EXPLORING THE LINK BETWEEN ECONOMICS AND CRIME: A COMPLEX PICTURE

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It is important at the outset to stress that the current period we find ourselves in (Summer 2020) is genuinely unprecedented in terms of economies being purposefully closed by governments around the world, with citizenry effectively locked down for a period of time. While economic recessions have routinely impacted countries all over the world for many decades, we really haven't witnessed anything quite like this. As such, history can only be a partial guide on this and so drawing inferences from the research completed on previous economic cycles and crime is likely to be even more problematic than before. First of all, it is important to understand the parameters of the debate and definitional issues that need to be recognised.

Indicators of Economic Activity

There is much debate about which indicators are reliable or not when it comes to describing the health of a country's economy. While rates of unemployment may seem like a potentially good indicator, most research has found this not to be the case, especially as trends such as the growth of the 'gig' economy and changes in Government policies on welfare support drive down rates of recorded unemployment. Equally, the rate of unemployment does not capture changes in rates of pay; job security; job mobility; work hours, and so on. These can often be much more effective ways of measuring economic stress in communities, particularly those groups that can be regarded as the 'precariat'/underclass – those more intimately and severely affected by economic shocks (Standing, 2012).

As such, criminologists have been encouraged to use a broader range of economic indicators to try and capture the health of an economy, such as: Gross Domestic Product (GDP); Gross State Product (GSP); house foreclosures, Consumer Price Index (CPI); real earnings; median income/wage; education expenditure; and consumer sentiment to name but a few. The paper will briefly summarise what is known thus far about some of these indicators.

Profile of Economic Recessions

Going back to the 1960s, there have been 7 economic periods that can be regarded as recessions in the US – it is highly likely that 2020 will be the 8th. Each recession has different characteristics – depth, length, coverage etc. It is therefore important but at the same time difficult to take these factors into account when comparing rates of crime and a range of economic indicators. In addition, changes in the response to recessions also need to be considered – to what extent does civil society and government react to the economic stresses experienced by some, such as providing food banks, food stamps, soup kitchens and so on? In the latest Pandemic-driven recession, some countries have poured billions into protecting workers through furlough schemes, such as the UK where the Government committed to paying 80% of the wages of all those temporarily unable to work for an extended period.

Measuring Crime

As a collective term, 'crime' encompasses a broad range of illicit behaviour, some of which may be more or less affected by changes in the economic environment. As such, most research looks to

understand changes in particular types of crime rather than crime in general, although inclusion/exclusion is often limited more by availability than choice. The main crime types that are used in the US when looking at the relationship between economics and crime are: property crime (burglary and criminal damage); violent crime; theft (larceny); robbery; motor vehicle theft; and fraud and embezzlement.

It is also important to recognise the limitations of 'official' crime statistics. As a measure of the volume of crime and trends over time, they can be heavily influenced by a number of factors, not least the willingness, or not, of various groups to report crime, how crime is categorised, changes in legislation and of course police practices. Some have argued that crime statistics are as much a measure of the administrative capability and competence of the police as they are an accurate measure of the amount of crime occurring in society (Maxfield, Lewis and Szoc, 1980). It is also worth noting that using national crime and economic data may mask relationships in specific areas of a country.

Official crime statistics tend to be relatively good at representing more serious crimes such as homicide and serious violent crime, and offences where the offender may be insured such as property crime and auto crime. Where they are poor is recording less serious crime – vandalism, minor violent encounters, domestic violence, gang-related crime and business-related crime. For example, in the UK there is around about 374,000 recorded incidents of shop theft every year, but industry-specific surveys suggest the number of incidents retailers experience every year might be nearer to 4 million – 11 times higher (Bamfield, 2012; Home Office, 2019).

