

Politics, Social and Economic Change and Crime: Exploring the Impact of Contextual Effects on Offending Trajectories

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Abstract

Do government policies increase the likelihood that some citizens will become persistent criminals? What is the role of other organisations and institutions in mediating offending over the life-course? Using concepts derived from criminology (such as the idea of a 'criminal career', an individual's repeated, longitudinal sequence of offending), and concepts such as the life-course from sociology, this paper assesses the outcome of macro-level economic policies on individuals' engagement in crime from age 10 to 30. Whilst many studies have explored the impact of 1980s 'New Right' governments on welfare spending, housing and the economy, few studies in political science, sociology or criminology have directly linked macro-economic policies to individual offending careers. Employing individual-level longitudinal data, we track a sample of Britons born in 1970 from childhood to adulthood, examining their offending trajectories between ages 10 and 30, and hence through a period of dramatic economic and social change in the UK throughout the early-1980s, during which the economy was dramatically restructured. As such, we are primarily concerned with the effects of economic policies on an individual's repeated offending. Using data from the British 1970 Birth Cohort Study, we develop a model that incorporates individuals, families and schools, and which takes account of national-level economic policies (which were driven by New Right political ideas) and which, we argue, shaped individual offending careers. Our paper suggests that processes of economic restructuring were a key causal factor in offending during this period. This broader framework also emphasises the importance of considering political and economic forces in criminal careers and related research. The paper therefore encourages criminologists to draw upon ideas from political science when developing explanations of offending careers, and shows how the choices over the political management of the economy encourage individual-level responses.

Keywords: criminal careers research; Birth Cohort Study 1970; life-course perspective; Thatcherism; economic restructuring.

Introduction

Research into criminal careers is a mainstay of criminological, sociological and psychological endeavours. Early research into why people started offendingⁱ has developed into research on why offenders continue to offendⁱⁱ and, more recently, why they desist from offending.ⁱⁱⁱ Criminologists have identified an increase in levels of offending during the teenage years, 'peaking' in the late-teens and early- to mid-20s, followed by a slow 'decay' in engagement in crime. Generally speaking, those who start to offend earliest and most frequently, tend to be engaged in offending for longer periods, in some cases decades. Research into criminal careers has tended to be dominated by quantitative researchers, although the literature is replete with many examples of qualitative research, and of late qualitative research into offending trajectories has seen a resurgence. Numerous theories, drawing upon thinking derived from sociology,^{iv} psychology,^v or psychiatry^{vi} have been developed since the early-20th Century. Research into criminal careers has made considerable contributions to public policies in both North America and Europe.^{vii}

Outlining the Life-Course Perspective

As many have come to recognize,^{viii} the life-course perspective has had a dramatic impact upon thinking within criminology, especially so since the early-1990s. Indeed, a very large part of contemporary criminology's theoretical apparatus is derived from the work of life-course scholars.^{ix} One of the key aims of the life-course perspective is to draw links between macro-level social history and social structures, and the lives of individuals and communities. The life-course perspective aims to explore "pathways through the age differentiated life-span", and is "manifested in expectations and options that impinge on decision processes and the course of events that give shape to life stages, transitions and turning points"^x. Two concepts central to this perspective are the notions of 'trajectory' and 'transitions'. The first refers to a line of development over the life-course (e.g. an employment career), and the second refers to events (e.g. first job, promotion etc.) which shape a trajectory. Sampson and Laub^{xi} describe the perspective as focusing upon "...the duration, timing and ordering of major social events and their consequences for later social development". As Elder et al note, rapid social change has the ability to re-arrange the timing and sequence of events in the transition to adulthood.^{xii}

Elder and Giele^{xiii} also note the importance of locating people (either particular individuals, subgroups or cohorts of people) in specific communities and at specific historical moments. Such thinking forces one to recognize that individuals do not exist in isolation; they are embedded in wider social, economic and political contexts and relationships. Similarly, individuals are key constitutive parts of what is termed the 'family-cycle', whereby people move from being children, to leaving the parental home, forming partnerships, rearing their own children and survival into old age. As these are not strictly age-defined, the typicality of any form of such cycle has waxed and waned (as age of marriage, age at first childbirth and rates of step-families have fluctuated). As individuals exert agency, the combination of people and wider social structures brings forth the possibility of what Elder and Giele^{xiv} refer to as a 'loose-coupling' between age-graded life-courses and individual choice. Norms exist, but individuals are able to depart from them or to adapt them to suit their own circumstances. This highlights the extent to which variations in the timing and sequence of

life-course events may produce substantive differences in outcomes (or be the result of other differences).

The focus on wider social and economic structures in the work of Elder and others^{xv} highlights the ways in which individuals' lives are linked to one another. As such, events and long-term trajectories in the lives of *parents* in a family may alter the life-courses of their *offspring*. As the individuals which make up families age, so they form an aging social network, referred to as a 'social convey'^{xvi}; a group of inter-connected people who move through time together. As Moen and Hernandez^{xvii} note, an individual's resources, deficits in these, strains upon them, increases in them and so on, become not just drivers of transitions or turning points in the lives of the individuals *themselves*, but also in the lives those people who are in some way *related to them* (either socially or biologically). For example, the loss of work for a parent on whom a family had relied, affects not just the individual concerned, but their dependents. As Elder remarks, "each generation is bound to fateful decisions and events in the other's life-course".^{xviii} Similarly, the individual's social network may be affected by the individual's loss of work, or divorce. As such, the concept of a 'social convey' can be extended away from family members; school mates, co-workers, acquaintances, loosely-engaged strangers and so on are potential members of such conveys. Similarly, a lot of attention has been devoted to the idea of timings and to different types of 'time'. Alwin^{xix} distinguishes between historical time (essentially the historical era in which one lives) and biographical time (the life-course of the individual concerned) and shows how they may interact. Meanwhile, Elder^{xx} introduces the concept of social timing (the duration, incidence and sequence of age-related expectations and beliefs).

Critiquing Life-Course Criminology

One of the debates which haunts life-course studies is the need for answers to pressing social challenges *now*. This is not always possible. Implicit in this critique is the idea that the social and cultural processes, economic forces and political ideas which shape the experiences of one generation may *not* be the same as those which will affect future generations. In short, societies change, and as they change so different drivers to such changes may come to have different impacts over time. Some cultural forces may die out and cease to have any purchase on individuals' life-courses, others may grow in importance. Such thinking, of course, recognizes the problem of age, period and cohort effects.^{xxi} The institutions which shape lives may change or cease to exist; but yet few criminologists have recognized that the changes in such institutions have been dramatic in some societies. Benson, argues that those "working in the life-course tradition have not yet devoted as much effort to understanding the contextual effects on trajectories in crime as they have to studying the parameters of careers at the individual-level".^{xxii} Since Benson's critique, others^{xxiii} have started to explore the role of neighbourhood factors, however even this misses the macro-level processes Benson's critique identifies. Similarly, educational sociologist Gleeson^{xxiv} argued that behaviorist explanations which focus on individual psychologies and family characteristics pathologize, aiding the creation of stereotypes whilst simultaneously overlooking the macro-level political, social and economic processes at play. This critique suggests that additional variables may be needed in order to more fully comprehend the causes of offending.

A further limitation of criminal careers research is that, for many very good reasons, studies are often based in one location. For example, the Cambridge Study in Delinquency Development, The Pittsburgh Youth Study, the Rochester Youth Study, The Edinburgh Study of Youth Transitions, and the Peterborough Adolescent Development Study were based on data from respondents recruited from *one place* (be that a whole city or a part or parts of a city). Whilst in some cases such cities are large and heterogeneous, such designs do not allow for changes which affect different parts of the same country in different ways. Even if the locations in which the data were collected are not mono-cultural at the local-level, they are spatially-invariant at the macro-level; hence the impacts of social and economic changes which do not fall evenly within a country are not available for analysis. One of our aims then, is to explore the impact of changing social and economic processes on the offending careers of one generation of UK citizens in such a way as to incorporate macro-level variables which may be causal antecedents of offending, and which, in so doing, avoids some of the pitfalls of behaviorist explanations.

In addition to this, and despite the undoubted quality of much of the research into criminal careers, it remains the case that much of the quantitative research has tended to tackle the causal processes of offending in a largely individualized manner. This ranges from a near-total emphasis on individual-level processes,^{xxv} to individual-institutional interactions^{xxvi} although more ecological models do exist.^{xxvii} This observation led Sampson^{xxviii} to note that society and the idea of social change was one of the key elements which was missing from current research on criminal careers. Similar observations about life-course research have been made by those working outside of criminology. For example, Mayer noted that the “unravelling of the impacts of institutional contexts and social processes ... on life-courses has hardly begun”, adding that

“we know next to nothing about how the internal dynamics of life-courses and the interaction of developmental and social components of the life-course vary and how they are shaped by the macro contexts of institutions and social policies.”^{xxix}

Thus, whilst life-course criminology has meticulously focused on proximal institutions (families, schools, employers and communities), those institutional arrangements and the discourses and policies which surround and flow from more distal institutions^{xxx} (political parties, governance structures) and the ideas they promulgate (discourses about ‘the family’, ideological stances on education, economic policies and so on) have not received very much attention at all. In short, the current approaches adopted by life-course criminologists tend to encourage the construction of ‘the offender’ in individualistic terms. It is an offender’s decision-making, marriages (or lack thereof), skills and employment chances which are often found to account for their onset, maintenance and desistance.^{xxxi} This body of scholarship, as technically sophisticated as it is, has failed to engage with literatures which suggest that political decision making (such as economic or welfare policies) shapes the lives and life-courses of citizens. This lacuna in criminological research means that the field reproduces constructions and discourses relating to offenders which are inherently pathologizing and which fail to consider the ways in which macro-level political and economic processes and policies may shape individual life-courses and their engagement in crime. The wider political, economic and social processes which are implicated in the onset of offender careers and which sustain involvement in crime are therefore routinely excluded from criminological theorising. Herein we seek to encourage the consideration of the more ‘distal’ influences on

criminal careers, such as national-level social and political changes, and the economic and social policies which shape (and are shaped by) these. We aim to explore the impact of economic change (and the political ideologies which preceded these transformations and the social consequences which followed them) on offending trajectories using data from the UK.^{xxxii}

Inserting Political, Social and Economic Change into Life-Course Criminology

Benson^{xxxiii} is one author who has attempted to theorize how social and economic change may alter environments in ways which might affect engagement in crime over the life-course. He notes that very few criminologists have explored the ways in which the State (and hence changes in those things which the State can influence, such as taxation or welfare policies) can shape criminal careers.^{xxxiv} Benson argues that as well as decisions over which behaviors are criminalized, States can shape offending careers via their policies relating to transportation systems, housing policies and economic decisions.^{xxxv} In exploring the concentration of poverty amongst the US's Black population, Benson draws on Wilson's work^{xxxvi} to show how decisions made by politicians, State officials and private individuals have helped to leave the US's Black population living with higher levels of family disruption and residential instability than is the norm in the US.^{xxxvii} These processes took several decades to emerge and were underscored by changes in the economy, which saw a long period of economic slowdown after 1974, during which many manufacturing jobs were lost.^{xxxviii} Such jobs were key to ensuring informal social control amongst lower class males, since they offered a chance for relatively highly-paid employment without the need for high levels of education. As jobs started to be shed, so inner city areas started to spiral into decay, and crime and the fear of crime began to rise.^{xxxix} Benson theorizes that such changes would have affected the lives of those young men (especially) and women who lived in such communities.

