

# The Cost of Exclusion

Counting the cost of youth disadvantage in the UK



Prince's Trust

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Counting the cost of youth  
disadvantage in the UK

With the Centre for Economic Performance,  
London School of Economics

Supported by



*The Royal Bank of Scotland Group*



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Handwritten graffiti on a light-colored wall, including stylized letters and symbols. Legible fragments include "P.M.P.A.", "L.S.M.", "H.Z.C.", "R.T.E.", and "1976".

Handwritten graffiti on a dark-colored wall, featuring large, stylized letters and symbols. Legible fragments include "S.M.", "I", and "V.E.". The graffiti is written in white or light-colored paint.



# Executive Summary

Unemployment is at its lowest for a generation; more young people are finishing school and going on to further education; and crime figures have stabilised and, in some cases, declined.

Yet there are a significant number of the population who are excluded from this prosperity – who find themselves on the outside looking in. They are often young and live in deprived communities across the UK.

Social exclusion comes with a big price tag – not only for the individual young people who are affected but for their communities and the economy as well. And the costs go beyond the financial: there are also hard-to-quantify costs such as the loss of potential and the long-term, emotional toll of unfulfilled ambitions.

Every day, The Prince's Trust helps 100 more young people gain the skills and qualifications they need to get a job. It gives practical and financial support, developing skills such as confidence and motivation. The Trust works with 14-to 30-year-olds who have struggled at school, have been in care, are long-term unemployed or have been in trouble with the law.

But what is the true value of this transformation to society and the UK economy?

Researchers at the Centre for Economic Performance, London School of Economics examined trends over time in the UK – comparing them with other similar countries – and, where possible, giving examples of the costs involved. They also looked at the inter-relationship between types of social exclusion.

The *Cost of Exclusion* reveals that interventions helping young people get into work, stay on in education or avoid crime represent excellent value for money given the measurable costs of social exclusion.

By re-engaging young people and helping them to turn their lives around, this report shows that we can save the UK economy billions each year.

Reducing youth unemployment by one percentage point could save over **£2 million** in terms of youth crime avoided.

## Key findings

### The cost of youth unemployment

- The percentage of 16- to 24-year-olds classified as unemployed in 2005 was nine per cent, 8.6 per cent, 10.1 per cent and 6.3 per cent in England, Wales, Scotland and Northern Ireland respectively. But in each country and English region the percentage of young people classified as 'not in education, training or employment' (or NEET) is around **twice as high**.
- Almost **a fifth** of young people in England, Scotland and Wales are not in education, training or employment. OECD data shows that the UK compares very poorly to other countries in this respect.
- The productivity loss to the economy as a result of youth unemployment is estimated at **£10 million** every day; and this is without taking into account people who are classified as 'inactive' for other reasons.
- There is also a substantial cost to the exchequer of youth unemployment and inactivity: it costs the state about **£20 million** per week in Job-Seeker's Allowance.
- The personal cost of not being in education, training or employment goes beyond foregone earnings in the longer term: youth unemployment has been estimated as imposing a wage scar on individuals of between **8 and 15 per cent**.

### The cost of youth crime

- The estimated total cost of youth crime for Great Britain was in excess of **£1 billion** in 2004.
- The rate of imprisonment is higher in England and Wales than in 12 other European countries. England and Wales also has the highest percentage of prisoners under 18 and the second highest percentage between 18 and 21.
- Prisoners are much more likely to be socially excluded than the general population: they are **13 times** as likely to have been in care as a child; **13 times** as likely to be unemployed; **10 times** as likely to have been a regular truant; and **2.5 times** as likely to have had a family member convicted of a criminal offence.
- Within Great Britain, the greatest success in reducing youth crime has been achieved in Scotland. Between 1984 and 2004, success in reducing the number of convictions of those aged 18-21 has been modest for England

and Wales. With regards to those aged 10-17, there has been some reduction since 1984. However, there was a partial reversal of the downward trend between the mid and late 1990s.

