

Delinquent-Prone Communities

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PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE
The Pitt Building, Trumpington Street, Cambridge United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU, UK www.cup.cam.ac.uk
40 West 20th Street, New York, NY 10011-4211, USA www.cup.org
10 Stamford Road, Oakleigh, Melbourne 3166, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain

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First published 2001

Printed in the United Kingdom at the University Press, Cambridge

Typeface 10/13pt Baskerville *System* 3b2 [cE]

A catalogue record for this book is available from the British Library

Library of Congress cataloguing in publication data

Weatherburn, Donald James.

Delinquent-prone communities / Don Weatherburn and Bronwyn Lind.

p. cm.

ISBN 0 521 79094 8

1. Juvenile delinquency – Australia – New South Wales. 2. Juvenile delinquency.

3. Crime – Economic aspects. 4. Crime – Social aspects.

5. Juvenile delinquents – Australia – New South Wales – Family relationships.

6. Juvenile delinquents – Family relationships. 7. Community life.

I. Lind, Bronwyn. II. Title.

HV9230.A6 N489 2001

364.36'09944 – dc21 00-036304

ISBN 0 521 79094 8 hardback

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The ESIOM paradigm and its problems

The ESIOM paradigm

Scholarly interest in the question of how economic stress affects crime has a long pedigree in criminology. Quetelet (1831) and Guerry (1833) both set out to test the belief, widely held in nineteenth-century France, that crime and economic stress were positively related. They found, instead, that crime rates were higher in wealthier areas. Both attributed this result to the fact that wealthier areas provided more opportunities for crime than poorer areas. Guerry and Quetelet's observations about the relationship between crime-prone areas and wealth in nineteenth-century France may not have been mirrored by those taking observations in other countries at later points in time. The balance of evidence now clearly favours the hypothesis that economic stress and crime are highly correlated, at least where serious crime is concerned (Braithwaite 1979; Box 1987; Chiricos 1987; Belknap 1989). But they firmly established the relationship between crime and economic factors as an important observational domain for criminological theory. They also anticipated a debate about the relative importance of offender motivation and offending opportunity which is alive and well today.

The conventional approach to the problem of explaining the relationship between economic stress and crime has been to argue that economic stress – or stress, in one way or another – motivates otherwise law-abiding individuals to offend. For brevity, in what follows we refer to this as the economic stress-induced offender motivation (ESIOM) paradigm. In using this term we do not wish to be taken as suggesting that psychological stress mediates the relationship between economic factors and crime. The term 'economic stress' is used as Fowles and Merva (1996) use it, that is, merely as a shorthand way of

denoting the psychological condition or conditions which putatively mediate the link between factors such as unemployment (or poverty) and the individual motivation to offend. We could have followed Sampson and Wilson (1995: 45) in using the term 'materialist theory' to describe theories which maintain that conditions such as unemployment or poverty motivate individuals to offend. We prefer to use the term 'ESIOM paradigm' because some classical theories about the relationship between poverty and crime, while clearly motivational, are not necessarily materialist. Social opportunity theory, for example, is clearly a motivational theory of crime but its explanation for criminal behaviour could not be said to hinge on the assumption that offenders commit crimes for reasons of material gain.

Strain theory (Merton 1968) was the first and remains perhaps the best known of the ESIOM theories. According to this theory all societies define certain material goals as 'worth striving for' and specify certain norms which define the legitimate means available to achieve these goals. Economically disadvantaged persons, however, experience a significant gap or disjunction between their socially inculcated aspirations and the legitimate means available to achieve them. This disjunction, according to strain theory, increases the likelihood of involvement in crime. This explanation makes sense of the association between economic stress and acquisitive crime because such crime can be viewed as a means of fulfilling material aspirations. On the other hand it makes somewhat less sense of evidence linking economic stress to non-acquisitive crime. It also leaves the mechanism by which the hypothesised 'disjunction' achieves its criminogenic effects within an individual entirely unclear. In other words, the theory offers no insight into why some economically disadvantaged individuals become involved in crime while others do not.

A somewhat more wide-ranging treatment of the strain hypothesis is the social opportunity theory put forward by Cloward and Ohlin (1960). They argued that delinquency emerges more as an act of rebellion against blocked social opportunities rather than as a means of achieving culturally approved goals. According to Cloward and Ohlin, structural blockages of social opportunity have the effect of driving youths into delinquent gangs as a means of conferring the social status on themselves unobtainable from conventional society. Mere lack of access to legitimate income-earning activities, however, is not sufficient to produce crime. The theory suggests that access to illegitimate opportunities must also be available. Since participation in any form of illegitimate activity is consonant with the desire to rebel against conventional social values, Cloward and Ohlin's theory gives rise to the possibility that economic stress may have just as strong an effect on non-acquisitive crime as on acquisitive property crime. Like strain theory, however, social opportunity

theory says little about why some disadvantaged juveniles become involved in crime while others do not. One might surmise that when disadvantaged individuals do not involve themselves in crime they either have not experienced a blockage of legitimate opportunities and/or do not have access to illegitimate opportunities. But the theory offers no insight into why this occurs and evidence supporting this proposition is nowhere presented.

The theory of crime put forward by Cohen (1955) offers one solution to this problem. Cohen argued that lower-class socialisation equips lower-class boys less adequately than their middle-class counterparts for success in school. The result, according to Cohen, is a sense of personal failure reinforced by stigmatisation at the hands of teachers and more successful students. The rest of Cohen's theory essentially follows the argument pursued by Cloward and Ohlin. The loss of social status engendered by school failure causes juveniles who have done poorly at school to band together. By this means they set up their own social status system, distinguished by the fact of its rejection of conventional social values. The strength of Cohen's theory is that the mechanism by which economic stress achieves its effects – poor school performance – has been explicitly identified. Moreover it is a mechanism whose existence, as Braithwaite (1979) points out, is well-supported by empirical evidence. Juveniles from economically disadvantaged backgrounds are more likely to do poorly at school. Poor school performance is universally found to be highly correlated with juvenile involvement in crime. Since not all economically disadvantaged juveniles do poorly at school, the theory is able to furnish at least some explanation for the fact that not all economically disadvantaged juveniles turn to crime.