Another criminologist who has theorized the ways in which criminal careers may be shaped by wider social and economic factors is Hagan. Hagan^{xl} develops a theory of crime and capitalisation based on a detailed review of the changes in the US economy since the end of WWII. He notes, like Benson, how economic restructuring, rises in economic inequality, residential segregation and the concentration of poverty have left some US inner cities with few meaningful employment careers on which to build law-abiding life-styles. Some communities have, instead of legitimate incomes, started to rely on deviant activities (drug sales, prostitution and other illegal services) as a means for securing an income. Such activities become entrenched as, over time, few people have links to legitimate employers and crime becomes embedded in communities' daily routines. Such activities therefore also start to shape the lives of the men and women who live in these communities.

Nevertheless, there are no other studies which we can find which take seriously the idea that political decision-making (around the management of the economy, the allocation of resources, and the extent of, for example, levels of economic inequality which are tolerated), may in some way provoke or be associated with offending behaviors at the individual-level. Accordingly, our aim is to incorporate an understanding of the role of political processes into the statistical modelling of individual criminal careers, such that current criminological debates about criminal careers pay greater attention to the role of politics (especially with regards to the management of the economy) in the evolution of such careers. In this way,

our research adds to the literature on the penal-welfare nexus, in that we explore the ways in which changes in the social and economic policies pursued by the Thatcher-led governments led to increases in crime, which in turn led to 'toughened' criminal justice policies under Prime Minister Tony Blair.^{xli} We approach the social and economic changes brought about or augmented by the Thatcher and Major governments from 1979-1997 as being distal events, which radically altered the social and economic circumstances for many UK citizens (such as regionally-varying unemployment). These distal events, in turn shaped proximal events and processes which led to some individuals becoming involved in crime.

An Outline of the Remainder of this Contribution

The rest of our paper unfolds along the following lines. In the next section we review what is known about the relationship between the economy and crime rates, focusing on the UK experience. This also serves as an overview of the economic history of the UK in the 1970s. We then outline the data upon which we rely, and our analytic strategy. Following this we present two near-identical path diagrams (one which does not include a measure of economic change at the county-level, and one which does). Finding that economic restructuring does help to explain offending careers, we then control for the extent of economic restructuring at the county-level to assess the geographical impact of economic restructuring on offending careers. We then reflect on the findings we have produced and locate these within wider literatures on both offending careers and economic, social and political change.

The UK in the 1970s, the 1980s New Right and the Radical Reshaping of Society

There is an extensive and longstanding literature on the relationship between economic conditions and crime, focusing in particular on effects of the business cycle and unemployment rates.^{xlii} Most studies test the economy-crime link in the context of evidence from the US or the UK.^{xliii} Economic hardship interacts with effects of other social and criminal justice policies. For example, Hale and Sabbagh^{xliiv} find that the effect of increases in police manpower in Britain during the 1980s was nullified by the sizeable increases in unemployment experienced at that same time.

The literature suggests that lagging and coincident indicators of economic conditions, such as the unemployment rate, income inequality, GDP, and consumer sentiment, contribute to increased rates of property crime either through production of need and hence criminal motivation, or through the relative availability of 'steal-able' goods and commodities.^{xlv} It is, however, rare for analyzes of the economy-crime link to be embedded in theories about wider social, economic and political changes. That is to say that the existing studies are conceived as a test of the effect of economic variables on rates of crime, rather than reflecting upon either the historical backdrop to changes in the crime rate, or the theoretical foundations of the economy-crime link.

Let us now turn to a consideration of the UK's economic fortunes between the 1970s and the 1990s. Throughout much of the 1970s, the UK faced considerable economic difficulties. The

inflation rate, which started at around 7% in 1972, reached 24% in 1975,^{xlvi} and stood at over 13% in 1979. Unemployment rates fared little better (despite a drop in 1973-74 to 3%), and stabilized around 5% for the period from 1976 to 1979.^{xlvii} The breakdown of the relationship between unemployment and inflation led British governments to retreat from Keynesian fiscal policies and focus, to varying degrees, upon monetarist policies and the welfare retrenchment associated with these.^{xlviii} In addition, the UK borrowed \$3.9Bn from the IMF in 1976, resulting in cuts in education budgets.^{xliv} Declining real wages from 1975 to 1978 and widespread strikes culminated in the so-called 'Winter of Discontent' in 1978-79.^l

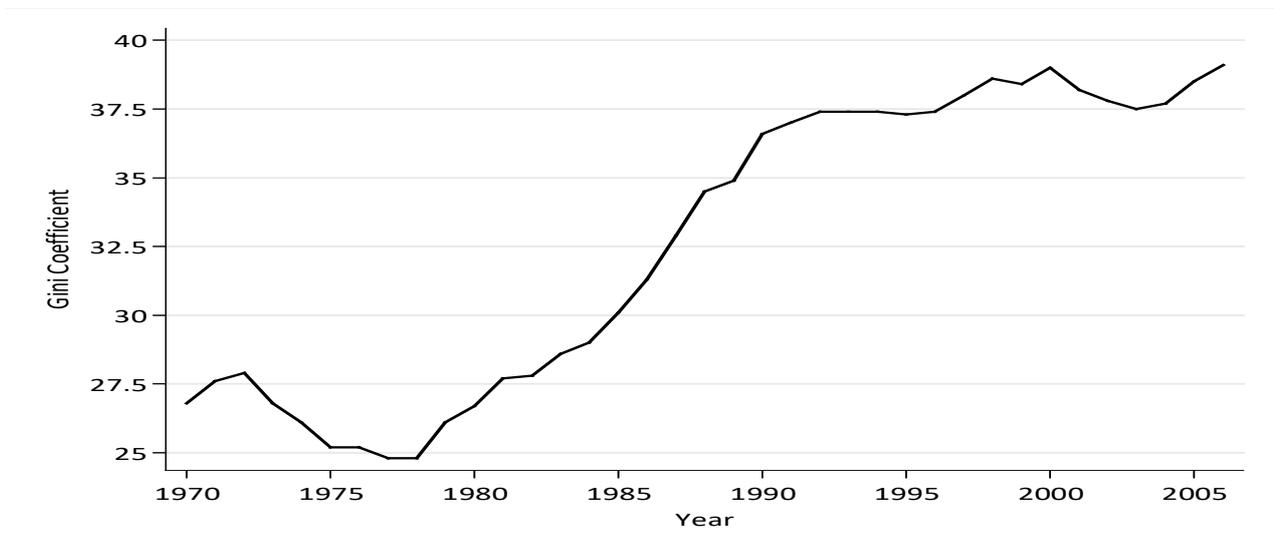
In May 1979, the UK elected its first 'radical right' government. Space precludes a full discussion of the impact of the Thatcher governments' policies on UK society,^{li} but it is important to highlight some of the early economic policies associated with this government. One of the first things which the government did was to increase interest rates. However, this had the unintended consequence of immediately weakening the UK's manufacturing sector,^{lii} producing a sharp fall in manufacturing output between 1979 and 1981^{liii}; indeed, the economy experienced negative growth for much of the early-1980s.^{liv} As the early Thatcher governments focused on reducing inflation over the goal of full employment, unemployment increased in the 1980s (Figure 1). So damaging were their policies that the Conservatives abandoned their monetarist ideals (their monetarist phase ran between 1981 and 1984). However, the UK economy's troubles persisted for many years with widespread economic disruption and unemployment. During the mid-1980s there was a year-long miners' strike, which the National Union of Mineworkers lost, resulting in the closure of many mines and the loss of tens of thousands of jobs. The abandonment of monetarism was followed by a focus on privatisation and financial deregulation (1983-1986), which contributed to the so-called 'Lawson Boom' of 1986-88. The economic and social turbulence, however, was not evenly distributed across the UK. The communities most heavily impacted upon were those most reliant upon heavy industry and manufacturing, and which were located in the Midlands and the North of England, South Wales, and central Scotland (all places once associated with mining and/or steel production and manufacturing). Accordingly, the unemployment rate rose dramatically, reaching almost 12% by the mid-1980s, from around 2% in the mid-1970s. From the mid-1980s, inflation also rose, and successive budgets reduced personal taxation. The economic restructuring, almost always associated with processes of deindustrialisation (which had started in the late-1960s, Tomlinson, 1990) was consistently associated with rising unemployment, which led to increasing social and political polarization.^{lv}

Figure 1. National Unemployment Rate (percent), 1970-2006



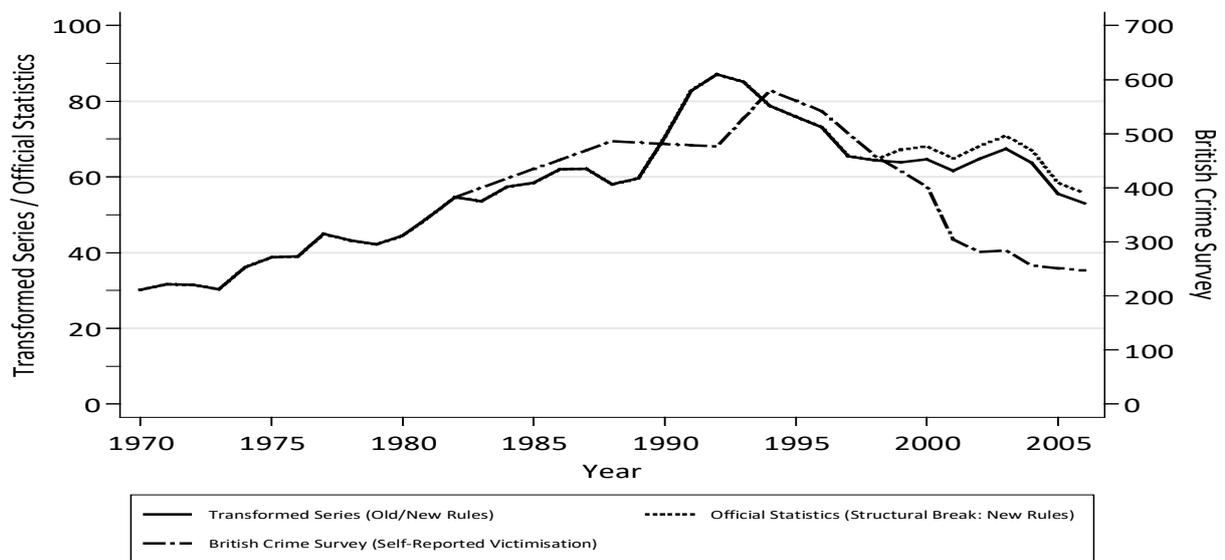
The liberalisation of the UK's financial markets and changes to the tax regime from the 1980s contributed to rising inequality (Figure 2) as the Thatcher government abolished higher rates of taxation and increased indirect taxation, which had a greater marginal effect on the less well-off.

