The State of Broken Windows in New York

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Since the publication of Gary S. Becker's Nobel Prize winning essay "Crime And Punishment: An Economic Approach", several economic scholars have not only theorized the reasons for reduction in crime but have published analysis's on criminal behaviour and criminal justice. Too often, their theories are later critiqued harshly by their colleagues and lose repute. "Practically all the diverse theories agree, however, that when other variables are held constant, an increase in a person's probability of conviction or punishment if convicted would generally decrease, perhaps substantially, perhaps negligibly, the number of offences he commits (Becker, pg. 9)". This is known as deterrence and many economists have hypothesized on the best methods of optimal deterrence. One assertion that has found celebrated acclaim within the United States is the theory of "Broken Windows" written by James Q. Wilson and George L. Kelling (1982), in which they argue that small-scale disorder in communities, that is left unattended to, becomes the breeding ground for more serious crime. From 1990 to 1999, violent crime rates fell by about 28% and property crime rates fell by about 26% within the United States. The more prevalent declines were seen in New York City with 56% and 65% respectively. The reasons for the declines are a highly debated topic among many economists. In a press conference with New York City Mayor Rudolph W. Giuliani on February 24, 1998, he stated, "We have made the "Broken Windows" theory an integral part of our law enforcement strategy. This theory says that the little things matter. As James Q. Wilson describes it, 'If a factory or office window is broken, passers-by observing it will conclude that no one cares or no one is in charge. In time, a few will begin throwing rocks to break more windows. Soon all the windows will be broken, and now passers-by will think that, not only no one is in charge of the building, no one is in charge of the street on which it faces. So, more and more citizens will abandon the street to those they assume prowl it. Thus 'small

disorders lead to larger ones, and perhaps even to crime.' There's a continuum of disorder. Obviously murder and graffiti are two vastly different crimes. But they are part of the same continuum, and a climate that tolerates one is more likely to tolerate the other (Corman and Mocan, pg. 2-3)." However, as with any other celebrated theory come its sceptics. Many economists argue that the successful decline in crime in New York City can be explained by trends and that the declines can be accredited to other deterrence's and even socio-economic variables that include the unemployment rate and perhaps the minimum wage. The object of this paper is to define the "broken windows" theory and its application to policing, discuss it's short comings, but most importantly, provide reason for its lack of functionality or validity with its application to New York City crime rates versus other possible deterrence's and socio-economic variables.

New York City's success in reducing crime in the mid-1990's has attracted a lot of attention throughout the country. The implication is that the feat is due to Mayor Giuliani's implementation of a zero tolerance, community based policing known as the "broken windows" approach to crime prevention. However, the "broken windows" methodology is less of an application of economic models and more of a philosophy based on an understanding of human nature. In its simplest sense, "broken windows" is about the physical decay of our communities. An environment in disrepair, litter and graffiti strewn about, shows a lack of respect, and so will its occupants. Perception maintains a large part in the prevention of crime. However, this does not only include physical perceptions but also social and behavioural. We are all to some extent defined by our surroundings and if we live in a community that places keen emphasis on self-reliance, education, and the value of work, then these are the values most of us will internalize. If, however, we reside in communities where the common courtesies are no longer a custom or

valued, we tend not to value them either. If the conditions that make a person or locality a more probable victim, or a more apparent cover for a perpetrator are unchecked, crime will start small as offenders test the limits to acceptable behaviour. These antisocial acts will only prompt substantial and more detrimental behaviour as crime begins to flourish. Problems can be associated with youth hanging out in the streets, open-air drug dealing, and street prostitution and in many communities, the mob mentality gets added into the mix. There is safety in numbers, but once a crowd gathers, it is easier to flow with it than try moving against the prevailing will. "Who is going to challenge you? Who will challenge you when you sell drugs on the corner? Who will challenge you when you shoot someone for wearing the wrong colour? Unchallenged behaviour will beget worse behaviour (Frasier pg. 189)." Under such environments, criminal laws are passed with the rationale that they be enforced. The police are endowed with an immense level of discretion as to what laws they enforce, when, and with whom. However, they must be careful as the more infractions that go unforced for whatever reason, the greater is the perception of corruption, incompetence or indifference. "Broken windows" is about rectifying minor transgressions in hopes of cutting off crime at the grass root to establish a perception of civility and liveability. This is accomplished by firmly enforcing nuisance laws. Although this theory is more of a philosophy of sorts, it could be applied to economic theory.