Although most theories of the relationship between economic stress and crime appeal to sociological notions there are some notable exceptions. Economic theories of crime offer yet a third perspective on the way in which economic stress motivates individuals to offend. The best known economic theory of crime is that formulated by Becker (1968). He rejected the need for any special set of concepts to explain criminal as opposed to non-criminal forms of human behaviour. Instead, he argued, individuals allocate their time between legitimate and illegitimate activities in proportions which result in equal expected utility. The expected utility of crime is determined by the perceived risks, costs and benefits associated with it. The benefits of crime in Becker's theory can be monetary benefits, benefits in kind or intangible benefits like social status. The costs of crime include not only the penalties imposed on offenders but also opportunity costs, that is, benefits foregone as a result of involvement in crime (e.g. income from legitimate activities). Becker argued, not unreasonably, that the opportunity costs of involvement in crime

fall with an individual's income. Thus, although Becker rejected traditional sociological theories of criminal behaviour, he was led to similar conclusions about the relationship between economic stress and crime. As with strain and social opportunity theory, however, the economic theory of crime offers little explanation for the fact that many disadvantaged individuals do not involve themselves in crime. One may attribute this fact to individual differences in the utility assigned to various outcomes associated with legitimate or illegitimate activity, but the theory affords no means of measuring these differences and thereby testing its claims.

There are many other theories of crime which fall within the ESIOM paradigm. As Braithwaite points out in his review of the theoretical literature (Braithwaite 1979) early Marxists argued that capitalism motivates offending because it encourages avarice and disregard for the needs of others. Some psychologists, on the other hand, have ascribed the source of criminal motivation to the fact that disadvantaged individuals experience a higher than average level of frustration and this produces a heightened tendency toward criminality. Despite their ontological differences, the distinctive feature of all these accounts is their appeal to the notion that economic stress increases crime because it motivates individuals affected by that stress to offend. It is a tribute to the influence of this idea that it continues to dominate research and theory on the relationship between economic stress and crime. Strain theory has been revised and extended by Agnew (Agnew 1985; Agnew and White 1992). Elements of social opportunity theory can be found in Braithwaite's theory of reintegrative shaming (Braithwaite 1988). Elements of Becker's economic theory can be found in Wilson and Herrnstein's general theory of crime (Wilson and Herrnstein 1985).

Early challenges to the ESIOM paradigm

The puzzle of all this is that the ESIOM paradigm was placed under theoretical and empirical siege almost from the moment of its inception. Early challenges to the ESIOM paradigm came from two sources. The first source consisted of theoretical, methodological or empirical criticisms of particular ESIOM theories. Strain theory was criticised, for example, on the grounds that there was little evidence to support the proposition that juvenile offenders experienced a more acute disjunction between their aspirations and their expectations than did non-offenders (Vold and Bernard 1986). Indeed delinquents appear to have both low aspirations and low expectations (Kornhauser 1978). Social opportunity theory was criticised by those who argued that, far from being talented but frustrated youths, with a burning sense of injustice,

gang members had few social abilities and no strong future aspirations (Nettler 1978). Cohen's theory was criticised on the grounds that it seems to be arguing that delinquents both accept and reject middle-class values (Vold and Bernard 1986). The economic theory of crime, as formulated by Becker, was criticised on the grounds that it involved arbitrary assumptions about the value of key parameters and oversimplified assumptions about the nature of the utility function underpinning the allocation of time to criminal activity (Ehrlich 1973; Block and Heineke 1975; Orsagh and Witte 1980).

These sorts of criticisms are important but they have not generally proved fatal to any of the theories in question. In some cases this is because the theories are so loosely tied to observation that it is easy to modify them in ways which protect them from refutation. Strain theory, for example, is currently enjoying a revival thanks to a reformulation of its theoretical commitments in relation to juvenile aspirations (Agnew 1985). The economic theory of crime has preserved its popularity because its underlying assumptions can easily be modified without abandoning its central notion that criminal activity flows out of rational assessments by offenders of the benefits and costs of involvement in crime (see, for example, Block and Heineke 1975; Buchanan and Hartley 1992). In some cases, however, the early criticisms of particular ESIOM theories failed to make a mark because they only succeeded in targeting assumptions which were essentially peripheral to the theory. One of the more controversial claims made by Cloward and Ohlin, for example, was that delinquent gangs all conform to a particular typology. Although there is little evidence to support this claim, as Vold and Bernard (1986) point out, this is of little consequence because the typology itself does not derive from the notion that delinquency is a consequence of rebellion against blocked social opportunity.

A second and more damaging set of challenges to ESIOM theories came from those who questioned the basic thesis that economic stress increases crime. At first blush the idea that anyone might question the central relationship underpinning at least four major theories of crime might seem somewhat surprising. But even before the emergence of the ESIOM paradigm some theorists rejected the proposition that stress and crime were causally linked. Shaw and McKay (1969), for example, noted the association between stress and crime in their study of delinquency areas of Chicago but rejected the suggestion that the high crime rate areas of Chicago were a direct result of economic stress. They were drawn to this conclusion by the fact that there had been no change in the per capita concentration of delinquents in Chicago despite massive increases in the general level of stress during the Great Depression (Vold and Bernard 1986: 169).

Shaw and McKay were far from the last theorists to question the notion that crime rates increase with the level of economic stress. Doubts were also expressed by Sutherland and Cressey in expounding their theory that criminal behaviour is learned as a result of association with delinquent peers (Sutherland and Cressey 1978). Like Shaw and McKay, they were influenced by the observation that crime rates and unemployment did not always rise and fall together over time. But they also ventured two other reasons for rejecting the view that economic stress and crime were causally linked. First, they suggested that at least some of the spatial association between stress and crime could be attributed to the fact that low socioeconomic status offenders are more likely to be arrested and prosecuted than high socioeconomic status offenders. Second, they suggested that crime rates might be affected by factors associated with economic stress rather than economic stress itself (e.g. early departure from school), arguing that such factors increased the rate of contact between delinquents and non-delinquents.