Figure 2. Income Inequality (Gini coefficient, after housing costs), 1970-2006



These trends in the post-war British economy correspond to long-term patterns of change in the rate of property crime (Figure 3, which is compiled from the Home Office's recorded statistics for England and Wales, 1961-2006). The steepest rises in the rate of property crime occurred during the 1980s and early-1990s, also coinciding with sharp increases in levels of unemployment and inequality. This is consistent with the findings generated by statistical analyzes of the link between economic conditions and crime.^{lvi}

Figure 3. Property Crime Per Capita (Home Office Recorded Statistics, England & Wales and the *British Crime Survey*)



Statistical modelling^{lvii} suggests that the economic policies initiated by the Thatcher governments forced several state-owned industrial companies (such as British Steel, British Coal and car manufacturers, some of which were state-owned) to make employees redundant. The eventual loss by the National Union of Miners of the year-long miners’ strike resulted in substantial job losses in mining. As these job losses cascaded through the economy, so jobs in sectors which were dependent on mining (such as railways and engineering) were also lost. In short, the economic restructuring which had started in the 1960s reached a zenith during the 1980s. From the mid to late-1980s the UK started the transition to a post-industrial nation. The official document *Social Trends* for 2007 reports that:

“Over the last 25 years the UK economy has experienced structural change. [...] the extraction and production industries, made up of agriculture and fishing, energy and water, manufacturing, and construction showed a combined fall of 43% from 8.2m jobs in 1981 to 4.7m jobs in 2006. Manufacturing alone accounted for 81% of this decline, with the number of employee jobs in this sector nearly halving from 5.9m in 1981 to 3m in 2006.”^{lviii}

As modelling^{lix} has shown, the resulting increase in unemployment was associated with an increase in property crime. Such policies also resulted in declines in the real terms value of welfare benefits (which did not keep up with inflation), increases in unemployment, economic inequality and crime, a toughening of the criminal justice system,^{lx} and increases in penal populism.^{lxi}

Nevertheless, there are deficiencies with this previous work. The first is the obvious question of the ecological fallacy; are the national-level findings corroborated by individual- and region-level data? In addition to this, national-level modelling is unable to assess the degree to which the effects of the economic policies pursued fell unevenly in the UK. The UK’s industrial geography is an uneven one, with the industrial base spatially-clustered.^{lxii} Herein we develop both of these matters via the use of longitudinal, individual-level data which has

been analyzed in such a way as to enable us to explore the geographical effects of economic policies. As such, as well as speaking to debates in criminology, our paper makes contributions to political geography and wider understandings of macro-level economic policies on the lives of citizens.

Research Design

Recall that our key focus is to explore processes of political change and offending trajectories at the individual-level. Whilst no data set would ever be perfect for this, the British Cohort Study (hereafter BCS70) makes an extremely good vehicle with which to study the impact of dramatic social, economic and policy change on a cohort of people. The cohort was born in one week of April 1970 and grew up during the 1980s (during which they would have experienced changes in economic, social welfare, housing and schooling policies). The BCS70 is large enough for us to explore the unfolding of life-courses over several years. In all, 16,135 babies were born and recruited into the BCS70 (98% of all births in that week). Although the births are limited to one week in 1970, there are no reasons why this cohort ought to be considered unique or non-representative in any way. As such, the cohort has been repeatedly used as if it were a nationally-representative sample. The BCS70 allows us to explore the social and economic changes of the 1980s due to the regular timing of the follow-up interviews (ages 5, 10, 16, 26 and 30). In 1970 mothers were interviewed, providing us with some background data on the social environments in which the cohort would spend its formative years. This was also one year before the UK's 1971 Census was undertaken. In 1975 mothers were re-interviewed, and asked questions about their children's behavior. In 1980 the children were interviewed and questions relating to crime were first fielded. Again, this preceded the UK's 1981 Census by one year. In 1986 (when aged 16) these survey questions were expanded to include contact with the police and convictions in court. These topics were revisited in 1996 when the cohort was 26, and again in 2000. Teachers and head-teachers were also interviewed whilst the child was at school (in 1975, 1980 and 1986). The survey regularly fielded questions on cohort members' social and economic circumstances (type of housing, neighbourhood characteristics, schooling and employment experiences, household composition, home leaving, homelessness, relationship formation, marriage and child-rearing, peer relations, and medical experiences), as well as social attitudes, political affiliation, alcohol consumption, and psychological wellbeing. The BCS70 cohort's geographical location was also recorded at each interview, allowing us to undertake county-level analyzes.^{lxiii}

Analytic Strategy and Results

The analytic strategy we adopt builds on that proposed by Elder and Pellerin^{lxiv} for linking structures and human lives. We explore how involvement with key social institutions and the organisations associated with them can initiate and maintain (or in some cases alter) the trajectories of offending careers. Because much offending occurs in early adolescence but is likely for some individuals to be maintained into adulthood, our model measures offending twice (at 16) and in adulthood, up to age 30. We first build a 'baseline' structural equation model^{lxv} including key individual-level variables (e.g. relationships with key social institutions such as families of origin, schools, employers and marital relationships). This model (outlined

in Figure 4A) allows us to identify the causal structure of offending and the social, institutional and organisational background(s) against which this takes place. This model represents a fairly standard model of offending over the life-course, and fits the data well (Figure 4B). Next, we rerun the model (outlined in Figure 5A and B), but include a measure of economic restructuring. Let us commence by outlining Figure 4A.

Figure 4A specifies a regression path from being *Disciplined at School* (as reported by the child's teacher in 1980) to feelings of *School Alienation* (as reported by the child in 1986).^{lxvi} The first of these variables relates to more serious forms of school punishment such as being suspended or excluded; being caned; being given another form of corporeal punishment or having a report on the child's behavior sent home to their parents. The questions recorded how often the teachers had used those forms of punishment *in general* (rather than for the child in question) and were coded as 'never', 'rarely', 'occasionally' and 'often'. Whilst this measure does not provide us with data on the child's experiences, it does provide us with an insight into the school's approach to discipline in which the child was located whilst at school (an important contextual variable associated with school outcomes^{lxvii}). A child who sees directly or learns of severe forms of punishment second-hand will be affected by this general punishment milieu. Higher scores indicate greater experiences of the more serious forms of punishment. *School Alienation* was measured by seven items which focused on the child's feelings about school (and dealt with the extent to which the child felt that "school is largely a waste of time"; that they were "quiet in classroom and get on with work"; that they thought "homework is a bore"; that they found "it difficult to keep my mind on work"; that they "never take work seriously"; that they did "not like school" and that they believed that making plans was "pointless; take things as they come"). The children could say if they found these statements "very true", "partly true" or "not true at all". These were factor analyzed (KMO value of .836 and producing one factor with an Eigen value of 2.924). Higher scores on the *School Alienation* measure indicated higher levels of alienation. From *School Alienation* we specify three further paths; to *Employed (at 26)*, to *Offending (10 to 16)*, and to *Offending (16 to 30)*.^{lxviii} These were all asked of the cohort members. The first of these variables is a binary of whether or not the cohort member was working (full time or part time, and including those studying, temporarily sick and off work, in training or looking after the home) or were unemployed (including those on long-term sick). The first offending measure relates to the number of times they had been cautioned at a police station between 10 and 16. In order to measure the same sort of experiences between 16 and 30, we used data reported at age 30 relating to experiences of being arrested and taken to a police station going back to 16. We specify a path from *Employed (at 26)* to *Offending (16 to 30)*, and one from *Offending (10 to 16)* to *Offending (16 to 30)*. Whilst the upper half of the path diagram models forms of formal social control (school and employment), the lower half models familial processes. We specify a path from being on the '*At Risk*' Register (at 10) (measured by school nurses or health visitors and based on school health records), to the child's report of the *Quality of Relationship with their Parents (at 16)* which is a sum of their answers to questions about their parents "treating me like a child", "not understand[ing] me/my motives" and "being too strict, bossy and having too many rules" (children could agree or disagree with each statement). This we also regress on to *Offending (10 to 16)*, and a further self-report of the *Quality of their Relationship with their Partner (at 30)* (a single item) and from this, finally to *Offending (16 to 30)*.^{lxix}