According to Becker, there exists a function that relates a person's number of offences (O_j) to his probability of conviction (p_j), to the extent of his punishment if convicted (f_j), and to other variables (u_j) such as income, willingness to commit an illegal act and the frequency of nuisance arrests $O_j = O_j (p_j, f_j, u_j)$. Any increase of these variable (p_j), (f_j) or (u_j), will decrease the number of offences (O_j) committed by an offender. The implementation of "broken windows" would seemingly have its greatest effect on the variable (u_j), increasing the frequency of nuisance arrests and decreasing ones willingness to commit an illegal act through a change in the perception of a community and the level of acceptance it has for crime. Both these factors have the affect of increasing (u_j) and therefore decreasing (O_j). However, because there are many influences that go into determining the multifaceted variable (u_j), it is either an increase in (p_j) or (f_j) that will decrease the utility of committing an offence and therefore reducing the number of offences, with (p_j) > (f_j) (assuming people are risk preferrers). The affect of the "Broken widows" theory as it applies to Becker's model would therefore be insignificant.

In a paper written in the National Bureau of Economic Research (NBER) Working Paper Series called Carrot, Sticks and Broken Windows, the authors Hope Corman and Naci Mocan find little evidence to support the broken windows hypothesis. In their paper, the authors measure the extent of the "broken windows" policing by using misdemeanour arrests as a leading indicator while controlling for all other variables. They describe misdemeanour offences as crimes pertaining to petit larceny, assault in the third degree, prostitution, criminal mischief, and theft of services. Crime and arrest data were obtained from the Crime Analysis Unit of the New York City Police Department and the five FBI index crimes analyzed were murder, assault, robbery, burglary and motor vehicle theft. The results of their investigation of data for regressions spanning from 1974 to 1999 found that misdemeanour arrests had a significant negative affect on robberies and vehicle theft, two of the five FBI index crimes analyzed. Therefore the "broken windows" theory provided support for only two types of crimes. A 10% increase in misdemeanour arrests decreased motor vehicle thefts by 1.6 to 2.1% and robberies by 2.5 to 3.2% (Corman and Mocan, 2002). They found no evidence that broken windows policing strategy had an affect on the other crimes. Even for data gathered for only the decade of the 1990's, the primary reason for the drop in felony crimes was due jointly by felony arrests and misdemeanour arrests.

Furthermore, in a city like Chicago, where declines in crime were not to the extent of New York City's, despite the implementation of similar strong community policing and street law enforcement, many have questioned the validity of broken windows policing. University

of Chicago professor Robert Sampson and Stephen Raudenbush, professor of education at the University of Michigan, co-authored the study, "Systematic Social Observation of Public Spaces: A New Look at Disorder in Urban Neighbourhoods (1999)" in which they took the ingenuity of video recording approximately 23,816 face blocks covering 196 carefully selected neighbourhoods in Chicago in order to capture levels of physical deterioration and social behaviour. The researchers related their recordings to previously collected data and crime statistics and interviews of more than 3,500 residents. The evidence of physical disorder included cigarette butts in gutters, gang graffiti, abandoned cars, and drug paraphernalia. Evidence of social disorder included adult loitering, public alcohol consumption, fighting or hostile arguing between adults, solicitation for prostitution, drug sales, and gang activity. The research contends that crime has less to do with physical deterioration or social disorder, and more to do with poverty and low levels of resident cohesion. The study states, "…disorder did not match the main theoretical thesis of 'broken windows'. Disorder is a moderate correlate of predatory crime, and it varies consistently with antecedent neighbourhood characteristics. Once these characteristics were taken into account, however, the connection between disorder and crime vanished in 4 out of 5 tests (Sampson and Raudenbush, pg. 637)". Although the literature provides plausible theoretical means for why policing of minor crimes may deter felonies, its application to Becker's model, and empirical studies like the two mentioned and others before them, have provided no evidence to justify its rhetoric.

