changes in crime through a variety of mechanisms, including assessments of perceived costs and benefits of legal vs. illegal activities, shifts in subjective economic perceptions and participation in illegal markets, the role of economic well-being on community social organization and criminal justice spending, and the possibility that economic realities may be linked to frustration levels, which in turn, are relevant to crime levels (Baumer et al., 2012). Though major economic shifts can be constrained to local areas, one implication of the globalization of the world economy is that such shifts tend to transcend national boundaries. Building on this logic, Rosenfeld and Messner (2009) suggest that the economic prosperity in the USA and Europe during the 1990s may be one reason behind the shared decline in property crime observed in these locations, a proposition for which they find some empirical evidence.

Changes in policing and incarceration are probably the two most commonly discussed "period" factors associated with the recent crime drops. Unlike most of the other period conditions discussed so far, however, major shifts in policing and incarceration were heavily concentrated in a small number of nations and were also more prominent in selected jurisdictions within countries. This suggests that their primary role may be in helping to explain deviation from global and/or national patterns. For example, during the 1980s and 1990s, police forces in many corners of America became larger and they implemented

different approaches, including more targeted efforts to address behaviors thought to facilitate crime, such as public disorder and weapon carrying (Kubrin, Messner, Deane, McGeever, & Stucky, 2010; Rosenfeld, Fornango, & Rengifo, 2007). There were also substantial increases in citizen reporting in America during this period (Baumer & Lauritsen, 2010), which could have enhanced the overall effectiveness of the police in responding to crime. Additionally, imprisonment rates increased modestly in several nations and quite significantly in America over this period (Garland, 2001; Sabol, 2010; Western, 2006). Theoretically, each of these noted can yield crime reductions through deterrent and/or incapacitation effects, and these anticipated effects seem most pertinent for explaining national or sub-national crime trends.

Crime dropped because of strategic shifts in physical and/or social settings

Though a large portion of the scholarly discussion of the crime drop has focused on possible shifts in offender motivation and the amount of social control applied to offenders or those contemplating crime, substantial drops in crime could occur without major changes in these things if there were notable shifts in the physical surroundings and social settings in which would-be offenders "roll" (Cohen & Felson, 1979). Changes in physical and/or social settings could directly decrease the likelihood that criminal motivations or propensities are activated or do so indirectly by permitting existing constraints to operate more effectively.

Drug markets represent settings that long have been linked to crime levels. Blumstein (1995) argued that the emergence and proliferation of crack cocaine in many inner cities in the mid-1980s transformed drug markets in fundamental ways that stimulated violence that diffused across urban neighborhoods. A practical consequence of such processes was sharply increasing violence rates from the mid-1980s through the early 1990s among young persons in many cities (Cook & Laub, 1998). As crack markets stabilized during the 1990s, violence decreased considerably, leading some to suggest that the former may be important for understanding the latter (Levitt, 2004).

Aside from drug markets, there were significant changes in the 1980s and 1990s in routine activities and the settings in which they are carried out, and these may have had a profound impact on the volume of crime. Cohen and Felson (1979) make a compelling case that among the key elements of the shifting American social context in the 1970s was a substantial movement in daily activities away from the home and various technological advances (e.g. a reduction in the size of popular consumer electronics), which coalesced to yield more plentiful and more attractive opportunities for crime. Several broad shifts in lifestyle, technology, and social organization in America since at least the early 1980s could be described as counter trends to these patterns. Putnam (2000) suggests that social interactions have shifted increasingly from the public to the private sphere during the past several decades, a process

which may have been accelerated by the “internet revolution.” These patterns could reduce the exposure of individuals to motivated offenders and increase the guardianship of homes, both of which could reduce crime rates.