The emergence of Hirschi's control theory (Hirschi 1969) added a further fillip to the arguments of those who questioned the relevance of economic stress to an understanding of crime. Instead of drawing on official records of juvenile or adult involvement in crime to draw conclusions about the factors which influence crime, Hirschi analysed the relationship between the rate of self-reported delinquency and a variety of factors, including social status, attachment to parents and siblings, and school performance. The results of this analysis indicated that, regardless of race or class and regardless of the delinquency of their friends, boys who were more closely attached to their parents were less likely to report committing delinquent acts than those who were less closely attached. Hirschi also found higher rates of self-reported delinquency among students who did poorly at or disliked school and/or who rejected school authority. On the basis of these observations he concluded that crime is the result of a broken or weakened bond between a juvenile and the persons (e.g. family and friends) and institutions (e.g. school and church) normally involved in fostering or supervising law-abiding behaviour. Moreover, because he found only very weak evidence of an association between the occupational status of a student's father and the likelihood that a student had committed delinquent acts, Hirschi rejected the suggestion that economic stress exerted any significant influence on the likelihood of juvenile participation in crime.¹

Hirschi's observation that there was no relationship between economic stress and crime was frequently confirmed during the 1960s and 1970s by other studies relying on self-reported measures of offending (Braithwaite 1988: 49). For a time this seemed to secure the proposition that crime is not

caused by economic stress and is not more prevalent among those of low socioeconomic status (e.g. Tittle, Villemez and Smith 1978). That proposition was further bolstered by a number of important sociological studies during the 1960s which documented police bias in the handling of juvenile suspects and in the enforcement of legislation against vice and narcotics (Bottomley and Coleman 1981). Such studies seemed to undermine the reliance placed on police statistics by many early studies of crime. Growing interest in labelling theory – the view that criminal justice intervention has the effect of exacerbating rather than ameliorating crime – probably reinforced this trend, as did growing awareness of the importance of white-collar crime. It became commonplace to argue that crime statistics based on reports of crime to police were just ‘social constructions’ rather than measures of any underlying reality. Indeed, some social theorists went so far as to claim that ‘official knowledge’ based on crime statistics was little more than an extension of the rhetoric used by those in power to secure political control (Bottomley and Coleman 1981: 1).

These arguments have not held sway with most scholars for reasons which have been comprehensively reviewed by Braithwaite (1979: 23–63) and also by Blumstein et al. (1986: 48). For this reason they will therefore not be rehearsed in detail here. Suffice it to say that most self-reported offending is only relatively minor in nature (Hindelang, Hirschi and Weis 1979) whereas studies relying on officially recorded crime are generally tapping quite serious forms of criminality. Self-report studies examining serious forms of offending do find strong association between economic stress and crime (Elliott and Huizinga 1983; Sampson and Laub 1994). A strong association between stress and crime can also be found for offences such as homicide and vehicle theft which are nearly always reported to and recorded by police (e.g. Devery 1991, 1992; Junankar and Kapuscinski 1992). Furthermore, it is now generally recognised that police resources and police discretion exert a much stronger effect on crimes recorded when police take the initiative in enforcing the law (e.g. drug offences, public order offences) than when crimes are recorded because of action by citizens who report them. In the latter case, the perceived seriousness of an offence has been found to be far more important in shaping the likelihood of it being reported to police than the socioeconomic status of the victim (Gottfredson and Hindelang 1979).² Even where socioeconomic status has been found to exert an independent effect on the likelihood of police contact or court referral following commission of an offence, the effect is greatly diminished for serious offences such as assault, robbery, theft and burglary (Sampson 1986). As Gottfredson noted in his review of the United States National Crime Victim Survey (NCS), most of the important social,

demographic and spatial/temporal differences shown by the NCS have also repeatedly been found in official data (Gottfredson 1986).

The emergence of more serious anomalies

Interestingly enough, renewed faith in the effect of economic stress on crime has not brought with it a resurgence of confidence in ESIOM theories. There are three reasons for this. First, in the years following the emergence of Hirschi's theory a considerable body of evidence began to accumulate indicating that most individuals commence their involvement in crime long before they enter the labour market and in many instances before they leave school. This phenomenon (which we call the *early onset anomaly*) militated against the view that otherwise law-abiding individuals were tempted into crime by unemployment, a low-paid job or low social status (Tarling 1982). A second reason is that the traditional dominance of motivational explanations for spatial and temporal variation in crime has come under threat from other theories which attribute such variation, at least in part, to changes in the supply of criminal opportunities (Cohen and Felson 1979; Clarke 1983; Cook 1986). A third reason is that, although most studies of the relationship between stress and crime show evidence of a positive relationship, a number of anomalies have emerged which seem inconsistent with the thesis that increases in economic stress uniformly produce increases in crime.

Evidence of the *early onset anomaly* emerged long before the advent of strain theory, social opportunity theory or the economic theory of crime (Glueck and Glueck 1950). Subsequent research using more reliable data has since confirmed the fact that the onset of involvement in crime for most offenders occurs when they are still quite young. In their review of the literature on age of onset for offending Farrington et al. (1990) conclude that the peak age for onset of criminal activity is about age 14. It is possible, however, to predict the onset of involvement in crime long before this. White et al. (1990), for example, were able to predict involvement in criminal activity between the ages of 11–13 from information about child behaviour at age three.³ In the light of what we now know about the role of developmental factors in the onset of criminal activity, such predictive efficacy may not seem surprising. On current evidence the best independent predictors of early onset of offending are leisure activities rarely spent with the father, troublesome behaviour, parents having authoritarian child-rearing attitudes, and psychomotor impulsivity, with other relatively strong indicators being low family income, low non-verbal intelligence and poor child-rearing behaviour (Farrington and Hawkins 1990). Many of these factors would be expected to exert their effects

on family functioning and child behaviour well before entry into school or the labour market. This does not prove that unemployment and economic stress exert no influence on the motivation to offend. But it does run against the grain of theories which contend economic disadvantage is enough to prompt criminal activity in otherwise law-abiding individuals. It has accordingly forced a reappraisal of this assumption even among some contemporary theorists working within the ESIOM tradition (e.g. Paternoster and Mazerolle 1994).