Figure 4A: Baseline Model of Offending

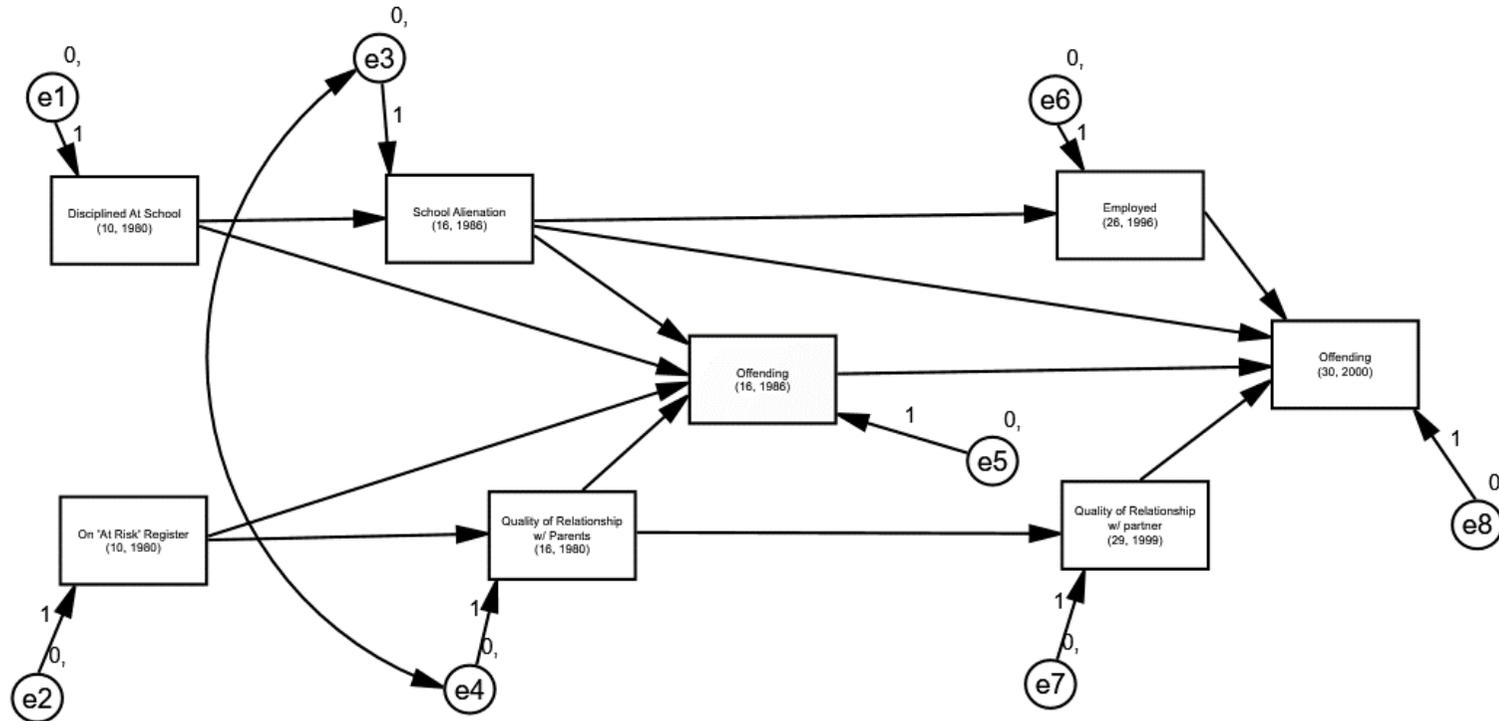
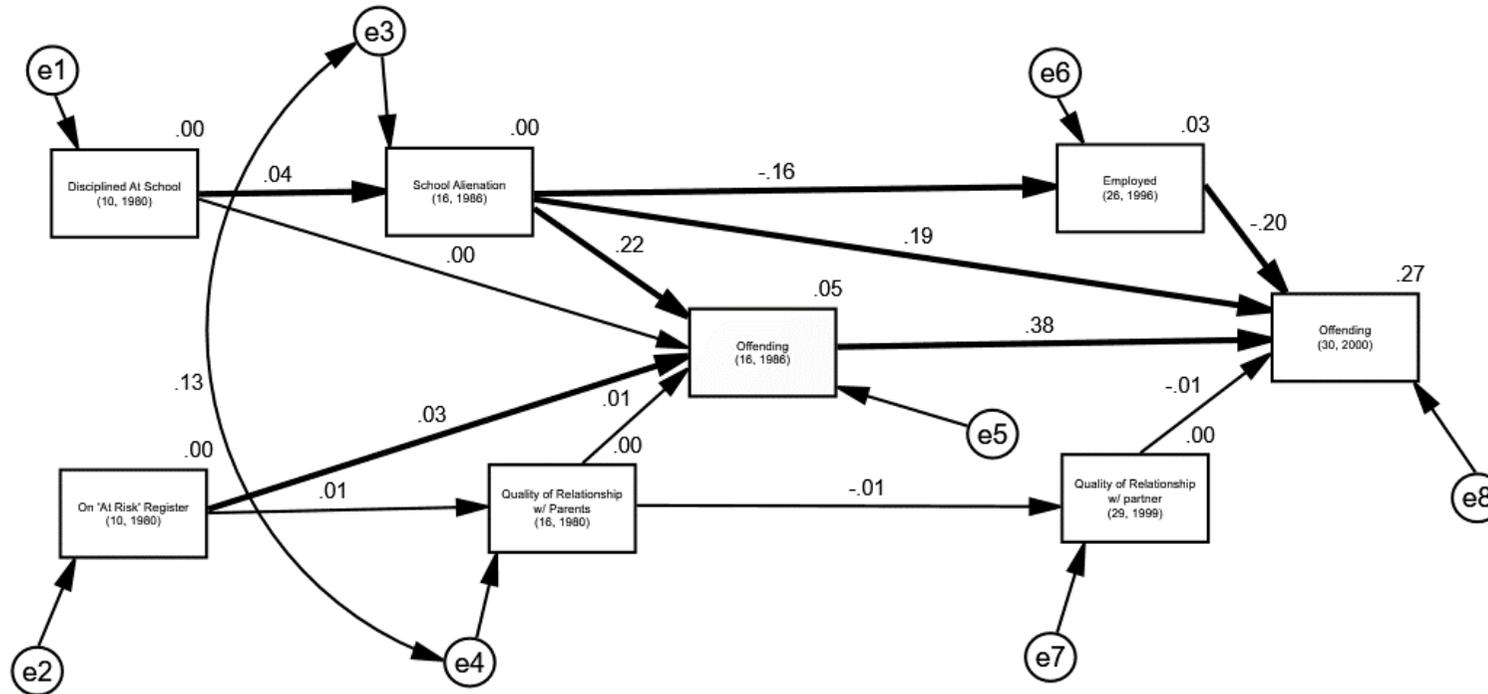


Figure 4B: Baseline Model of Offending
(with estimates)



The model fitted the data well (NFI = .956, CFI = .969, RMSEA = .011) and explained about 27% of the observed variance, with seven of the twelve paths statistically significant (see Figure 4B for the standardized regression coefficients, which are marked in bold if they are statistically significant at at least the <.05 level). Four of the five non-statistically significant paths relate to familial processes; all of the key explanatory variables associated with offending were associated with school or employment. Being on the '*At Risk*' Register (*at 10*) was the only familial process variable which was statistically significantly related to offending (for offending between 10 and 16). Schools which tended to use more severe forms of discipline tended to have more 'alienated' children at age 16. *School Alienation (at 16)* was related to *Employment (at 26)* (such that those who were more alienated from school were less likely to be employed at 26), and *Offending (10 to 16)* and *Offending (16 to 30)* such that the more alienated were more likely to have been arrested by the police. As one might imagine, being on the '*At Risk*' Register (*at 10*) was also associated with *Offending (10 to 16)*. Being employed at 26 was negatively associated with *Offending (16 to 30)*, suggesting that employment acted as a suppressant factor in terms of offending. There was a high degree of stability in terms of offending between childhood (aged 10-16) and adulthood (16-30). Quality of relationships (with parents and partners) was not a key part of the model, but may reflect the instability of such measures which may fluctuate, making measurement less stable. In short, the baseline model we have fitted replicates earlier models in this tradition, with the theoretical expectations being in line with the findings of others.^{lxx}

The second step of our analytic strategy sees us repeat this model, this time including a variable which captures the degree of economic restructuring experienced by the community in which each BSC70 cohort member was living when they were aged 16 in 1986 (Figure 5A). Our measure of *Economic Change (1971-1981)* uses data from the 1971 and 1981 Censuses and is the sum of:

- a) the proportion of the economically active population employed in mining in 1971, and
- b) the proportion of economically active unemployed males in 1981.

These proportions were summed for each county and applied to each cohort member based on the county they were living in during 1986 at age 16. We chose data for those working in coal mining in 1971 as it was a good barometer of industrial activity at that time, since mining was co-located with steel production and processing in South Wales, South Yorkshire, Central Belt Scotland and Teesside, and ship-building (in and around Glasgow in particular), and the maintenance of locomotives and railway distribution in centers in Derby, Doncaster, Nottingham, Sheffield, York, and Central Belt Scotland). In 1970 there were approximately 290,000 people (mainly men) working in 293 mines. By 1986, following the year-long miners' strike, this had dropped to roughly 91,000 working in 110 mines.^{lxxi} By summing this with the proportion of unemployed males in 1981, we created a single item measure of areas which were heavily industrial at t1 (1971) and which at t2 (1981) were experiencing high levels of male unemployment, due in most cases to loss of jobs amongst industrial and related employers and which had not recovered after 10 years. Our measure therefore describes the economic trajectories of industrial areas over 10 years.

This variable measures change over time, since there was a significant and rapid loss of employment in industries associated with mining and male employees were amongst those most affected by this, hence our use of two measures at two points of time. Whilst there were other social changes which took place alongside these processes (such as the greater inclusion of females in the labor market), for many individual households such processes

were in part a response to the loss of traditional forms of (male) employment. Many such communities lived and worked closely together such that local state housing estates ('council houses') were dominated by families who derived their household incomes from the same employer (or interdependent employers), meaning that when coal production declined or ceased altogether in one community, so the livelihoods of whole estates were impacted upon. In order for readers to 'locate' the parts of Britain most heavily affected by the economic changes of the early-1980s, Figure 6 provides a map of the Britain which shows the levels of economic restructuring using this measure plotted by county. The four rectangles mark four areas of Britain in which economic restructuring was heavily pronounced (and are namely Central Belt Scotland, the North-East shoulder, Central Belt England and the Welsh Valleys).^{lxxii}

The expanded model is identical to the baseline model, with the exception of the inclusion of the *Economic Change* variable described above. This we locate to the left-hand side of the model (implying temporal and causal precedence), and from it we specify paths to five of the variables in the original model (*Disciplined at School*, *School Alienation*, *Offending (10 to 16)*, *'At Risk' Register (at 10)* and *Quality of their Relationship with the Partner (at 30)*). Of these five new paths, three were statistically significant; those leading to *Disciplined at School*, *School Alienation*, and *Offending (10 to 16)*. The model (Figure 5B) fitted the data well (NFI = .942, CFI = .958 and the RMSEA was .012), and again explained about 27% of the observed variance. Of the statistically significant paths specified, the model indicates that greater levels of *Economic Change* were associated with schools who reported using more severe forms of discipline (*Disciplined at School (at 10)*). This suggests that as economic change took place, so schools used more severe discipline measures more frequently. This could be because the children themselves were less well-behaved (and hence the teachers responded more punitively), or it could be that economic change (independent of its effect on children's behaviors) increased use of severe school discipline measures. Similarly, in the expanded model, local *Economic Change* was associated with higher scores on the *School Alienation (at 16)* measure (suggesting that economic change was associated with increases in feelings of school alienation), and with *Offending (16 to 30)*, such that people living in areas which experienced greater economic change were more likely to offend when aged 10 to 16. The measure of the types of discipline meted out at school (*Disciplined at School (at 10)*) is associated with alienated at school (*School Alienation (at 16)*). Being on the *'At Risk' Register (at 10)* is also associated with *Offending (10 to 16)*.