The widespread shifts in America and elsewhere during the past few decades directed at enhancing security and automating social control represent another important change that may have altered the potential for crime. These include the increased use of “target hardening” tactics for homes during the 1980s and 1990s, including burglar alarms, protective bars, gated entries, and private security details (see Cook & MacDonald, 2011). Technological advances during the 1990s and 2000s also have yielded substantial increases in protection for motor vehicles (Farrell, Tseloni, & Tilley, 2011), and the expansion of mobile telephony and closed-circuit video placement has created a public environment with far more “virtual guardianship” for individuals than was the case in previous eras. These shifts integrate efforts by public officials (e.g. state and city governments), private individuals, private–public partnerships (e.g. Business Improvement Districts), and industry groups (e.g. the automobile industry). Collectively, they contribute to what Farrell, Tseloni, Mailley, and Tilley (2011) refer to as a significant level of growth in the quality and quantity of security in the environment, which they describe more fully in their “security hypothesis” for the recent crime drop (see also Cook & MacDonald, 2011; Walsh & Taylor, 2007). Others have discussed these changes in terms of a growing “culture of control,” spurred by broader societal shifts (e.g. the increases in crime during the 1970s, the politicization of crime, increased news coverage of crime, and its sensationalism) that transformed the once far-removed feeling that crime was a problem for somebody else into an environment in which crime was perceived to be a reality for a much wider spectrum of the population and therefore called forth a variety of protective actions geared toward minimizing this heightened perceived risk of crime (Garland, 2001).

Assessing the Global, National, and Local Validity of Crime Drop Explanations

Now that we have provided a brief review of the major explanations that have been proposed for contemporary crime declines, what can we say about their relevance for understanding the relatively long-term decline in non-violent property crimes that emerged in the 1980s, characterized by notable declines in burglary and theft that accelerated and were joined by decreases in motor vehicle theft in the 1990s? What are we to make of the two notable drops in violence that have been observed in the contemporary era, including the drop in adult and intimate partner homicide since the early 1980s and the drop in overall homicide, robbery, and assaults that have occurred since the early-to-mid 1990s? Are these trends primarily a function of shifts in criminal propensities, or

are they better understood as reflective of significant changes in the constraints placed on would-be offenders or on settings conducive to crime?

The capacity to address these questions is hindered significantly by the current state of empirical research in this area, but beyond this it also is highly contingent on what, specifically, we wish to explain. Most important from our vantage point, our conclusions about the validity of the explanations summarized above will vary depending on whether we are interested in assessing the reasons for: (a) changes in crime that are “global,” or in other words shared across many nations; (b) changes in crime rates within a given nation and perhaps whether and why it deviates from an average multi-nation trend (e.g. What might account for cross-national variation in the crime drop? What can account for America’s crime drop?); (c) changes in crime rates within one or more sub-national units and perhaps whether and why they deviate from the national trend (e.g. What can account for the observed trends in New York City? Why is the crime drop observed in New York City and other cities greater than what has been observed in other cities?); or (d) changes in crime rates within a given local area such as a neighborhood and perhaps whether and why it deviates from the larger ecological context (e.g. city) within which it is located (e.g. Whether and why do some neighborhoods within a given sub-national unit exhibit greater crime declines than other neighborhoods?)

Most of the existing reviews of empirical research judge the efficacy of given factors without attention to these potentially unique dimensions of the contemporary crime drop, which can yield misleading conclusions. Put differently, evidence that some portion of the crime drop was shared widely across nations should not be used to dismiss the importance of localized policing efforts, nor should we conclude from evidence showing the crime drop was particularly steep in a given location (e.g. New York City) that changes in abortion laws, something believed to have a very broad effect, are of limited importance. This is implicitly what is done when the empirical evidence on the contemporary crime drop is reviewed without reference to what we wish to explain. As suggested above, shifts that were highly localized in nature (e.g. policing innovations in selected American cities) probably are not going to be very useful for explaining the portion of the crime drop that was largely shared across many nations, and shifts that were quite widespread (e.g. reductions in lead exposure) are at best weakly relevant for explaining why a given city departs from a national or globally shared trend. In light of these realities, we dissect our discussion of the validity of different perspectives with reference to the “global” crime drop, the American crime drop, and localized effects, including the New York City crime drop.