### **The cost of educational underachievement**

- There has been little change since the mid-1990s in the percentage of young people aged 16-24 with no qualifications. In 2005, these figures stood at 12.6 per cent, 12 per cent, 8.3 per cent and 19.9 per cent in England, Wales, Scotland and Northern Ireland.
- The percentage of young people with low-level or no qualifications in the UK compares very unfavourably to France (for all age ranges) and Germany (for the age range 25-28 and older categories).
- There is some evidence of a relationship between education and health outcomes. And the education of parents can affect the educational outcomes of their children – proof that education can help break the intergenerational cycle of poverty.
- Educational underachievement affects the relative performance of the UK economy. The UK has between **10 and 25 per cent** lower output per hour than France, Germany and the US and much of this can be attributed to a poorer level of skills and a shortfall of capital investment.
- There is a strong relationship between educational underachievement and crime. US evidence suggests that social benefits from a one per cent increase in the high school completion rate are equivalent to 14-26 per cent of the private return. Applying these estimates to the UK (with strong caveats) suggests that this might be equivalent to **£2-5 billion**.
- UK evidence on the effects of the Educational Maintenance Allowance and the Reducing Burglary Initiative suggest that programmes like these can lead to savings of about **£3,595-£4,902 per 1,000 pupils** because of reduced levels of crime.



# Introduction

A strong economy and low unemployment continue to mask the true cost of youth exclusion.

More than 1.2 million young people across the UK are not in work, education or training, representing a significant loss to the individual and the economy.

But this is only part of the story. Counting the hidden cost must also take into account the future challenges and opportunities presented by globalization, an ageing population and the rapid pace of technological change.

The dramatic growth in developing economies, particularly in China and India, will transform the global market, placing greater emphasis on educational achievement as a key indicator of young people's prospects. Keeping pace with these changes will become increasingly important if we are to remain competitive.

The *Cost of Exclusion* shows why The Royal Bank of Scotland Group is a keen supporter of The Prince's Trust. It builds on our long-standing partnership, helping young people to gain qualifications, enterprise skills and find work in the UK's poorest areas.

Only by believing in young people's hidden talents and developing our skill base at all levels can we really hope to tap into this lost potential. By ensuring that all young people achieve the most basic skills, we can significantly improve their employment chances.

The findings from this report reveal why a massive effort to attract young people into the potential labour force is justified on economic grounds alone – without mentioning the potential benefits for their communities and society as a whole.

## **Stephen Moir**

Head of Community Investment

The Royal Bank of Scotland Group



# 1. The cost of youth unemployment

## – £90 million per week

Youth unemployment costs UK tax payers £20 million per week in Job Seeker's Allowance. But this is dwarfed by the productivity loss to the economy of over £70 million per week. Add them up, and it's a massive expense to the UK. By helping young people into work or training, we could potentially save £90 million per week. This makes effective interventions aimed at helping young people become economically active extremely good value for money.

### 1.1 Youth unemployment – the facts

The percentage of 16- to 24-year-olds classified as unemployed in 2005 was nine per cent, 8.6 per cent, 10.1 per cent and 6.3 per cent in England, Wales, Scotland and Northern Ireland respectively. But in each country and English region the percentage of young people classified as 'not in education, training or employment' (or NEET) is around twice as high.

The Office of National Statistics recently reported that the number of 16- to 24-year-old NEETs has increased by 15 per cent from 1.08m in 1997 to 1.24m in 2006.

Women make up the largest part of the NEET group, although the proportion of men is increasing more rapidly. The number of male 16- to 24-year-old NEETs rose 27 per cent from 453,000 to 575,000 between 1997 and 2006, while the number of female NEETs has increased by six per cent from 629,000 to 669,000.

In England, Scotland and Wales, almost a fifth of young people are not in education, training or employment.

## 1.2 Youth unemployment – calculating the costs

When calculating the cost of youth unemployment, this report considers two main factors: the direct cost of benefits, including Job Seeker's Allowance; and the productivity loss to the UK economy. Each is now considered in turn.

The taxpayer's bill for benefits  
– £20 million per week.