Figure 5A: Expanded Model of Offending

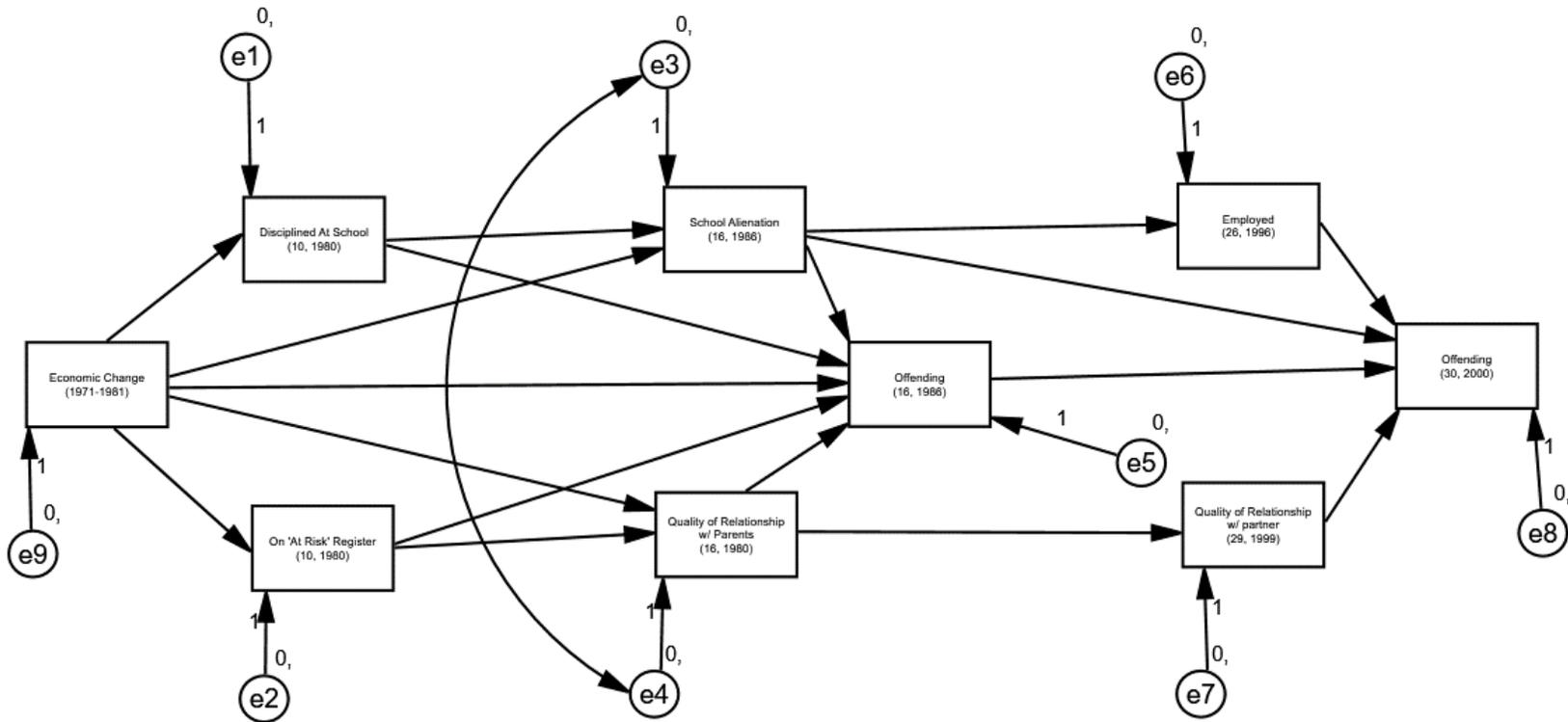
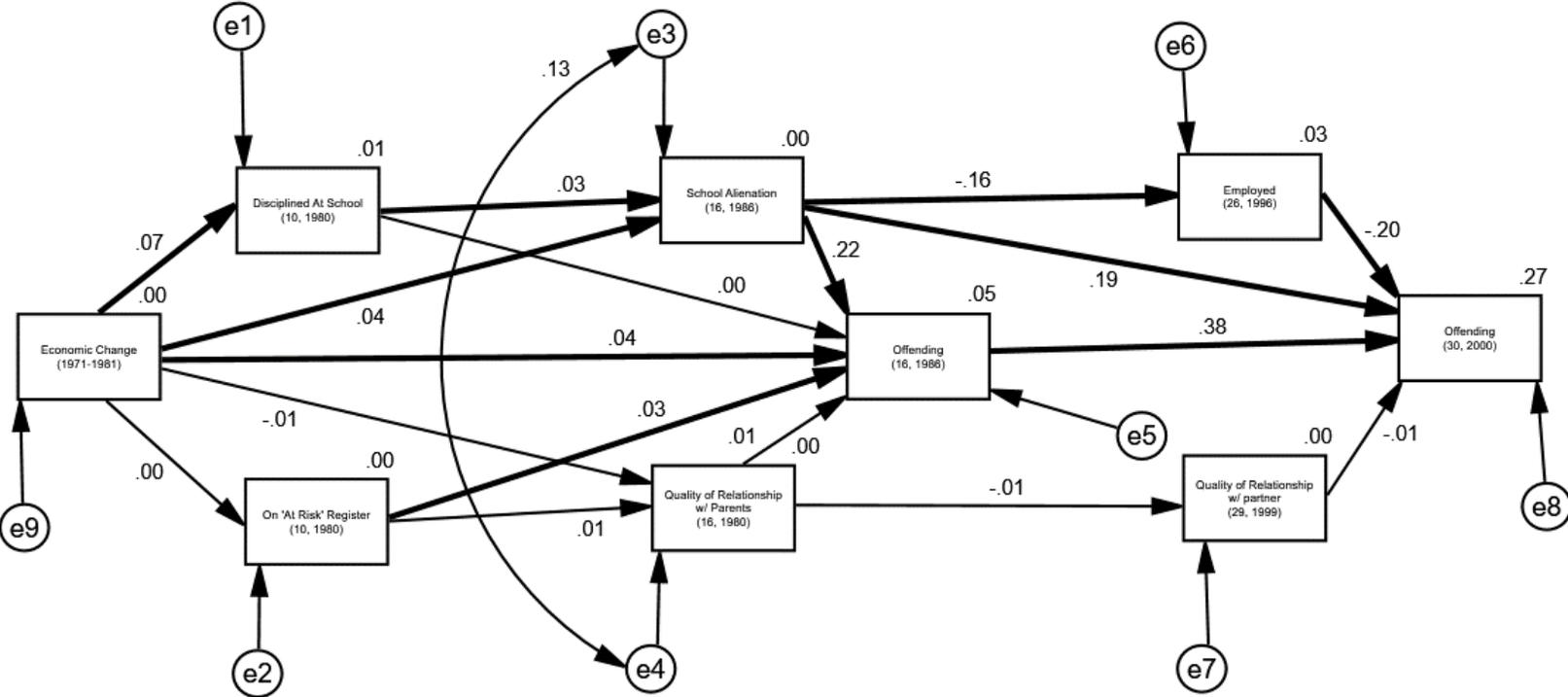


Figure 5B: Expanded Model (with estimates)



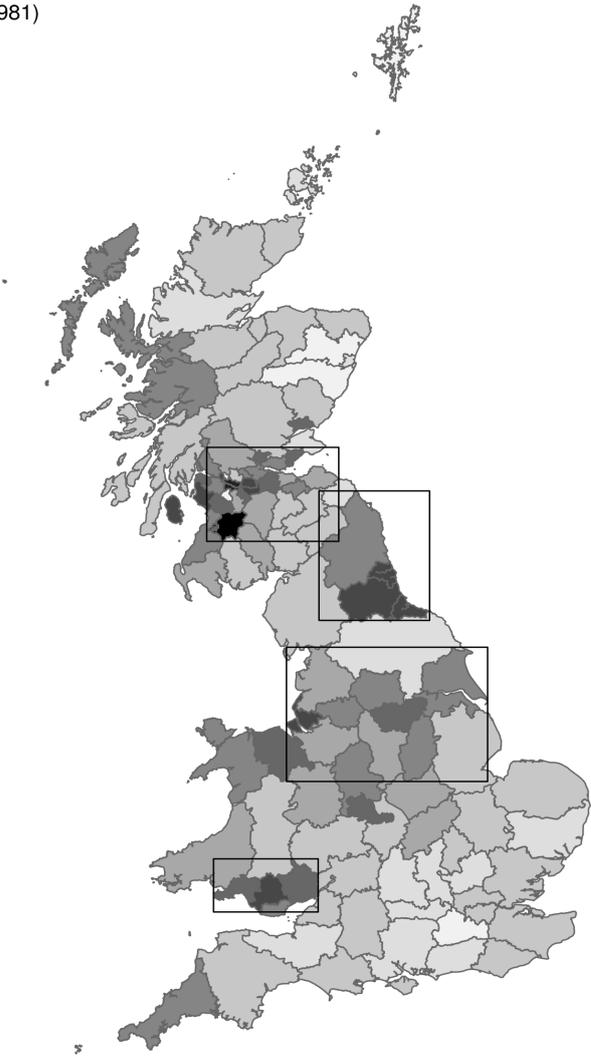
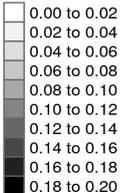
Our analyzes suggest that economic change lay behind some of the (seemingly) individual-level processes associated with the commencement of criminal careers, such as weakened social bonds with key institutions such as schools and that economic change may (in some circumstances) encourage disengagement from schools.^{lxxiii} These relationships suggest that greater levels of economic restructuring are associated with greater use of punitive measures in schools in those areas which experienced greater levels of restructuring; the same was also true for alienation from school (namely that children living in those areas which experienced greater levels of restructuring felt more alienated from their schools). *Economic Change* was also directly related to *Offending (10 to 16)*, such that those living in areas of greater economic change were likely to have been in trouble more often with the police when aged 10 to 16 than those living in areas with lower levels of economic change.