The “Global” Crime Drop

If our interest lies in exploring the possible reasons behind the apparent multinational crime decline that appears to have occurred since the

mid-1990s, explanations that highlight shifts in fertility patterns, industry-driven security technological innovations, widespread shifts in regulatory policies (e.g. policies designed to reduce lead content in various substances), and broad economic changes possess the greatest face validity (Farrell et al., 2011; Rosenfeld & Messner, 2009). Major shifts in fertility patterns and associated aspects of demography such as age structure tend to follow parallel paths across many nations, especially those in close proximity and those integrated socially or economically. Gartner and Doob (2010) show that shifts in age structure are strongly associated with recent homicide trends in Canada and the USA, but they also caution that several other factors mirror the observed trends (including the amount of beef stored in Canada!). Additionally, Donohue and Levitt (2001) present intriguing evidence in favor of a link between fertility choices in the 1970s (the legalization of abortion in the 1970s) and US crime trends in the 1990s, but others have highlighted the absence of strong cohort differences in crime trends that would be anticipated if this type of propensity-based argument were valid (Cook & Laub, 2002), and further analyzes have revealed mixed evidence on the matter in both in the US context and elsewhere (e.g. Kahane, Paton, & Simmons, 2008; Zimring, 2007).

The empirical literature on recent cross-national crime trends is fairly thin and has not integrated data or insights from a large number of societies to evaluate whether each of the potential explanations discussed above was influential or which ones were most consequential. Nonetheless, the most persuasive evidence available to date for the shared nature of contemporary crime trends suggests that an improved economic outlook, major technological shifts, and widespread changes in environmental policy have been most influential. Rosenfeld and Messner (2009) report on an empirical analysis across ten nations (the USA and nine European countries) that yields support for a link between trends in subjective economic conditions and burglary rates across nations. Farrell et al. (2011) present evidence consistent with the significance of anti-theft devices in driving down motor vehicle theft rates across several nations. Finally, Nevin (2007) presents compelling evidence that lagged temporal patterns in lead exposure fit well with contemporary crime trends both in America and several other nations, suggesting that this could be one element of the noted shared temporal variance in recent crime trends.

The extant literature also points to several other types of shared experiences across nations in recent decades (e.g. a rise in obesity and diabetes, decline in smoking prevalence and alcohol consumption; the mass movement of women into labor markets) tied generally to the diffusion of norms about "civility" and consumption, technologies, government and industry regulations, market prices, and other factors fueled by globalization. Some of these shifts might have implications for understanding shared multi-nation crime declines, but they have not been explored systematically in the extant research. For example, it is possible that there has been a widely shared increase in levels of self-control across many nations (e.g. Eisner, 2008). Consistent with the general idea of such a shift, Mishra and Lalumiere (2009) document that the

USA and Canada exhibit similar declines during the 1990s not only in crime rates, but also a wide variety of other “risky behaviors,” including smoking and drinking, injuries and accidents, risky sex, and school drop-out; they speculate that this pattern could reflect shared trends in levels of self-control. However, we are aware of no direct research that evaluates multi-nation trends in self-control or the possibility that such trends are related to temporal changes in crime rates across nations.

The American Crime Drop

We cited evidence above showing of a modest degree of shared variance in recent crime trends across nations in samples that included America. This suggests that at least part of the “Great American Crime Decline” can be explained by factors that were prevalent not just in America but also in other nations. Zimring (2007) hints at this as well when he references unnamed “cyclical factors” that account for some of the observed crime reductions in America, and Rosenfeld and Messner’s (2009) study suggests that global economic conditions may be pertinent in this regard. But most studies of American crime trends do not integrate insights about how many other nations have exhibited similar patterns, focusing instead on the unique “national” conditions that may be relevant to the American crime drop. By implication, factors that can help explain unique national trends or, in other words how given nations depart from the global trend, should exhibit significant temporal variability within nations that is not highly shared across nations. In theory, such conditions could include changes in criminal justice policies and practices (e.g. a move to mass incarceration or a nationwide clemency policy, a large-scale shift to more targeted policing patterns, etc.), shifts in the distribution or composition of the population (e.g. immigration trends), disruption of widespread illicit drug distribution paths, and events that modify significantly a nation’s perception of its government’s legitimacy (Blumstein & Wallman, 2006; LaFree, 1998; Roth, 2010).