To counter the limited scope of official statistics, crime surveys have been carried out across the world for many years. These collect data directly from the public (typically adults aged over 16 years) through population sampling techniques. In the UK for example, these surveys have been carried out almost every year since 1981 and are now a core part of how the Government reports and responds to crime (Office for National Statistics, 2020). Generally speaking, the crime surveys in the UK record around about 9.5 million crimes a year compared with about 4.3 million officially recorded crimes – more than double. But even these surveys have flaws – the UK version does not record business crimes, any crimes experienced by individuals not resident in a household, drug possession, murder and sexual offences to name but a few.

To further confound matters, most developed countries have witnessed similar changes in the pattern of overall levels of crime since the 1950s onwards. The overall volume of crime, especially property-related crime, increased year on year until the early 1990s, when it has since been on a steady decline, perhaps by as much as 50% overall (See Figure 1 below). This macro trend in crime levels (mirrored to a fair degree by the available crime surveys) will obviously have a major effect upon attempts to understand the impact of economic stress on levels of crime. There have been many attempts to explain this drop in crime, including improved security, increased rates of incarceration, better and more policing, more permissive gun laws, an increase in ageing populations, and the removal of lead in gasoline (Farrell et al, 2010).

Figure 1: Violent Crime and Recessions (left) and Property Crime and Recessions (right)



Source: Finklea, K. (2012) Economic Downturns and Crime, Congressional Research Service: https://www.everycrsreport.com/reports/R40726.html.

Economic Crime Link Theory

The most familiar criminological theory is the Economic Theory, which predicts a positive correlation between unemployment and property crime in particular; in other words, that increases in the unemployment rate will be correlated with increases in property crime rates (Becker, 1968; Freeman, 1996). The reason for this positive correlation, according to this theory, is that during periods when there are fewer opportunities for legitimate income, people may turn to illegal activities, while when more jobs are available, the risks of committing a crime may be weighed against the opportunity for legitimate work. However, other have countered this theory and suggest the opposite – property crime will decrease, mainly because more people will be at home and hence able to protect their property. Of course, other theories have been employed to try and understand links between economic stress and criminality, such as Routine Activity Theory and Rational Choice Theory, the latter of which posits that individuals will make choices based upon the circumstances in which they find themselves. In this respect, those that find themselves faced with significant economic stress will decide to commit crimes to mitigate the circumstances in which them find themselves (Cornish and Clarke, 1986).

Summary of Literature

Perhaps not surprisingly, given all of the above, the academic literature on the relationship between crime and economic indicators provides a very mixed picture – the evidence is in no way clear cut and is often very contradictory. Starting with the studies on unemployment, Chiricos's research back in the late 1980s (a review of 63 studies and still regarded as one of the best studies) suggests an 'inconsistent' relationship between unemployment and property crime rates during the 1960s and a positive relationship during the 1970s. Gould et al also analysed the relationship between unemployment and property crime rate between 1979 and 1997, and similarly found that the significance of the relationship was dependent on the time period. They determined that there was no evidence for a long-term relationship between unemployment and the property crime rate between 1970 and 1997.

Overall, it is difficult for researchers to predict the effect, if any, that unemployment rates may have on property crime. This would seem mainly due to limitations in the efficacy of unemployment as a lead indicator of economic stress (as discussed earlier).

In an attempt to look more broadly at the possible indicators of economic stress, Fadaei-Tehrani and Green ran a correlation between six different independent variables: GDP, median income, education expenditures, poverty rate, drug seizures, and unemployment, and the property crime rate. As with Chirico's work, they did not find a significant relationship between unemployment and the property crime rate. They did, however, determine that a decrease in the property crime rate was significantly related to an increase in public expenditures for education, median income, and gross domestic product (GDP). Together, these three variables accounted for about 74% of the variation in the property crime rate from 1980 through 1997, and GDP accounted for about 28%. These results suggest that for property crime at least, there may be a link with fluctuations in the economy.

More specifically, Arvanites and Defina used a more localised economic indicator – Gross State Product (GSP) to measure economic health. They found a significant relationship between GSP and the property crime rate from 1986 through 2000, although the study was limited by the overall rate of crime declining across the research period. As with others, they could not conclude anything about causation.