The third and final stage in our analysis is to rerun the model in Figure 5A, this time controlling for the extent of economic change experienced in each area. We have thus far shown that *Economic Change* lay behind some of the individual- and school-level processes we have charted. However, what the model reported on in Figure 5B cannot do is to assess the extent to which the relationships between these variables were mediated by the extent of economic restructuring experienced. We re-ran the model reported in Figure 5B four times (Figures 7A-D), with these Figures reporting first those in the lowest quartile of *Economic Change* (Figure 7A), the next lowest (Figure 7B) and so on, up to those who were living in the areas with the highest levels of *Economic Change* (Figure 7D). This strategy allows us to explore the strength of the relationships between the variables in the model, and allows us to assess the relative impact of *Economic Change* in those areas with little change, as opposed to those areas with greater levels of change. Because we can identify which counties are included in each quartile of *Economic Change*, we are also able to comment on the geography of economic restructuring and the extent to which this strengthened the relationship between variables which account for offending in some areas more than in other areas.

The first thing to note is that for those who experienced the lowest levels of economic change (Figure 7A), the *Economic Change* variable is *not* related to other variables.^{lxxiv} This suggests that in those areas with low levels of economic change, it was individual-level factors which explained offending (towards the right hand side of the diagram). The next thing to note is that the degree of *Economic Change* is only statistically significantly related to many of the other variables in the model for the two middle groups (Figures 7B and C). However, the degree of *Economic Change* is related to being on the 'At Risk' Register for those children in the first of the two groups of counties which experienced the highest levels of economic restructuring (Figure 7C). It is also statistically significantly related to *Offending (10 to 16)* for those who experienced a low level of economic change (Figure 7B) and those who experienced the highest levels (Figure 7D). However, in Figure 7B it is a negative relationship, but for the highest group it is positive. This suggests that in places which experienced relatively low levels of economic change, children may have been encouraged into engaging with school (supporting earlier Scottish data on this matter^{lxxv}). Hence the effects of economic change are mediated by the degree of change which areas experienced.

Figure 6: Disadvantage index score of mining (1971) and unemployment (1981)

Economic change (1971-1981)



In areas with relatively low levels of economic change (Figure 7B), *Economic Change* is directly related to *Disciplined at School*, *School Alienation*, and *Offending (10 to 16)*. However, the paths to the latter two of these are negative (suggesting that economic change *reduced* school alienation and offending. The model for the areas which experienced relatively high levels of *Economic Change* (Figure 7C) suggests that economic change affects offending between ages 10 and 16 indirectly via school alienation and being on the at risk register. So where economic change was higher it may have demoralized young people and placed them at greater risk of harm. In those areas which experienced the greatest levels of *Economic Change* (Figure 7D), economic change was directly related to offending at age 10-16, suggesting that children in those areas most heavily affected in by economic change were drawn directly into offending. Here the relationships with schooling and being 'at risk' were not found. All of this suggests that the impact of economic restructuring is mediated by the *degree* of economic restructuring; the relationship is not simply linear.

Discussion

Focusing on the UK's economic troubles during the 1970s (to which Margaret Thatcher's election can be read as a response) and the early years of the Thatcher governments themselves (1979-1981), we have explored the extent to which macro-level economic changes can be used to understand the causal antecedents of offending over the life-course. To our knowledge, few have ever attempted to *empirically* locate offending careers within wider macro-level structures, or linked these to macro-economic policy and political decision-making. Our modelling found that whilst the addition of a variable which captured change over a 10-year period did not improve the percentage of variance explained when compared to a model which did not include such a variable (Figures 4A to 5B), the fact that three of the five additional paths incorporated were statistically significant suggests that incorporating such a measure has theoretical merit.^{lxxvi} Further modelling (Figures 7A-7D) explored this in greater depth, assessing the extent to which the relationships between the variables were modified by the degree of economic restructuring experienced. This suggested that whilst the model fitted the data well, the role of economic restructuring was especially key in areas with *greater* levels of economic restructuring. Substantively this would suggest that the social and economic changes initiated (either via deliberate policy developments or as unintended consequences) during and since the early-1980s have altered citizens' engagement in crime, and that this is especially the case for those in counties which experienced the greatest levels of economic restructuring.

Our theoretical position has been that the relationship between increases in unemployment in the early-1980s, especially in communities which relied on coal mining and heavy industry for their incomes, were worst affected when monetarist policies were adopted in the UK in the early-1980s. As such, our paper is concerned with the effects of changes in the political governance of the economy in the early-1980s, the impacts that this had on engagement in crime for young people living in the UK at that time, and their subsequent offending in adulthood. The dramatic increases in crime witnessed in the UK during the 1980s led to the development of a more punitive criminal justice system in the 1990s.^{lxxvii} Such dramatic changes in unemployment (which stood at just over 4% in 1979, but had increased to almost 8.5% in 1981) pushed many living in the industrial heartlands of the UK into unemployment,