A relatively large literature on nation-specific crime trends has emerged in recent years, much of it unpublished and much of it focused on relatively long-term trends rather than the recent crime drop. The published research includes studies of crime trends in Malaysia, Greece, Hong Kong, Japan, and the UK (see Baumer & Wolff, 2011). There are several US time-series studies that focus on post-World War II crime trends (Rosenfeld & Fornango, 2007), but perhaps because the contemporary crime drop represents a relatively small time frame that is not sufficient for supporting sophisticated time-series techniques, we could not locate a single study that explicitly assesses in a multi-variate context the nation-wide crime drops observed since 1980 (for property crime) or the 1990s (for violence). However, several studies have focused on the recent US crime drop across various sub-national units, including regions (Rosenfeld, 2009), states (Donohue & Levitt, 2001; Raphael & Winter-Ebmer,

2001), metropolitan areas (Stowell et al., 2009), counties (Gould, Weinberg, & Mustard, 2002), and cities (e.g. Baumer, 2008; Kubrin et al., 2010; Rosenfeld et al., 2005). The picture that emerges from this literature is murky.

Zimring (2007) and Levitt (2004) summarize the evidence from the pertinent research that had accumulated through the mid-2000s, agreeing that the rise in imprisonment rates in the USA was an important determinant of the national crime drop, but disagreeing on just about everything else. Levitt (2004) highlighted increases in police forces, the ebbing of the crack epidemic, and the legalization of abortion, while Zimring (2007) emphasized improving economic conditions and smaller youth cohorts to his list of factors that probably are most consequential to explaining the American crime drop. Subsequent to these reviews, Baumer (2008) presented empirical evidence that highlights the importance of increases in incarceration and changes in policing (i.e. increases in police size and arrest certainty) for the decline in property crime since the early 1980s, and improved economic conditions and incarceration growth for the decline in violence during the 1990s. Other research has bolstered conclusions about the significance of economic growth and the increased use of imprisonment during the 1990s. In a series of studies, Rosenfeld and colleagues (Rosenfeld & Fornango, 2007; Rosenfeld, 2009) present compelling evidence that increases in rates of incarceration and subjective economic perceptions were the most significant contributors to the 1990s drop in both property crime and homicide in America. More recently, Stowell et al. (2009) report findings that indicate a significant role of changes in immigration levels on crime trends during the 1990s across US metropolitan areas, suggesting that this may be another pertinent factor.

It is tempting to join others (e.g. Levitt, 2004; Zimring, 2007) in drawing conclusions from the existing research on the American crime drop about the factors that have been most influential, and if we take the results presented at face value, we would suggest that increases in rates of imprisonment and an improving national economy (at least subjective perceptions of improving economic conditions) were most consequential to the decline in crime rates during the 1990s, with other factors more germane to property crime decreases during the 1980s (e.g. heightened police strength). But one feature of much of the extant research on US crime trends that makes us cautious about drawing strong conclusions about the factors most influential in shaping the American crime drop is that studies of US crime trends typically do not decompose the observed temporal variation in crime into its constituent parts, namely the portion that: (a) is shared with other nations; (b) reflects national trends (e.g. the variance that is shared across states, counties, or cities); and (c) represents deviations from the national trend. This renders the exercise of allocating explanatory power to given factors, which may be more relevant to one of these dimension (i.e. global, national, or local) than the others, highly precarious. As McDowall and Loftin (2009) lament, it is especially common for sub-national studies of American crime trends to obscure the latter two elements, most often because the national trends in these studies tend to be treated as a

nuisance (i.e. partialled out with year dummy variables) rather than something to be explained. Thus, while this research tells us something meaningful about the factors important for explaining *deviations from the national trend*, it is unclear how much they tell us overall about the factors that drove the national trend. Considering the substantial variance buried in these often ignored partitions, studies of American crime trends would profit from more precisely specifying the dimensions or sources of the observed crime trends (i.e. global, national, local) that are or can be assessed with the models estimated.