Criminal opportunity theory has also proved a corrosive influence on support for the ESIOM paradigm. The essence of criminal opportunity theory is the view that crime rates are driven by the supply of opportunities and incentives for crime rather than the factors which influence the supply of motivated offenders. While there is still room for doubt about the validity of this thesis (at least when strictly interpreted) the accumulated evidence that situational factors play a very important role in shaping spatial and temporal variation in crime rates is now too strong to be ignored (Clarke 1983; Clarke and Cornish 1985; Clarke 1995; Sutton and Hazlehurst 1996). Research stimulated by criminal opportunity theory has also thrown up phenomena not readily explicable in terms of any theory falling within the ESIOM tradition. To take just two examples, no offender-based explanation has so far been offered for the existence and persistence over time of crime 'hot spots', that is, physical locations which account for a disproportionate amount of reported crime (Sherman, Gartin and Buerger 1989; Sherman 1995). Nor has any offender-based theory been offered for the phenomenon of repeat victimisation (Farrell 1995), that is, the observation that, once victimised, certain locations appear to be at elevated risk of revictimisation for a period.

As with the *early onset anomaly*, the observations pertaining to repeat victimisation and crime 'hot spots' do not so much refute ESIOM theories as erode their claim to offer a satisfactory general framework for explaining criminal behaviour. By contrast, the pattern of anomalies among empirical findings on the relationship between economic stress and crime poses a direct threat to the ESIOM paradigm. The only studies which could be said to provide a consistent pattern of support for the paradigm are those employing social class as a measure of economic stress and measuring crime using official data. In most such studies the relationship between stress and crime is tested by seeing whether individuals occupying low status occupations are more likely to show evidence of involvement in crime. In some studies, however, it is tested by seeing whether low status areas (as measured by the percentage of residents in low status occupations) have higher crime rates. Braithwaite (1979) has conducted what arguably remains the most authoritative review of

both types of study. He concluded that the overwhelming weight of evidence supports the view that:

- Lower-class adults commit those types of crime which are handled by police at a higher rate than middle-class adults.
- Adults living in lower-class areas commit those types of crime which are handled by police at a higher rate than adults who live in middle-class areas.
- Lower-class juveniles commit crime at a higher rate than middle-class juveniles.
- Juveniles living in lower-class areas commit crime at a higher rate than juveniles living in middle-class areas.

In some ways, however, social status is arguably the least satisfactory way of measuring the effect of economic stress on crime. Because there is no universally accepted scale of social status it is impossible to compare the magnitude of the social status effects on crime obtained in different studies. The ordinal nature of the social status scale makes it difficult, if not impossible, to examine changes in economic stress and crime over time. Finally, the observation of a relationship between social status and crime gives little clue as to which component of social status (e.g. occupational prestige, income, unemployment) is most important in shaping the likelihood of involvement in crime. These problems have led to a greater focus on more easily measured variables, such as unemployment and income. Studies which measure economic stress through unemployment or income, however, present nowhere near as clear or consistent a picture of the relationship between economic stress and crime as studies examining the relationship between social status and officially recorded rates of offending. Early reviews (Gillespie 1978; Long and Witte 1981) of research on the effects of unemployment have been described as creating a consensus of doubt on the relationship. More recent reviews (Box 1987; Chiricos 1987; Belknap 1989; Allen 1996) claim to have reduced this doubt but a number of puzzling anomalies remain.

Chiricos has conducted the most comprehensive review to date on the relationship between unemployment and crime. He examined the outcome of 288 separate tests for a relationship between unemployment and crime reported in a total of sixty-three published studies. Overall he found that the unemployment–crime relationship was three times more likely to be positive than negative and fifteen times more likely to be significantly positive than significantly negative. Moreover, as might be expected, tests involving property crime were more likely to prove positive and significant than tests involving violent crime. These observations and those we have just reviewed

concerning social status provide the main empirical pillars of support for the ESIOM paradigm but even here the paradigm is not without its difficulties. The vast majority of ESIOM theories are materialist in conception, that is, they assume that crime is committed primarily as a means of overcoming some material disadvantage. The fact that a substantial proportion of tests examining the link between unemployment and violent crime proved significant and positive (a finding we call the *non-utilitarian crime anomaly*) remains hard to reconcile with any of these theories. Only social opportunity theory (and its derivatives) avoids this problem because it treats the motivation to offend as an act of rebellion against conventional values rather than as a means of generating income or goods.

The *non-utilitarian crime anomaly* is not the most pressing problem facing the ESIOM paradigm. The most pressing problem lies in the fact that, although the majority of significant test results reviewed by Chiricos supported a positive link between unemployment and crime, overall, the majority of tests for an association failed to produce a significant result either way. In addition, a number of studies have found evidence of a significant inverse association between unemployment and crime (Chiricos 1987: 193). These findings (which we call the *inconsistency problem*) are hard to dismiss as artefacts of measurement error because the pattern of non-significant and negative results does not appear to be either random or attributable to some particular research design problem. The effect of unemployment on aggregate crime rates, for example, appears to depend upon the time period in which the relationship is examined. Cross-sectional tests for an association between unemployment and crime conducted on pre-1970 data were far less likely to find a significant positive association between unemployment and crime than cross-sectional studies conducted on data during the 1970s (Chiricos 1987: 197). These time period anomalies have been found in later studies. Vaughn (1991), for example, found that unemployment was positively related to Japanese crime rates in the period 1926–45 but negatively related thereafter.