Figure 7A: Expanded Model of Offending
 Lowest Level of Economic Change

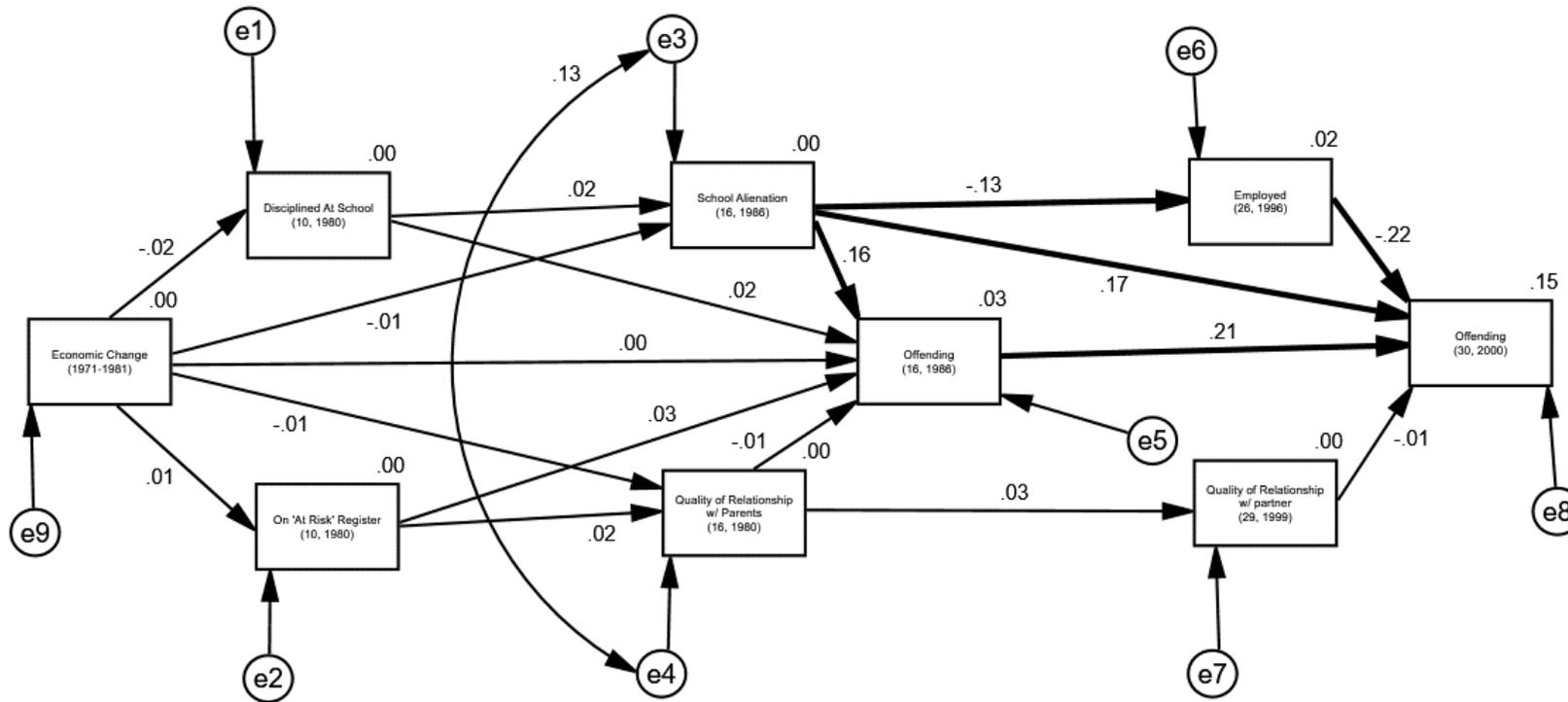


Figure 7B: Expanded Model of Offending
Second Lowest Level of Economic Change

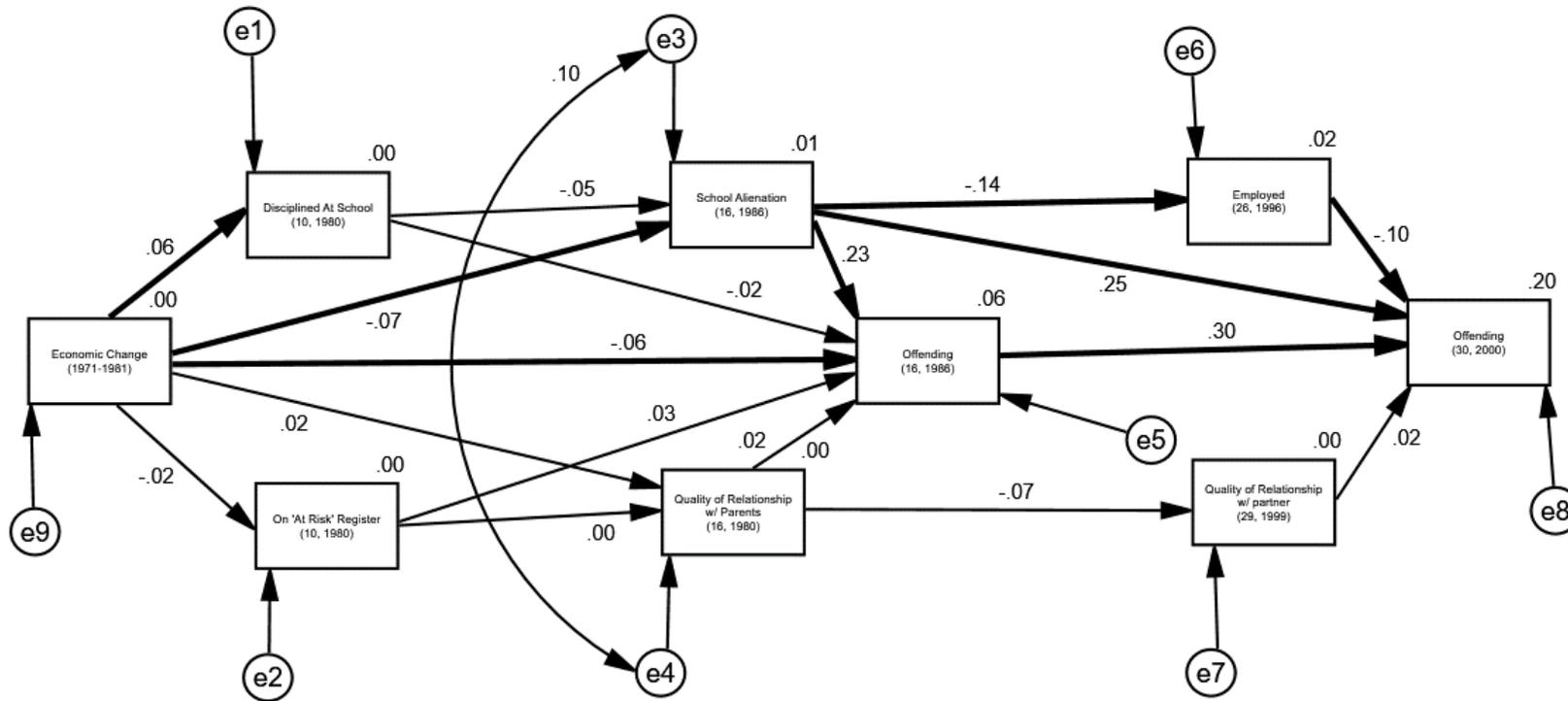


Figure 7C: Expanded Model of Offending
Second Highest Level of Economic Change

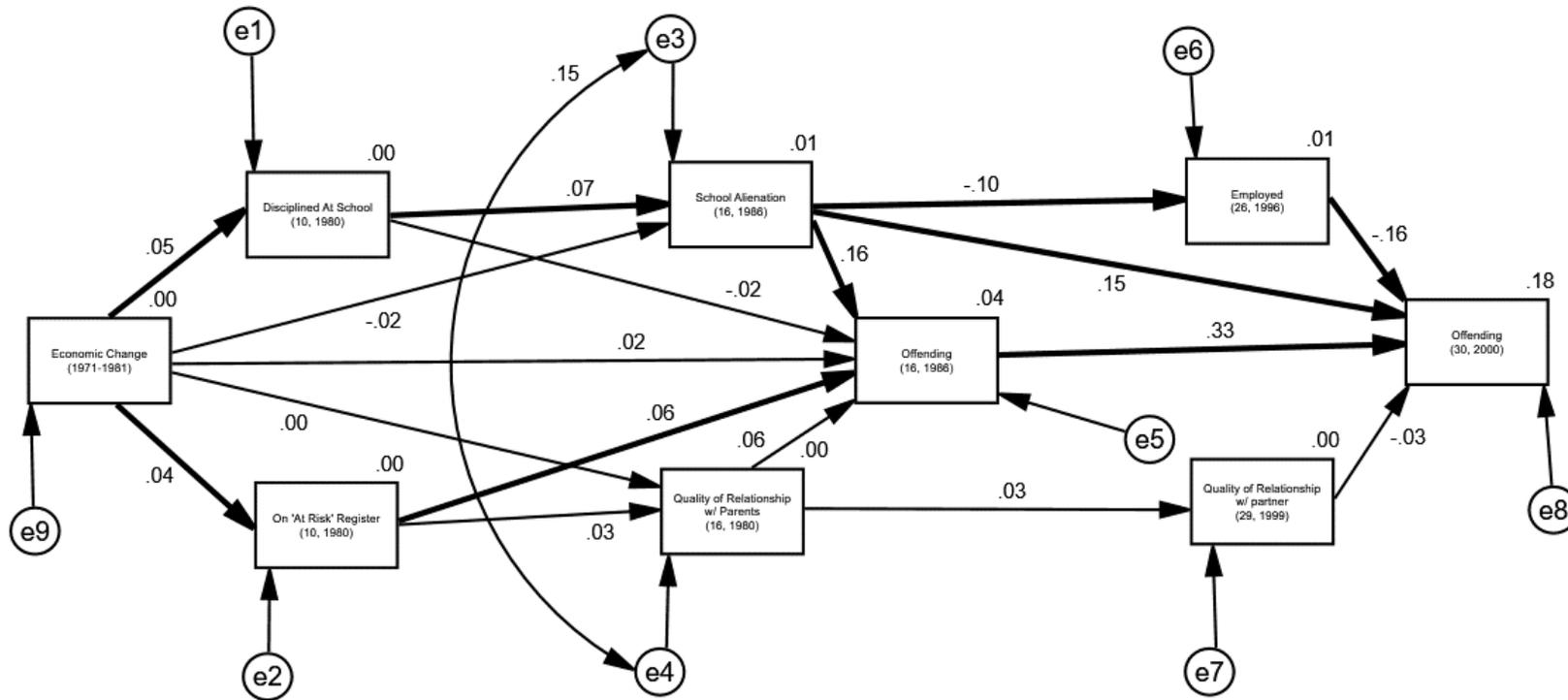
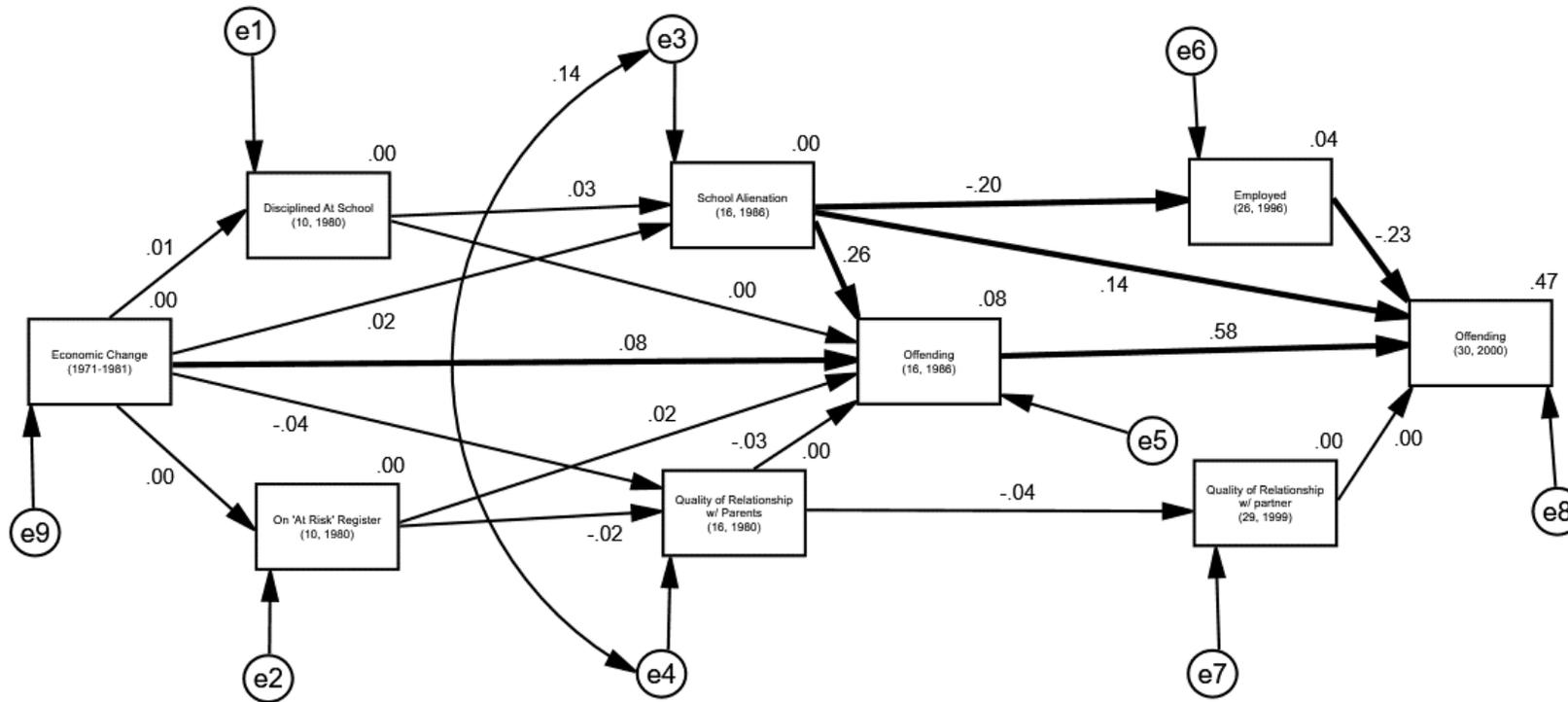


Figure 7D: Expanded Model of Offending
Highest Level of Economic Change



and forced many families who were dependent on (typically) male breadwinners for their livelihoods into, or close to, poverty. That these job losses were clustered, made the impact of such levels of unemployment on crime all the greater, since it encouraged the development of offending networks.^{lxxviii} Hence the radicalism of the early phase of Thatcherite economic policies created quite profound and immediate economic problems (not simply unemployment, but long-term, and geographically-concentrated levels of unemployment) which fell disproportionately on those communities which had relied on manufacturing and mining for their livelihoods. Over time, and augmented by retrenchment in other social policies,^{lxxix} the neighbourhoods in which those who had relied on heavy industry for their incomes became associated with crime and disorder. On the whole, economic change was associated with increases in levels school alienation, which, following what we know from other studies^{lxxx}, as well as our own modelling^{lxxxi}, was associated with juvenile offending (10-16) as well as offending into adulthood. School failure, unemployment and engagement in crime started to take on inter- and intra-relationships familiar to criminal careers researchers. As such, interlocking social and economic policies relating to housing, schooling and economic management started a set of processes which altered the social and economic geography of the UK, such that the greater levels of impoverishment started to coalesce together in both regions of the UK and smaller geographies. Part of this story of change, then, relates to the uneven geographical impact of political decision-making. When the Labour Party returned to power in 1997, their manifesto promised to tackle just such uneven deprivation (as part of their New Deal for Communities program).^{lxxxii} Much of this, of course, resonates with what we already know about the causal antecedents of offending; those with lower levels of engagement with schools, and who are at risk are likely to start offending early in life. Similarly, early engagement in crime is likely to foster continued engagement in offending. Employment (especially after the age of 25^{lxxxiii}), is negatively associated with offending. What is novel, however, is our focus on the wider economic restructuring which may have entrenched such causal processes in the first place, and the political ideology which shaped this.