Localized effects and the New York City crime drop

What drove the crime drop in New York City? Providing a meaningful answer requires that we first consider the following issues: (1) whether we want to explain the overall crime decline in the city, or just the portion that is unique from trends observed elsewhere in the nation?; and (2) whether any unique crime patterns observed in New York City reflect things found there that were not evident elsewhere or whether they were merely a function of elements present in other places, but at higher doses or allocated more strategically in New York City.

As we highlighted above, there is some debate about whether specific cities within the USA, including New York City, exhibited *highly* unique patterns with respect to the magnitude of the observed crime drop during the 1990s. In our judgment, the fairest comparison is with other relatively large cities for a period defined by the peak crime rate observed during the late 1980s/early 1990s and the lowest value observed from that point forward through the point at which the crime drop stalled, which for most large cities occurred in the early 2000s. By this comparison, New York City experienced large drops in crime rates during the 1990s, but so did many other major cities (see Panel C of Table 1 above). This simple descriptive exercise corroborates the findings generated from more complex analyzes, which have shown among other things that a large portion of the 1990s crime drop in America was a shared experience across nations (as discussed above) and across places within the country (e.g. McDowall & Loftin, 2009). This has significant implications for any assessment of the factors that have driven recent crime declines in specific American cities. Most pertinent to the present paper, it implies that the crime drop in New York City observed in the 1990s probably was driven largely by “global” and national conditions, and to a lesser extent by features specific to the city and its local neighborhoods.

The idea that a potentially substantial portion of New York City’s crime drop may be due to conditions it shared with other place—rather than it being mostly something unique to the city—strikes us as an important point to underscore, because it goes against the conventional wisdom that crime trends in a given area are largely a function of conditions and actions unique to that area. As Rosenfeld (2006: 310) poignantly argues, though it is quite common for the public, media, and criminal justice authorities to attribute shifts in

local crime rates primarily to localized conditions, often in the form of taking credit for crime drops and allocating blame for crime increases, such reactions are “extraordinary when compared with the behavior of their counterparts in other institutional realms.” Rosenfeld (2006) highlights localized shifts in overall cancer rates as one example, noting that few informed on the basics would conclude that such shifts are merely, or even largely, the product of local conditions. Similar parallels can be found in other domains, as well, including among others trends in local employment rates, housing market conditions, and television viewership. Although these things can take unique turns within given locations, they tend to exhibit parallel shifts across a wide spectrum of areas because of shared regional- and/or national-level influences.

An important take away message for the present paper is that if we are interested in explaining the New York City crime drop, each of the factors or explanations described earlier would be potentially relevant, in theory, and their potential explanatory power would depend on whether we are interested in explaining the *overall* New York City crime decline or *how it deviates from other places*. If it is the overall crime decline we wish to explain, we would want to include things even if they were not highly unique to the city (e.g. changes in age structure, abortion laws, lead paint abatement, and imprisonment), and we would want to examine the effects of such factors in empirical models that do not partial out shared temporal influences (see also McDowall & Loftin, 2009).

Most of the public commentary and research attention on the New York City crime drop has focused, instead, on how things may have been different in the “Big Apple” during the 1990s (e.g. Zimring, 2011). Indeed, this is one of the motivations for this special issue of *Justice Quarterly*. Though we argued above that significant degree of special attention devoted thus far to New York City may be unjustified, it is true that the city experienced significantly larger crime declines during the 1990s than many other places, and it is thus instructive to explore why this may have occurred. Often, the discussion on this matter seems to focus on what happened in New York City that did not occur elsewhere, but this oversimplifies the way in which localized crime trends can in theory depart from the national trend.