The pattern of negative and positive unemployment–crime results also appears to depend upon the methodology employed to examine the unemployment–crime relationship. For example, time series studies appear to have been far more likely than those relying on cross-sectional designs to find a significant negative relationship, particularly where property crime was concerned. No cross-sectional test involving property crime found a significant negative effect of unemployment. By contrast, 14 per cent of the time series tests for property crime found a negative effect of unemployment (Chiricos 1987: 194). The apparent conflict between cross-sectional and time series study results is of particular concern because time series studies arguably

provide a stronger test of claims that one variable exerts a causal influence on another than cross-sectional studies (Greenberg 1979: 80; although see also Freeman 1995: 180). It is, after all, much easier to sort out the causal order of events when changes in crime and unemployment are followed over time than when they are only examined at one point in time.

Similar anomalies have also been noted in the literature on income and crime. ESIOM accounts of the relationship between stress and crime would lead one to expect a negative relationship between income and crime. Yet Box (1987) and Belknap (1989) in their reviews cite a number of studies which either fail to find any negative income–crime relationship or which find evidence of a positive relationship. Research conducted since the publication of those reviews has not altered this general picture. Norstrum (1988), for example, found evidence that crime rates in Sweden were positively related to household income in the period 1841–1913 and negatively related to income in the period 1950–84. Field found that property crime rates were positively related and violent crime rates negatively related to consumption growth (which is normally related to income) in post-Second World War England and Wales (Field 1990). Devery (1991) observed a correlation of +0.9 between the percentage of poor families (i.e. income of less than \$15,000) in each Local Government Area of Sydney (New South Wales) and the court appearance rate of its residents, over the period 1987–88. Between 1988 and 1991, however, while rates of unemployment in Australia rose by more than 60 per cent (Reserve Bank of Australia 1991) and mortgage interest rates rose by about 13 per cent, rates of break, enter and steal and car theft fell sharply (Weatherburn 1992).

There are three other observations concerning the relationship between economic factors and crime which are common enough to be regarded as anomalous from the vantage point of the ESIOM paradigm. The first (which we call the *income inequality anomaly*) is that income inequality appears more frequently associated with crime than absolute measures of income or unemployment, at least in metropolitan localities. Belknap (1989) cites a number of studies reaching this conclusion. In his review of the literature Box (1987) found that, of the sixteen studies which had examined the association between income inequality and crime, eleven reported significant associations between higher levels of income inequality and crime while five did not. All five studies which failed to find a relationship were concerned with homicide. The studies which supported a positive relationship covered a variety of offences including burglary, larceny, robbery, aggravated assault and rape. Box concluded that the cross-sectional evidence favouring an association between income inequality and crime was much stronger than that concerning the

relationship between unemployment and crime. Braithwaite (1978) arrived at much the same conclusion in his review of the evidence. With one exception (Allen 1996) research conducted since these reviews has continued to confirm the importance of income inequality as a predictor of aggregate crime rates although some offences appear to show this result more clearly than others (Patterson 1991; Allen 1996; Fowles and Merva 1996). The importance of income inequality as a predictor of aggregate crime rates is not immediately explicable in terms of most ESIOM theories. Social opportunity theory (Braithwaite 1979) and economic theory (Deutsch, Spiegel and Templeman 1992) can be adapted to the task, at least for property crime, but not without the aid of assumptions drawn from criminal opportunity theory.

The second observation (which we call the *neighbourhood effect anomaly*) is that, at least in Western countries (Matsumoto 1970), the effect of individual-level economic stress on juvenile involvement in crime would appear to be shaped by the level of economic stress in the surrounding neighbourhood. In a reanalysis of data drawn from a study by Reiss and Rhodes (1961), Braithwaite (1979) observed that rates of participation in crime (as measured from court records) among juveniles of low socioeconomic status were much higher when they lived in low socioeconomic status neighbourhoods than when they lived in middle or high socioeconomic status neighbourhoods. Braithwaite repeated the analysis using Australian juvenile court data and obtained the same findings (Braithwaite 1979: 150).

Attempts to confirm the relationship using self-reported crime produced rather more mixed results. In the study referred to above, Braithwaite found that the expected relationship materialised except that juveniles coming from the lowest status families and living in the lowest status areas reported fewer offences than juveniles from middle-class families living in low status areas (Braithwaite 1979: 143). Johnstone (1978), using self-reported arrest frequency, found that the different combinations of neighbourhood and individual economic status exerted different effects for different crime types. In the case of drug offences, for example, lower-class individuals resident in higher-class areas engaged in the most delinquency. Jarjoura and Triplett (1997) examined both self-reported and officially recorded offending among groups of juveniles ranked in terms of neighbourhood and family economic status. However, unlike Braithwaite they found that self-reported offending rates were highest among low-status families resident in middle or upper status neighbourhoods.

The failure of these studies to confirm the original Reiss and Rhodes finding has prompted some to suggest that the alleged 'neighbourhood' economic status effect may be nothing more than a failure to employ adequate controls for all the individual factors which influence involvement in crime

(see Gottfredson, McNeil and Gottfredson 1991: 202). This is a difficult claim to assess since neighbourhood effects of any kind must ultimately exert their effects on individual behaviour through some individual characteristic. One cannot therefore test the hypothesis that neighbourhood economic status affects participation in crime by controlling for *all* individual characteristics known to influence such participation. On the other hand, in the absence of a generally accepted theory about how neighbourhood economic status influences individual behaviour, it is difficult to know which individual-level factors ought to be regarded as extraneous influences and which ought to be regarded as factors mediating neighbourhood effects. We will return to this issue in more detail later (see Chapter 3). For now, however, it suffices to observe that the apparent existence of neighbourhood economic status effects on delinquency is a finding not readily explained in terms of most ESIOM accounts of offending.