One theory that sceptics of the "Broken windows" theory attribute to New York City's experience is the influence of socio-economic variables. During the decade of the 1990's, New York City along with the United States had a booming economy that saw unemployment decline 25% nationally and 39% between 1992 and 1999 in New York City. Another economic indicator to consider is the minimum wage. In New York, there were two nominal wage increases in 1990 and 1991, and two more in 1996 and 1997. The real minimum wage throughout the decade rose by 12 percent. The

idea is that an increase in income and employment would decrease the utility of crime and therefore reducing the amount of illegal acts committed. However, in its application to Becker's model, the affects of such changes would be similar to those of broken windows policing. Similarly, changes to ones income would have an effect only on the variable (u_j) from the function $O_j = O_j(p_j, f_j, u_j)$, and although it could hypothetically decrease the number of offences (O_j), as explained before, there are so many factors that influence the variable (u_j), that any effect would be insignificant to determining the changes in (O_j) within the model. This assertion is further justified as a 12.5% decline in unemployment generates about 2.2% decline in burglaries and a 1.8 percent decline in motor-vehicle thefts (Corman and Mocan, 2002). Similarly, increases in the real minimum wage are found to only reduce robberies and murders with any significance (Corman and Mocan, 2002). This does show some evidence that economic conditions do affect crime rates (except assault), even though they are the not always the same socio-economic variable. However, during the 1990's, the extent of change in economic variables was not of the same magnitude as criminal justice variables. Their elasticities and actual changes were relatively small and did not generate a large enough impact to explain crime rate declines.

The last variable to consider when trying to justify crime reduction is the effect of other deterrence variables of criminal justice. These are simply the factors that would affect the probability of conviction and also includes the extent punishment play in prevention. These are the factors that according to Becker justify changes in the levels of offences with any significance. As outlined earlier, these are the variables (p_j), (f_j) in the supply of offences function $O_j = O_j(p_j, f_j, u_j)$, with the effect of changes in (p_j) > (f_j). That is, when there is a change is the optimal number of offences, these changes can only be accredited to either change in the probability of conviction or the changes in punishment if convicted. Referring back to the investigation of data presented by Corman and Mocan (2002) as I have throughout, the statistics do indeed provide evidence that the principles of Becker's crime and punishment model, still hold

today. The study finds that only felony arrests deter all five crimes analyzed, which can be considered an increase in the probability of conviction. Incapacitation does not play a role in the decrease in crime, as although the number of New York City residents in state correctional facilities does reduce all crimes but assault, the magnitude of influence is small. Although one would assume that the size of the police force would have a significant affect on crime and the perceived probability of conviction, it only had an impact on motor vehicles. Still, one percentage point increases in arrest rates for murder, assault, burglary, robbery and motor vehicle theft decreased crime in their respective categories by 0.6%, 0.4%, 3.1%, 2.4% and 5.9% respectively. This means that, for example, a 10% increase in the murder arrest rate entails a 4% decline in murder. Therefore, as predicted by Becker's model, deterrence factors other than socio-economic variables and misdemeanour arrests, that are encompassed in the variables (p_j) and (f_j), induce the most significant declines in crime in New York City. It is also important to note that during the time between 1990 and 1999, when New York City saw its highly debated decline in crime, arrests per crime increased (Corman and Mocan, 2002), which sustains the fact that felony arrests are the most significant deterrent in crime.

Although it is highly publicized by New York City Mayor Rudolph Giuliani as the principle philosophy to its law enforcement strategy and the key to the steady decline in crime in New York City, the "Broken window" theory lacks economic merit. As stated before, the "Broken windows" theory is more of a philosophy or even psychological doctrine of human nature whose affects on the supply of offences when applied to economic models prove to be rather insignificant, while correlations to New York City crime rates, with misdemeanour arrests as a leading indicator, are marginal at best. The hypothesis only provides a theoretical means for crime prevention, possessing no substance in application.

Similarly, the argument that New York City's decline in crime in the 1990's is a result of a prosperous economy holds little credence. Using the unemployment rate and minimum wage as leading indicators, the affects such socio-economic variables would have on the number of offences are secondary and correlations to New York City crime rates did not generate a large enough impact to warrant or explain crime rate declines.

Therefore, it is the contention of this essay that the reductions in crime are the affect of deterrence variables of criminal justice other than socio-economic variables or misdemeanour arrests. This is validated by the principles of Becker's economic model. Only felony arrests deter all five crimes analyzed in New York City crime rates and the magnitudes of affects of increases in arrests in the five FBI index crimes are quite drastic on their respective categories. Between 1990 and 1999, when New York City saw its highly debated decline in crime, arrests per crime increased (Corman and Mocan, 2002), which sustains the fact that felony arrests are the most significant deterrent in crime. Law enforcement strategies should therefore focus on felony arrests rather than misdemeanour arrests as suggested by the "Broken windows" theory.

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