Borrowing an analogy from the medical field, we suggest that New York City could have exhibited larger crime declines during the 1990s than the nation as a whole because the city (1) received the same “treatment(s)” that fueled national and/or global crime declines, but those treatments were more effective there; (2) received a larger “dose” of specified treatments; (3) received a unique set of treatments; and/or (4) allocated treatments more strategically in areas where crime is heavily concentrated. The first possibility has received relatively little attention, but it is plausible that some of the large-scale changes associated primarily with global and national decreases in crime (e.g. shifts in routine activities, technological innovations, changes in consumer economic sentiment, and the rise in levels of incarceration) simply had larger effects on crime rates in New York City. For example, perhaps enhanced

technology geared toward preventing motor vehicle theft exerts especially strong effects in areas with a very large volume of automobile traffic, or maybe consumer sentiment yields stronger effects on crime in large cities where informal markets are more prevalent and better organized. It is also plausible that incarceration could have larger effects on crime rates in an area with especially high rates of population density, such as New York City, because the potential for disrupting criminal networks through incapacitation is greater, and the general deterrent message emanating from incarceration might be more potent under such conditions. To our knowledge, none of the existing studies of the crime drop has explored such possibilities.

Much more attention has been devoted to the latter three aforementioned possibilities for why New York City might have experienced greater crime declines than many other cities: larger doses of crime reduction “treatments,” unique “treatments,” and/or more effective allocation of “treatments.” Zimring (2007) describes the unique policing innovations that were fielded in New York City, suggesting that a different treatment was applied there compared to other places. The policing shifts implemented in New York City also can be thought of as merely a greater dose of remedies applied elsewhere (Joanes, 2000), as can the significant growth in police size in New York City as compared to other cities (e.g. Rosenfeld et al., 2005). Shifts in the volume of immigration and drug involvement in New York City represent alternative examples of things New York City received in larger doses in the 1990s compared to elsewhere. The 1990s brought the greatest number of immigrants to America in the nation’s history, and New York City ranked very high among the receiving locations (Fix & Passell, 2001). Also, several scholars have noted that since open-air crack markets and levels of crack use were more prevalent in New York City than many other places during the 1980s, their retreat for various reasons during the early 1990s could be particularly consequential for the crime drop there (e.g. Blumstein & Wallman, 2006).

What does the existing empirical research tell us about the New York crime drop? Unfortunately, only a small number of studies have focused explicitly on assessing recent crime trends in New York City, so the evidentiary basis remains relatively thin. Some of the relevant studies have focused on the city as a singular entity, either in isolation (Corman & Mocan, 2000) or in a comparative context (e.g. Rosenfeld et al., 2005), but the most pertinent research has focused on changes in crime and other features across boroughs, precincts, or census tracts within New York City (Cerdea et al., 2009; Cerdea et al., 2010; Chauhan et al., 2011; Harcourt & Ludwig, 2006; Kelling & Sousa, 2001; Messner et al., 2007; Rosenfeld et al., 2007). Some of this research suggests relatively large effects of the targeted policing efforts implemented by the NYPD during the early-to-mid 1990s (Kelling & Sousa, 2001), some suggests no significant association (Chauhan et al., 2011; Harcourt & Ludwig, 2006), and some shows a modest association (Cerdea et al., 2009; Cerdea et al., 2010; Messner et al., 2007; Rosenfeld et al., 2007). Similarly mixed results have emerged for another of the key factors highlighted in theoretical discussions of the 1990s crime drop—the

ebbing of the crack cocaine epidemic—but the weight of the evidence suggests a significant, albeit, modest association between various indicators of cocaine consumption and violence rates (see Chauhan, 2011 for a review).