The third observation (which we call the *individual-level evidence anomaly*) is the fact that direct individual-level evidence that unemployment and income directly affects the probability of involvement in crime is fairly scant. Ethnographic research provides little support for the view that individuals make straightforward choices between employment and crime (McGahey 1986). Indeed, in his discussion of economic conditions, neighbourhood organisation and urban crime, McGahey (1986) concluded on the basis of both survey and ethnographic data that a more important criminogenic effect of persistent unemployment among adults was disruption to the development of stable households. Blumstein et al. (1986) report a Danish experiment which found lower rates of reconviction among a sample of prison releasees given financial and job assistance. The interpretation of this finding is clouded, however, by the fact that releasees were also given a variety of other forms of social support. Rossi, Berk and Lenihan (1980) found that income assistance to prison releasees in the United States reduced their rate of recidivism. However, the study has been sharply criticised by Zeisel (1982) and a subsequent attempt at replicating the finding appears to have failed (Berk, Lenihan and Rossi 1980). The Rand Corporation prison inmate survey found that offenders employed less than half the time in a specified observation period prior to incarceration reported committing property crime at higher rates than offenders employed 50 per cent of the time or more (Blumstein et al. 1986: 75). But this observation might simply mean that offenders with access to lucrative illegitimate sources of income are inclined to spend less time in legitimate forms of income-earning activity.

The most compelling evidence in favour of the hypothesis that economic stress motivates individuals to offend comes from a study by Farrington et al.

(1986). Farrington et al. drew data on individual rates of offending by individuals in the Cambridge Study in Delinquent Development (a prospective longitudinal study of 411 London males followed from the age of eight onwards). The study permitted estimates of individual offending frequency to be obtained during periods in which an individual was employed and compared with estimates obtained from the same individual during periods of unemployment. The differences thus obtained could also be compared for groups of individuals differing in age, occupation status and period of time spent unemployed. Farrington et al. found that estimated rates of offending were significantly higher during periods of unemployment than during periods of employment, even after controls had been introduced for age and the total period of time an individual spent unemployed. The effect of unemployment on crime, however, was confined to offences involving material gain committed by those employed in low-status occupations who had a predisposition to involvement in crime. The study therefore provided no individual-level evidence that unemployment motivates individuals to commit non-acquisitive crime although, as we noted earlier, numerous aggregate-level studies have found a relationship between unemployment and non-acquisitive violent crime.

The observation that suitably disposed individuals were inclined to commit offences involving material gain more frequently during periods of unemployment than during periods of employment might be thought to provide at least some supportive individual-level evidence for the ESIOM paradigm. The support, however, comes at a price. Few ESIOM theories are in a position to provide any explanation for the fact that the unemployment–crime relationship in question appears to be limited to those who have a predisposition to offend. In the Farrington et al. study this predisposition was assessed by reference to low family income, poor housing, large family size, cruel or neglectful parenting, erratic parental discipline and parental conflict because these factors had been shown in past research to be good predictors of future offending. Most traditional ESIOM theories have nothing to say about these factors. Thus, if the study by Farrington et al. is to be taken as a partial vindication of the ESIOM paradigm it is at the cost of having to look elsewhere for a general account of the disposition to involvement in crime. Such an outcome would be of little concern to economists, whose interest in explaining the origins of criminal behaviour is subordinated to the task of why economic factors exert *any* influence on crime (see Buchanan and Hartley 1992: xi). It should, however, be of great concern to sociologists within the ESIOM tradition as they assign economic stress a central role in shaping the individual disposition to involvement in crime.

Grappling with the anomalies

There are three broad ways of responding to the empirical anomalies surrounding the effect of unemployment and income on crime. One possible response is essentially to ignore the empirical anomalies and to rely on the fact that the balance of evidence does show a positive association between economic stress and crime. A second possible response is to abandon the idea that aggregate crime rates are driven solely by the supply of motivated offenders and to try to bolster the ESIOM paradigm with some other assumption or set of assumptions. A third response is to abandon the ESIOM paradigm and search for some other pathway or set of pathways linking economic stress to individual offending behaviour in the hope that this will provide a better foundation for explaining the aggregate-level association between economic stress and crime.

The first of these three types of response was the course taken by Chiricos (1987) and has tended to characterise those whose work remains strongly influenced by social opportunity theory or strain theory (e.g. Agnew 1985; Elliott, Huizinga and Ageton 1985; Braithwaite 1988). Braithwaite (1988), to be fair, acknowledges that the putative association between social status and crime has been the subject of some debate but treats that debate as essentially settled by the discovery that self-report studies only tap minor forms of criminality (Braithwaite 1988: 49). While we have no difficulty with Chiricos's summary of the research evidence regarding unemployment and crime, that summary cannot be regarded as a vindication of theories within the ESIOM paradigm. The anomalies we have discussed cannot reasonably be dismissed as artefacts of measurement error or research design. Indeed, few would be prepared to argue that they are. In our view they suggest that past attempts to characterise the way in which economic variables influence crime are either incomplete or misconceived. An adequate theory of the relationship between economic stress and crime might not be expected to account for every recalcitrant empirical observation on the subject of unemployment or income and crime. We would argue, however, that an adequate theory should at least shed some light on the inconsistency problem. Ideally it should also help resolve the other anomalies we have mentioned (i.e. the *early onset, non-utilitarian crime, income inequality, neighbourhood effect* and *individual-level evidence* anomalies).

The theory integration response

Two notable attempts have been made to bolster the ESIOM paradigm in order to deal with the anomalies we have discussed. Both draw on the notion

of criminal opportunity. Braithwaite (1979) developed the social opportunity theory notion that crime requires both a blockage of legitimate activities and access to illegitimate activities.⁴ Cantor and Land (1985) developed a model of crime rate variation which combines some features of economic theory, criminal opportunity theory and conventional motivation theory.