Others have also found a relationship with types of crime and various other economic indicators. Gould for instance, did find a relationship between a decrease in wages and an increase in property crime. A Chicago-based study looked at the property market and crime and concluded that violent crime, but not property crime was linked to an increase in foreclosures (quoted in Finklea, 2012). They found that a 1% increase in foreclosures could be linked with a 2.3% increase in violent crime (but only based upon only 1 year of data in one area). A similar study undertaken by the Charlotte-Mecklenburg Police Department, quoted by Finklea (2012), looked at a five-year period of house foreclosures (2003-2007) and concluded that rates were linked with increases in violent crime but not property crime.

Some researchers have suggested that consumer sentiment may correlate with crime rates, particularly for those crimes that may be, to some extent, economically motivated. Rosenfeld and Fornango used annualized values from the Index of Consumer Sentiment (ICS) as a proxy for how individuals perceived the economy and contrasted it with crimes they deemed to be economically motivated, such as robbery, burglary, and larceny. Results from their analyses indicated that consumer sentiment was more highly correlated with robbery and property crimes than more traditional measures of the economy, such as the unemployment rate. However, they did not use any other violent crime indicators, such as domestic violence, murder and assault (which could arguably be associated with economic stress). Indeed, it has been almost impossible to find any research which draws a strong correlation between various types of violent crime and economic indicators.

It does not appear, therefore, that recessions, as measured by macroeconomic variables such as the unemployment rate or home foreclosures – can be definitively linked to increases in crime rates. However, research on other factors, such as GDP and GSP, as well as consumer sentiment, have shown that there may be some correlation between these factors and certain types of crime rates.

Conclusions

Bold statements indicating that increases in unemployment in particular, will **cause** an increase in various types of crime are difficult to substantiate from the evidence reviewed in this paper. However, the current context is very hard to compare with any of the recent studies undertaken since the early 1960s – US unemployment is currently at 1930s Depression era levels and so it cannot be ruled out that crime levels will not increase as a consequence.

Other indicators of economic stress do seem to point towards some form of correlation with an increase in some types of crime although the vagaries of crime statistics often make drawing this conclusion challenging.

What seems certainly possible, is that high levels of economic stress are likely to generate increases in some forms of crime, in particular domestic violence, possibly acquisitive crimes and property crime. The peculiarities of the recent Pandemic-enforced lockdown, with large swathes of citizenry confined to their homes for long periods of time may have certainly exacerbated levels of abuse and domestic violence, but at the same time reduced levels of property crime (reduced opportunity).

It is also important to stress the need for analysis at the local level wherever possible; numerous previous studies have recognised the smoothing effect of using macro-level data compared with looking at changes at a more micro level, such as individual States and Counties.

As this period of economic stress unfolds and gradually eases, then opportunities will be present to measure how crime rates have changed over this time period, but it will be important to take a medium-term view. As detailed earlier, measuring economic stress and crime is not straightforward and therefore a measured and considered approach to reflecting upon this issue would seem a prudent approach to adopt.

Selected Bibliography

Allen, R. C. (1996) 'Socioeconomic conditions and property crime: A comprehensive review and test of the professional literature', *The American Journal of Economics and Sociology*, 55 (3): 293–308.

Arvanites, T. M. & Defina, R. H. (2006) 'Business cycles and street crime', *Criminology*, 44 (1): 139-164.

Bamfield, J. (2012) Shopping and Crime, Basingstoke: Palgrave Macmillan.

Becker, G. (1968) 'Crime and punishment: An economic approach', *Journal of Political Economy*, 76 (2): 169-217.

Cantor, D. & Land, K. C. (1985) 'Unemployment and crime rates in the post-world war II United States: A theoretical and empirical analysis', *American Sociological Review*, 50: 317–332.

Chiricos, T. (1987) 'Rates of crime and unemployment: An analysis of aggregate research evidence', *Social Problems*, 34 (2): 187–211.

Cohen, L. E., & Felson, M. (1979) 'Social change and crime rate trends: A routine activity approach', *American Sociological Review*, 44 (4): 588-608.