The available research that has considered the New York City crime drop systematically is pioneering in many respects, and it has in our judgment done about as much as possible with existing data to investigate the mystery of the city's major crime decline. But several of the studies possess significant limitations for the task at hand, and of course there are some inherent restrictions to what can be done, in retrospect, with available data. With respect to the former, none of the studies conducted on the New York City crime drop incorporates time-varying indicators of unemployment rates or other potentially influential indicators of relatively short-term economic changes (e.g. shifts in wages and consumer sentiment) highlighted in theoretical discussions. This is a major limitation given that the improving economy of the 1990s serves as a plausible alternative to shifts in policing and drug activity. Additionally, most of the studies omit data on incarceration trends (for an exception, see Chauhan et al., 2011) and shifts in age structure and other potentially relevant elements of the so-called "abortion-dividend" argument (Donohue & Levitt, 2001), and they ignore the possible role of lead paint abatement (see Nevin, 2007). With these limitations as a backdrop, we feel confident in extracting three conclusions from available quantitative research on the crime drop in New York City: (1) a large portion of the crime drop in New York City was shared with many other places (see also Joanes, 2000) and appears to be due to unspecified national and global shifts, with some evidence that growth in levels of incarceration were especially important (Rosenfeld et al., 2005); (2) the increasing shift to order-maintenance policing and reductions in crack cocaine markets had, at most, a relatively small impact on overall trends in New York City (cf. Cerda et al., 2009; Cerda et al., 2010; Chauhan et al., 2011; Messner et al., 2007; Rosenfeld et al., 2007); and (3) it is unclear whether existing data resources for New York City (or elsewhere) can provide much more definitive evidence beyond already published research on the factors most pertinent to the crime drop. As implied above, the first two of these conclusions should be viewed cautiously in light of the data limitations mentioned. The latter conclusion may be overly pessimistic, but in our judgment, the current limits to knowledge on the New York City crime decline lie not in weaknesses with existing theory or research, but rather they are a function of the absence of the kind of comprehensive crime monitoring system and data infrastructure that would support the type of data and research that might provide more definitive answers.

Discussion and Conclusion

We began by providing a critical assessment of key descriptive features of the crime drop, including *when* it started, *what* types of activities it has involved,

and *where* it has been observed. We then reviewed and assessed the validity of the major explanations that have been proffered for contemporary crime drops, bearing in mind the important issues of the timing and locus of the observed trends.

On the first issue, our critique of the literature suggests that the contemporary crime drop was not exclusive to the 1990s and not highly unique to America or New York City. At a minimum, it seems clear that the timing and duration of the crime drop appears to have been contingent on the form of crime considered. Further, the 1990s crime drop occurred in many corners of the globe and across most US cities and neighborhoods, and two notable implications of this are that (a) the uniqueness of New York City is open to debate; and (b) valid explanations for the crime drop observed in the 1990s should be mindful of global, national, and local influences. Elaborating on the latter, theoretical and empirical models of recent crime trends in America should encompass both national-level factors as well as those that were shared across nations; comprehensive assessments of the crime drop in New York City should encompass "global," national, and city-level factors; and a full understanding of neighborhood changes in crime rates during the 1990s would entail consideration of all of these factors plus those that might have been implemented differentially within specific sub-areas in a given city.

With respect to the second issue addressed in our paper—assessing the validity of the major explanations—several general conclusions emerge, albeit on admittedly shaky ground in light of the relative weakness of the existing empirical literature. For example, the limited cross-national research suggests that the widely shared "global" drop in property crime observed from approximately the mid-1990s through the mid-2000s appears to be largely a function of improving (subjective) economic conditions, various forms of target hardening, and large-scale shifts in environmental (e.g. lead toxin exposure) policy (Farrell et al., 2011; Farrell, Tseloni et al., 2011; Nevin, 2007; Rosenfeld & Messner, 2009). But this conclusion is admittedly on a thin base of evidence, as the existing research has not simultaneously considered these conditions along with other potential explanations that could help to explain multi-national crime trends (e.g. shifts in alcohol consumption, cultural norms, etc.). Indeed, the most systematic cross-national study of crime trends to date (Rosenfeld & Messner, 2009) is impressive in its focus on large-scale economic shifts and changes in imprisonment, but it does not consider changes in specific forms of target hardening, fertility patterns, or environmental policy. Likewise, studies that have focused on some of these things, such as Nevin's (2007) analysis of the effects on crime trends of lead exposure, do not consider many other pertinent factors, including shifts in punishment levels and perceived economic conditions.