Like Benson's review of the political processes which may shape criminal careers, we found that the key processes which appeared to have operated as causal antecedents took many years to lead to entrenched offending. The budget of 1981 (when the BCS70 children were 11) increased levels of unemployment, which affected the lives of some of the cohorts' families. Their peak age of conviction would not have been for around another nine to 10 years (1990-1991), and those who remained engaged in crime would have done so well into their late-20s (the late-1990s), as suggested by our modelling. The point at which many of the BCS70 would have become increasingly engaged in crime (around 15 or 16) coincided with a dramatic increase in crime in England & Wales. The data we have at our disposal does not allow us to explore the micro-level processes which Hagan^{lxxxiv} suggests took place in the USA, however other studies of the relationships between neighbourhoods and crime^{lxxxv} suggests that such processes may have been operating in the UK in some places too. More generally our modelling suggests that other studies, wherever possible, ought to incorporate variables into their modelling which capture the role of political processes and the social and economic changes which may stem from these. The substantive message our paper delivers is that the background structural causes of offending at the individual-level may rest as much with a country's politicians as they

do 'street-level' actors, but that in periods when crime rises dramatically as a result of this, it may be subsequent governments who have to deal with the 'fall out'. Politics shapes the economic policies adopted, which in turn affects the communities which people live in via the availability of work, and influences the extent to which young people may regard their own futures as worthy of investment (leading to alienation from school) and the extent to which offending (either out of frustration or economic need) may be an appropriate response. Given what we know about offending careers, and the difficulty of ceasing these once they have begun,^{lxxxvi} offending pathways can easily become entrenched at the individual and community-levels.

Appendix

This table lists the minimum and maximum values of each of the variables used in the models, along with the mean for each of these and its standard deviation. All the data is available from the UK Data Service (<https://ukdataservice.ac.uk/>). The Study Numbers are listed for each individual sweep of the data. These data were extracted by ourselves and brought into one file to enable the above analyzes.

Variable	Minimum	Maximum	Mean	Std. Deviation	Study Numbers
Disciplined at School	1.00	16.00	11.36	3.26	SN 3723
On 'At Risk' Register	0.00	1.00	0.05	0.22	SN 3723
School Alienation	-1.42	2.75	0.00	0.88	SN 3535
Quality of Parental Relationship	3.00	6.00	3.34	0.67	SN 3535
Offending at 16	0.00	6.00	0.71	0.43	SN 3535
Employed at 26	0.00	1.00	0.04	0.20	SN 3833
Quality of Partner Relationship	1.00	7.00	5.14	2.26	SN 5558
Offending at 30	0.00	9.00	0.39	1.26	SN 5558
Economic Change	0.01	0.19	0.06	0.02	SN 5558

Disciplined at School was coded so that children who were attending schools which used serious punishments more regularly scored more highly. Being *On the 'At Risk' Register* was a binary, with 0 as not on the 'At Risk' Register, and 1 representing those children who were on the register. *School Alienation* was the result of a factor analysis, coded such that higher scores indicated a higher degree of alienation. The *Quality of Parental Relationship* was the sum of three items, coded so that higher scores meant a better quality of child-parent relationship (as reported by the child). *Offending at 16* and *Offending at 30* were both coded so that 0 indicated that the respondent had not been cautioned by the police, and a whole number indicated the number of times they had been cautioned. *Employed at 26* was a binary, with 1 indicating employment (full or part-time, studying, in training, temporarily ill and off work and those who were looking after the home. 0 indicated those unemployed or those on long-term sick. *Quality of Partner Relationship* was coded so that lower scores indicated a happier relationship. *Economic Change* was calculated from two variables from the UK census recorded for the county at which the respondent was living in 1986 (see the main text), and is a percentage, ranging from .01 (1%) to .19 (19%). These data are plotted in Figure 6.

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We have no conflicts of interest.

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Stephen Farrall trained as a sociologist before concentrating on criminology. He is known for his work on why people stop offending, the fear of crime and on the long-term effects of neo-liberal and neo-conservative social policies. His most recent book is *Exploring Political Legacies* (with Colin Hay and Emily Gray, Palgrave, 2020).

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Phil Jones is a spatial sociologist with an interest in health and matters relating to crime. His most recent publications have been in *Geoforum*, the *British Journal of Criminology* and *British Politics*.

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- ^{lxiii} In the UK, a county is an administrative geography. The average population of the counties which we used was around 493,504 (mean) and 205,053 (median); and the average size of the counties was 2,091.745km² (mean) and 1,655km² (median). For the purposes of our modelling, we use counties as they were defined during the period 1974 to 1996. This produced 110 counties in England, Scotland and Wales.
- ^{lxiv} Elder and Pellerin, 1998, *ibid*.
- ^{lxv} Structural equation modelling is a form of causal modelling which includes path analyzes, which assess the linear dependencies between variables. It can be seen as a form of multiple linear regression which allows for variables

simultaneously to be both independent and dependent variables. The coefficients presented in Figures 4B, 5B and 7A to 7D are standardized coefficients. Byrne, Barbara. (2016) **Structural Equation Modelling with AMOS**, Routledge, London (3/e) provides an excellent overview of how to interpret the models and how the coefficients are calculated. The coefficients have been standardized so that the variances of dependent and independent variables are 1. As such, the standardized coefficients tell one how many standard deviations a dependent variable will change for each standard deviation increase in the dependent variable. The standardization of the coefficient is usually done in order to enable the identification of which of the independent variables has a greater effect on the dependent variable in analyzes when the variables are measured in different units of measurement (for example, total household income in US\$ and self-reported quality of relationship with spouse on a 1-5 Likert scale).

^{lxvi} Descriptive statistics for all of the variables in the models are provided in an appendix.

^{lxvii} Perry, B. and Morris, E. (2014) *Suspending Progress: Collateral Consequences of Exclusionary Punishment in Public Schools*, **American Sociological Review**, 79(6)1067-87, and Rausch, M. and Skiba, R. (2004) **Unplanned Outcomes**, Bloomington, Indiana University, Center for Evaluation and Education Policy.

^{lxviii} The *Offending* variables were positively skewed. We therefore transformed the data to minimize the abnormality of the residuals, testing the square root, Log10 and natural log. However, the results remained the same. As such, we have reverted to displaying the original untransformed data which is easier to interpret. As a further check, we reran those variables which regressed directly onto *Offending (16 to 30)* using both Poisson and negative binomial regressions, which both suggested substantively the same conclusions.

^{lxix} Diagnostic checks of the model during its development, and specifically the Modification Indices, suggested that adding a covariance between the error terms for *School Alienation (at 16)* and *Quality of Relationship with their Parents (at 16)* would improve the models fit. Given that such additions are common in longitudinal model (Byrne 2016, *ibid*) we chose to include it.

^{lxx} E.g. Sampson and Laub, 1993, *ibid*; Moffitt, Terrie. (1993) *'Life-Course Persistent' and 'Adolescent-Limited' Antisocial Behaviour: A Developmental Taxonomy*, **Psychological Review**, 100:674-701.

^{lxxi} Our data comes from: <https://www.gov.uk/government/statistical-data-sets/historical-coal-data-coal-production-availability-and-consumption-1853-to-2011>. Last accessed 23rd April 2020.

^{lxxii} This maps shows a similar geographical patterning of economic restructuring to that developed by Beatty and Fothergill, 2017, *ibid*, Figure 2, p165.

^{lxxiii} Farrall, Stephen, Gray, Emily and Jones, Phil M. (2020) *The Role of Radical Economic Restructuring in Truancy from School and Engagement in Crime*, **British Journal of Criminology**, 60(1):118-140.

^{lxxiv} The model had a good fit with the data: the RMSEA was .007, the NFI was .902 and the CFI was .958. The model also explains more of the variance in *Offending (16 to 30)* as the degree of *Economic Change* increases, from .15 for those with the lowest levels of economic restructuring to .20 for the next highest group, .18 for the next and .47 for those living in areas which experienced the highest levels of economic restructuring.

^{lxxv} Raffe, David. (1986) Unemployment and School Motivation: The case of Truancy, **Educational Review**, 38(1):11-19.

^{lxxvi} Sampson, Robert, J., Morenoff, J. D. and Earls, Fenton. (1999). *Beyond social capital: Spatial dynamics of collective efficacy for children*, **American Sociological Review** 64:633–60; Wikström, Per-Olaf and Loeber, Rolf. (2000) *Do disadvantaged neighbourhoods cause well-adjusted children to become adolescent delinquents? A Study of Male Juvenile Serious Offending, Individual Risk and Protective Factors*, **Criminology**, 38(4):1109-1142; Savage, 2009, *ibid*.

^{lxxvii} Farrall, Stephen, Gray, Emily, Jennings, William and Hay, Colin. (2016) *Thatcherite Ideology, Housing Tenure, and Crime*, **British Journal of Criminology**, 56(6):1235-1252.

^{lxxviii} Hope, Timothy and Foster, Janet. (1992) *Conflicting Forces*, **British Journal of Criminology**, 32(4):488-504; Murie, Alan. (1997) *Linking Housing Changes to Crime*, **Social Policy and Administration**, 31(5):22-36.

^{lxxix} Walker and Walker, 1997, *ibid*.

^{lxxx} Roque, Michael, Jennings, W., Piquero, Alex, Ozkan, T. and Farrington, David. (2017) *The Importance of School Attendance: Findings From the Cambridge Study in Delinquent Development on the Life-Course Effects of Truancy*, **Crime and Delinquency**, 63(5):592-612.

^{lxxxii} Farrall et al, 2020, *ibid*.

^{lxxxii} Labour's New Deal for Communities program (1998-2011) targeted 39 of the most deprived communities in England & Wales for improvements in crime; housing; schooling; health and unemployment.

^{lxxxiii} Uggen, Christopher. (2000). *Work as a Turning point in the Life-Course of Criminals*, **American Sociological Review**, 67:529-46.

^{lxxxiv} Hagan, 1997, *ibid*.

^{lxxxv} Hope and Foster, 1992, *ibid*.

^{lxxxvi} Halsey, Mark, Armstrong, Ruth and Wright, Serena. (2016) '*F*ck it!*': *Matza and the Mood of Fatalism in the Desistance Process*, **British Journal of Criminology**.