We turn first to Braithwaite's (1979) adaptation of social opportunity theory. It is important to begin by pointing out that in adapting the theory Braithwaite was not motivated by a desire to explain or resolve the inconsistencies then emerging among studies examining the association between economic stress and crime. Furthermore, although the focus of Braithwaite's (1979) analysis was on the effect of inequality on crime, he did not set out to explain why the level of income inequality in a community was a better marker of its crime problems than the average level of income. Instead, he took this fact for granted and sought to use it to explain other features of crime, such as delinquency among middle-class adolescents (Braithwaite 1979: 203). He was, however, concerned to replicate and explain the *neighbourhood effect anomaly*. Braithwaite's argument was that this finding could be explained in terms of social opportunity theory if one assumed that disadvantaged individuals living in disadvantaged areas had access to a greater range of illegitimate opportunities. The illegitimate activities appealed to by Braithwaite, however, were not those contemplated by criminal opportunity theorists (e.g. unlocked cars, unguarded households). Instead they were 'criminal role models, criminal learning structures, the social support of delinquent gangs, weak community control etc.' (Braithwaite 1979: 108). In other words, the source of criminal opportunities appealed to by Braithwaite was none other than that championed by differential association theory, that is, delinquent peer influence.

The notion that the effects of economic stress might be mediated by delinquent peer influence does indeed provide an explanation for the observation that individual and area economic status interact in shaping rates of delinquency. As we shall see later, there is abundant evidence that association with delinquent peers increases the likelihood of involvement in crime. Delinquent peer influence would therefore be expected to magnify any effects on crime generated by economic stress. One significant problem with Braithwaite's adaptation of social opportunity theory, however, is that it shares the principal weakness of that theory. He offers no basis on which one can determine a priori which groups of disadvantaged individuals will offend and which will not. One is left to assume that an economically deprived individual who does not engage in crime has either somehow found a means of access to legitimate opportunities or, alternatively, failed to find a means of access to

illegitimate opportunities. This is a useful conjecture if operational criteria are laid down which allow some a priori judgement about which of the two possibilities applies to which groups of cases and in what circumstances, but no such criteria are provided. Furthermore, although Braithwaite goes to great pains to deal with evidence inimical to the claim that social class and crime are related, his treatment of this issue does nothing to resolve the inconsistencies apparent among studies examining the effect of unemployment or income on crime. Nor does it do anything to resolve the other anomalies we have discussed.

Unlike Braithwaite (1979), Cantor and Land (1985) were expressly preoccupied with solving what we have called the *inconsistency problem*. Their approach to this problem was both imaginative and resourceful. They combined the traditional notion that unemployment motivates individuals to offend with the insight that economic factors affect the supply of criminal opportunities. Their central claim was that the criminogenic effects of unemployment are offset by the reduction in the supply of opportunities for involvement in crime which accompanies the economic contractions that produce unemployment. Although it was developed in the context of unemployment, the theory can easily be extended to findings on the income–crime relationship. Increases in personal income would be expected to decrease the motivation to offend but increase the supply of opportunities for involvement in crime. The theory can thus be used to explain evidence of a positive income–crime relationship as well as evidence of a negative unemployment–crime relationship.

Although Cantor and Land only apply their argument to time series data it could in fact be seen as offering some insight into why cross-sectional studies examining the relationship between crime and unemployment or income sometimes fail to obtain evidence of a significant positive association between economic stress and crime. It has been known for some time, for example, that there is some divergence between the spatial distribution of offenders and the spatial distribution of offences (Herbert 1980: 31). This observation suggests that motivated offenders do not necessarily commit all their offences in their own neighbourhood and, therefore, that neighbourhoods with larger numbers of motivated offenders will not always have higher crime rates. It follows that cross-sectional studies seeking to tap the effect of economic stress on offender motivation may in many cases have failed to observe such an effect simply because they wrongly assumed that areas with high levels of economic stress will inevitably have higher crime rates.

Unfortunately, the explanatory strength of the theory is in some ways one of its major weaknesses. A negative unemployment–crime relationship can be explained by saying that the effect of unemployment dominates its effect on

criminal opportunity. A positive unemployment–crime relationship can be explained by simply putting the argument into reverse. The failure to find any effect of unemployment on crime, on the other hand, can be read as indicating that the positive and negative effects of unemployment have cancelled each other out. As a general explanation for the relationship between stress and crime, then, the theory is impossible to test, at least with aggregate-level crime data.

Cantor and Land dealt with this problem in the context of unemployment by making a special assumption. They suggested that the opportunity effect is immediate but the motivational effect is delayed because social security and family support temporarily ‘cushions’ the effect of unemployment. Note that this assumption is only tenable in countries such as the United States where unemployment benefits are only provided as a temporary measure. Nevertheless, as long as the assumption is accepted, the theory implies that the initial effect of a rise in unemployment should be to reduce crime while the lagged effect should be to increase it. Cantor and Land endeavoured to test the implication by analysing the impact of unemployment on time series trends in seven offences in post-Second World War United States. The results provided some support for the theory. The expected combination of a negative contemporaneous and lagged positive effect showed up for some property offences but only one of the seven offences they examined exhibited both significant negative and significant positive effects. The study was later criticised on various technical grounds by Hale and Sabbagh (1991) and Hale (1991). Land, Cantor and Russell (1995) repeated the analysis using additional data and a different form of analysis, and they obtained similar results. There remain, nonetheless, a number of troubling questions, both about the assumptions underlying Cantor and Land’s theory and about its capacity to make sense of the general relationship between economic stress and crime.