Cornish, D. and Clarke, R. (1986) *The Reasoning Criminal: Rational Choice Perspectives on Offending*, New York: Springer-Verlag

Devine, J. A., Sheley, J. F. & Smith, M. D. (1988) 'Macroeconomic and social-control policy influences on crime rate changes, 1948–1985', *American Sociological Review*, 53 (3): 407–420.

Ehrlich, I. (1973) 'Participation in illegitimate activities: A theoretical and empirical investigation', *Journal of Political Economy*, 81 (3): 521–565.

Fajnzylber, P., Lederman, D. & Loayza, N. (2002) 'What causes violent crime?' *European Economic Review*, 46: 1323–1357.

Farrell, G., Tilley, N., Tseloni, J. & Mailley, J. (2010) 'Explaining and sustaining the crime drop: Clarifying the role of opportunity-related theories', *Crime Prevention and Community Safety*, 12: 24–41.

Finklea, K. (2012) *Economic Downturns and Crime*, Congressional Research Service: https://www.everycrsreport.com/reports/R40726.html.

Freeman, R. (1996) 'Why do so Many Young American Men Commit Crimes and What Might We do About it?', *The Journal of Economic Perspectives*, 10 (1): 25-42.

Gould, E. D., Weinberg, B. A. & Mustard, D. B. (2002) 'Crime rates and local labor market opportunities in the United States: 1979–1997', *The Review of Economics and Statistics*, 84 (1): 45–61.

Grogger, J. (1997). *Market wages and youth crime*, National Bureau of Economic Research Working Paper Series, 5983. Cambridge, MA.

Home Office (2019) Crime in England and Wales Year Ending March 2019, London: Home Office.

Jones, G. & Kutan, A. M. (2004) Volatile interest rates, volatile crime rates: A new argument for interest rates smoothing, William Davidson Institute Working Papers Series, 694. University of Michigan.

Long, S. K. & Witt, A. D. (1981) 'Current economic trends: Implications for crime and criminal justice', in K. Wright (Ed.) *Crime and criminal justice in a declining economy*, Boston, MA: Gunn and Hain Publishers, Inc., 69-143.

Machin, S. & Meghir, C. (2000) *Crime and economic incentives*, The Institute for Fiscal Studies Working Paper Series, 0017. London.

Maxfield, M., Lewis, D. and Szoc, R. (1980) 'Producing Official Crimes: Verified Crime Reports as Measures of Police Outputs', *Social Science Quarterly*, 61 (2): 221-236.

Neustrom, M., Jamieson, J., Manual, D. & Gramlin, B. (1988) 'Regional unemployment and crime trends: An empirical examination' *Journal of Criminal Justice*, 16 (5): 394–402.

Office for National Statistics (2020) *Crime Survey for England and Wales*: https://www.crimesurvey.co.uk/en/index.html.

Oh, J. (2005) 'Social disorganizations and crime rates in U.S. central cities: Toward an explanation of urban economic change', *The Social Science Journal*, 42 (4): 569-582.

Oster, A. & Agell, J. (2007) 'Crime and unemployment in turbulent times', *Journal of the European Economic Association*, 5 (4): 752-775.

Ralston, R. W. (1999) 'Economy and race: Interactive determinants of property crime in the United States, 1958– 1995', *The American Journal of Economics and Sociology*, 58 (3): 405–434.

Rosenfeld, R. & Fornango, R. (2007) 'The impact of economic conditions on robbery and property crime: The role of consumer sentiment', *Criminology*, 45 (4): 735-769.

Stack, S. (1982) 'Social structure and Swedish crime rates: A time-series analysis, 1950–1979', *Criminology*, 20 (3): 499–513.

Guy Standing (2012) 'The Precariat: From Denizens to Citizens?', Polity, 44 (4): 588-608.

Young, T. J. (1993) 'Unemployment and property crime: Not a simple relationship', *The American Journal of Economics and Sociology*, 52 (4): 413-415.



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