The net cost of youth unemployment to the exchequer depends on the duration of unemployment and the extent to which young people move on to other types of income benefit, even if they find a job (a working person on a low income may be eligible to claim for income support or a working tax credit). Shaw and Sibieta (2005) provide a survey of the UK benefit system, which includes details of the types of allowance available to unemployed or low income people.

Job Seeker's Allowance is unique to unemployed people: it can either be contribution-based (if the individual has worked previously) or income-based. The average cost per claimant in 2004/05 – for all age groups – was about £3,000.



## Exchequer costs of youth unemployment per week

(Based on Job Seeker's Allowance rate of £45.50 for those aged 18-24)

	% unemployed*	population of 18-24 year olds**	Estimated number of unemployed	Total cost (£ per week) based on JSA rate of £45.50
London	10.8	722,878	78,133	3,555,051
North East	11.5	242,939	27,830	1,266,265
North West	7.7	625,099	48,167	2,191,598
Yorkshire	8.6	482,251	41,244	1,876,602
East Midlands	7.3	384,974	28,223	1,284,146
West Midlands	8.2	478,789	39,223	1,784,646
East of England	7.5	439,746	33,165	1,509,007
South East	7.0	681,477	47,442	2,158,611
South West	6.2	413,670	25,487	1,159,658
<b>England</b>	8.2	4,471,823	368,698	16,775,759
<b>Wales</b>	8.1	265,645	21,517	979,023
<b>Scotland</b>	9.1	458,631	41,815	1,902,582
<b>Northern Ireland</b>	7.1	169,050	11,952	543,816
<b>UK</b>			<b>443,982</b>	<b>20,201,181</b>

\* Labour Force Survey, 2005; \*\* Office for National Statistics (2004 data).

Receipt of income-based Job Seeker's Allowance also automatically entitles individuals to free school meals, health benefits (including free prescriptions, dental treatment and sight tests), maximum council tax benefit, maximum housing benefit and certain Social Fund payments. So the total benefit paid to unemployed persons varies depending on their personal characteristics.

For 18- to 24-year-olds, the amount paid out in Job Seeker's Allowance alone would add up to around £20 million per week.

In calculating the productivity loss, average earnings for employed people in this age range have been used as an estimate of the average earnings unemployed persons might expect to receive if they were in employment; on this basis, weekly pay is about £242. This should be thought of as an upper band since young people who are unemployed may be different from those in employment in a way that is difficult to capture using variables in the Labour Force Survey.

## The productivity loss to the UK economy in terms of foregone income – £70 million per week.

Average weekly pay of £242 compares very favourably to the income and non-income related benefits received by unemployed persons in the same age range (£90.34 on average – estimated using the Family Resources Survey). If we use £242 per person, per week as an estimate of foregone earnings in the 20-24 age range and multiply this by the number of people unemployed by region, we obtain an aggregate estimate of weekly foregone earnings.

For the whole of the UK, the productivity loss in terms of foregone earnings is £70 million per week when measured in this way.

The estimated foregone earnings can also be thought of as the weekly loss to the economy of unemployment under the assumption that those in employment are paid their marginal product and the earnings of these people really are similar to the earnings unemployed persons might expect to receive <sup>2</sup>.

Measuring foregone earnings can be difficult: if we consider the earnings of someone in work who is very similar to an unemployed person – in terms of education and ability – we run into difficulties because unemployed people may be different from employed people in ways that are hard to measure. And if we use the information available in the Labour Force Survey to estimate the *probability* of unemployment for people in the 20-24 age range according to observable characteristics like age, gender, marital status, ethnicity, qualifications, health and dependents<sup>3</sup> we find that collectively, these variables have relatively low power in explaining unemployment.

<sup>2</sup> There are also issues of general equilibrium effects arising from large increases in employment. This is another reason for thinking of the 'productivity loss' estimate as back-of-envelope.

<sup>3</sup> We consider persons aged between 20-24 (rather than 16-24) because many 16-19 year olds are in education rather than in employment. Also, we do not follow this procedure to estimate foregone earnings of the economically inactive because of the greater difficulty of comparing such people to those in employment (for example, people may be economically inactive because of an illness).