With respect to observed national trends, a notable limitation of the available research is that it does not routinely distinguish from the portion of such trends that are shared with other countries and the portion that is unique to a specific nation, which makes it difficult to assess empirical and theoretical

validity. Nonetheless, the most compelling evidence on the 1990s national crime drop in America, and specifically the portion that is unique from broader multi-national patterns, points to enhanced economic perceptions and rising imprisonment as most consequential (Rosenfeld et al., 2005; Rosenfeld & Fornango, 2007; Rosenfeld, 2009; Zimring, 2007). Although Donohue and Levitt (2001) present persuasive empirical evidence linking changes in abortion laws during the 1970s and the 1990s crime drop among youth and young adults in America, Cook and Laub (2002) make a convincing case against propensity-based explanations for the 1990s crime decline in America, noting in particular the relative invariance in trends across cohorts during this period.

Though there was a strong shared component to the 1990s crime drop within America, some areas of the nation experienced larger decreases than others (see, e.g. Table 1). While we do not yet have a solid grasp on why that is the case, the most compelling evidence points to city differences in growth in police forces and arrest certainty, increases in levels of imprisonment, improved economic circumstances, an increase in immigration, and the rise of enhanced "security" efforts such as Business Improvement Districts (e.g. Baumer, 2008; Cook & MacDonald, 2011; Messner et al., 2007; Ousey & Kubrin, 2009; Rosenfeld et al., 2005; Rosenfeld et al., 2007; Stowell et al., 2009). There are many limitations of this body of research that warrant scrutiny, however (see Baumer, 2008). In particular, this research generally does not distinguish between the portion of the crime decline that is shared with other places and the portion that is unique to given areas, and the empirical specifications adopted in most studies tend to be relatively narrow. Additionally, it is disappointing that so few studies have systematically explored the long-term decline in burglary and rape in America and that very little attention has been devoted to the potential importance of shifts in technology (e.g. house target hardening and the proliferation of cell phones) that might be relevant to these trends or other temporal crime patterns.

Finally, our overview of the literature and available data shows that while New York City experienced a significant crime drop in the 1990s, it was not alone in this regard and much of what occurred there appears to be tied to broader shifts experienced in America and, to a lesser extent, in other nations as well. Still, New York City did exhibit large declines in crime during the 1990s, and several studies suggest a modest role for the ebbing of the crack epidemic and the chronicled changes in policing. But studies that account for incarceration trends raise doubts about the significance of policing shifts in the city (Chauhan et al., 2011; Rosenfeld et al., 2005), and it is unclear whether the existing research would yield the same patterns if it accounted for changes in other pertinent factors (e.g. unemployment rates, wages, consumer sentiment, age structure). It is tempting to make the obligatory call for additional research, but while we concede that it may be valuable to study the New York City crime drop further for valuable clues about what happened (Zimring, 2011), the data infrastructure for doing seems limited in several ways and it is not clear to us that additional research can go very far beyond existing work.

Moving forward, we encourage scholars who study crime trends to separate where possible "global," national, and local factors and also that consideration be given to both additive and multiplicative effects. Some scholars have suggested that what may have been truly different in the 1990s is that it was evidently the first time in the history of the USA (and perhaps other nations) where one saw simultaneous shifts in several things (e.g. major increases in punishment, major improvements in the economy, reduction in the youth population, etc.) that might be relevant to crime trends (Zimring, 2007). While this comment does not necessarily imply interaction, one reading of it highlights the possibility that the combined effects of these (or other) factors may have been greater than the sum of their parts, an issue that has not been fully explored to date. Beyond this, in our judgment, the greatest need for advancing understanding of why crime shifts dramatically over relatively short periods lies not in how we theorize about crime trends or analyze crime data, but is instead a matter of developing the data infrastructure needed for providing the desired definitive answers. Recent modifications to national data collections that provide more routine data for cities and neighborhoods (e.g. the American Community Survey; the Bureau of Labor Statistics series on local employment conditions) are a positive development, as is the growing tendency for police agencies to gather detailed information on the nature and location of crimes and arrests. But many of the elements thought to be pertinent to shaping local, national, and global crime trends remain quite elusive, and the overall investment allocated for such efforts by government agencies devoted to enhancing public safety strikes us as highly insufficient. Hopefully, the terrain will be different when the next major shift in crime trends occurs.

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