First it must be observed that, although the general assumption that crime rates are influenced by the supply of opportunities is an entirely reasonable one, no direct evidence was offered by Cantor and Land to support the much stronger claim that economic contractions always reduce the supply of opportunities for involvement in all forms of crime. This is an issue of some significance, first because at least one attempt to test this part of Cantor and Land’s thesis study has failed to find strong confirming evidence (Allan and Steffensmeier 1989) and, second because a priori arguments can be mounted both for and against the claim. For example, economic contractions might increase the opportunities for property offences involving the resale of stolen goods. But by the same token they should also increase the incentives for cash-generating offences such as robbery. They might reduce the opportunities for

conflict between strangers if people respond to a drop in income by going out less frequently to hotels and entertainment venues. But by the same token they should increase the opportunities for domestic assault. They might reduce the opportunities for employee theft if there are fewer people in work. But they should then also increase the opportunities and incentives for social security and insurance fraud. None of this would matter if it were possible to determine from Cantor and Land's theory when the net effects of criminal opportunity and criminal motivation should be positive, negative or zero. It is the fact that this determination cannot be made a priori which makes the absence of independent evidence for the assumed effects of economic growth on criminal opportunity a significant problem.

The theory faces more serious difficulties in relation to its claims about the effect of unemployment on criminal motivation. It brings to light no evidence which would resolve the *individual-level evidence anomaly*. In any event, even if unemployment did motivate individuals to commit offences involving material gain, as we have already noted, the theory offers no explanation for the *non-utilitarian crime anomaly*. Yet both Cantor and Land (1985) and Land, Cantor and Russell (1995) treat unemployment as a factor which increases the motivation to commit offences such as rape, homicide and assault. The theory also offers no explanation for the other anomalies we have mentioned, although to criticise it for failing to do so would be somewhat unfair. Neither Cantor and Land (1985) nor Land, Cantor and Russell (1995) set out to offer a general theory of crime. This said, it must be acknowledged that, even on its chosen ground, the theory is not without its problems. In our view these problems stem not from the basic thesis that aggregate crime rates are determined both by the supply of motivated offenders and the supply of criminal opportunities. They stem from the assumption that the effect of unemployment on aggregate crime rates is mediated by the effect of unemployment on the motivation to offend.

Abandoning the ESIOM paradigm

In our view the anomalies we have discussed are serious enough to warrant abandonment of the ESIOM paradigm, at least as a framework for understanding the aggregate-level spatial relationship between economic stress and crime. We are not the first to suggest that the ESIOM paradigm has outlived its explanatory utility. In one of the more insightful analyses of the crime–unemployment relationship yet published, Hagan (1993) has suggested that, rather than unemployment causing crime, there are compelling reasons for believing that crime, or involvement in crime, can in some circumstances

cause unemployment. Hagan makes the point (and provides evidence to support it) that juveniles embedded in a criminal subculture are likely to be cut off from access to information about employment yet have detailed information about illegitimate alternatives to employment as a means of raising income.

There is much in Hagan's argument we find appealing, and we return to it again in Chapter 8. It suffices to observe at this point that there is no need to choose between the thesis that crime causes unemployment and the thesis that unemployment causes crime. Both may be true. In the next two chapters of this book we review theory and evidence suggesting that factors such as unemployment do produce crime but not in the way conventionally assumed. The central thrust of our argument will be that economic stress sets in train two interrelated processes which, over time, have the effect of rendering communities 'offender-prone'. The first of these processes involves a disruption of the parenting process. The second involves an interaction between parenting and association with delinquent peers. In the next chapter we discuss the first of these processes.

Summary and conclusion

The ESIOM paradigm attempts to make sense of the fact that crime rates appear higher in areas of economic stress by assuming that such stress, in one way or another, motivates individuals affected by it to offend. Such an assumption is no less integral to traditional sociological theories, such as strain theory, as it is to economic theories of crime. The evidence and arguments we have reviewed suggest that the ESIOM paradigm provides an inadequate framework for handling what we know about the relationship between stress and crime. The paradigm faces at least five major anomalies. These are:

1. The fact that there is limited and somewhat ambiguous evidence available to support the claim that economic adversity increases individual offending rates (the *individual-level evidence anomaly*).
2. The fact that aggregate rates of non-utilitarian violent crime are strongly affected by economic stress (the *non-utilitarian crime anomaly*).
3. The fact that many of the processes which shape involvement in crime substantially precede entry into the labour market and, in some cases, precede entry into school (the *early onset anomaly*).
4. The fact that studies examining the relationship between economic stress and crime have frequently produced non-significant and occasionally negative results (the *inconsistency problem*).

5. The fact that the effect of economic stress on rates of juvenile offending appears to be influenced by the level of economic stress in the surrounding neighbourhood (the *neighbourhood effect anomaly*).
6. The fact that income inequality appears to be a better predictor of area crime rates than absolute levels of income (the *income inequality anomaly*).

In addition to these problems, only social opportunity theory (within the ESIOM paradigm) has any explanation to offer for the *non-utilitarian crime anomaly*, that is the fact that economic stress appears to exert a strong effect on aggregate rates of violent crime even if that effect appears somewhat weaker than the effect of economic stress on property crime.

There seems little reason to believe that the problems surrounding the ESIOM paradigm can be resolved simply by integrating ESIOM theories with some form of criminal opportunity theory. The weaknesses in any such proposed merger stem not so much from the criminal opportunity side of the ledger but from the notion that economic stress affects crime solely by motivating those affected by it to offend. Braithwaite's (1979) analysis of social opportunity highlighted the important fact that the effects of economic stress on crime are likely to be mediated by peer influence. This provides at least some explanation for the neighbourhood anomaly. However, he did not adequately address himself to the other anomalies we have mentioned.

Cantor and Land's (1985) integration of offender motivation and criminal opportunity theories offers one solution to the *inconsistency problem*. But it does not (and was not intended to) shed much light on any of the other anomalies we have mentioned. Furthermore, although the general thesis that aggregate crime rates are driven both by the supply of motivated offenders and by the supply of criminal opportunities is well supported by empirical evidence, the specific assumption that unemployment reduces the supply of criminal opportunities lacks independent supporting evidence, as does the assumption that unemployment motivates individuals to commit both utilitarian and non-utilitarian forms of crime.