## Estimated weekly foregone earnings as a result of unemployment and estimated benefits

Region	Percentage unemployed*	Population 20-24 **	Estimated Number of unemployed in 2005 (20-24)	Estimated Foregone earnings £	Estimated benefits £
London	10.2	537,256	54993	13,298,718	4,968,039
North East	9.5	170,411	16223	3,923,183	1,465,595
North West	6.4	437,716	28212	6,822,446	2,548,680
Yorkshire	7.8	341,558	26682	6,452,419	2,410,448
East Midlands	5.6	270,965	15119	3,656,305	1,365,896
West Midlands	7.1	336,762	23890	5,777,375	2,158,270
East of England	6.6	308,560	20474	4,951,075	1,849,587
South East	6.9	479,299	32841	7,941,882	2,966,871
South West	5.9	289,129	16962	4,101,820	1,532,328
<b>England</b>	7.4	3,171,656	235544	56,961,113	21,279,122
<b>Wales</b>	6.2	186,150	11551	2,793,287	1,043,496
<b>Scotland</b>	7.4	325,419	23938	5,788,794	2,162,536
<b>Northern Ireland</b>	5.9	116,597	6913	1,671,738	624,516

Note: benefits are estimated based on the Family Resources Survey for 2004/05. The benefits include all income and non-income related benefits for unemployed persons (estimated as £90.34 per person, per week).

\* Labour Force Survey; \*\* Office for National Statistics (2004 data).

### 1.3 Youth unemployment – the long-term wage penalties

The personal cost of not being in education, training or employment is not only in the immediate loss of earnings but also in future benefits that come with education, training or work experience. Some argue that there is a ‘wage penalty’ from youth unemployment even if individuals avoid being unemployed again. Using the National Child Development Study, Gregg and Tominey (2004) estimate that youth unemployment imposes an impact on individuals’ wages of 12-15 per cent by the age of 42.

The penalty is lower, at eight to 10 per cent, if individuals avoid repeat incidence of unemployment. Gregg (2001) uses the same data set to show that the future incidence of unemployment is related to youth unemployment. Conditional on background characteristics, an extra three months of youth unemployment (before the age of 23) leads to an extra 1.3 months out of work between the age of 28 and 33.

Another study in the UK, using the Labour Force Survey<sup>4</sup>, finds that the long-term effects of unemployment are conditional on the individual’s skill level with a lasting adverse effect for low-skilled individuals but not for mid- to high-skilled individuals. The former group is more likely to experience unemployment in the long term.

A recent study in the United States finds evidence for short-term persistence of youth unemployment on future unemployment but little evidence for long-lived persistence (Mroz and Savage, 2006). However, they find lasting effects of youth unemployment on future wages. They simulate that a 26 week unemployment spell experienced at age 22 results in an earnings loss of \$1,400 to \$1,650 at age 26 and a loss of \$1,050 to \$1,150 at age 30.

<sup>4</sup> Burgess *et al* (2003)



## A design on a new life

From the age of seven Chandrika wanted to be a fashion designer, but her severe dyslexia held her back at school. She left with no qualifications, ending up homeless and with little chance of getting a job.

Her childhood dream took another step back when she became a single parent of two. Becoming estranged from her family after they felt she was a disappointment to them, her confidence and self-esteem hit rock bottom.

In 2002 The Prince's Trust awarded her a £4,500 business loan, grant and mentor to design haute couture wedding dresses and accessories. Her business is on course to turn over £300,000 this year and employs four people.

Chandrika believes that The Prince's Trust was her 'guardian angel' and that she is now 'worth something'. She is proud that hard work and determination have secured her family's future and looks forward to expanding her business and creating more jobs.

In addition to these quantifiable costs, there are other, less-tangible effects. Unemployment can damage young people's confidence, leading to low self-esteem and self-worth. In the experience of The Prince's Trust, lack of confidence and self-belief, along with lack of skills, are key factors in excluding young people from successful independent living.

Some studies argue that wage loss is not the main cost of unemployment to the individual. Oswald (1997) maintains that the worst thing about losing one's job is the non-pecuniary stress. Based on results of studies attempting to explain individual well-being or happiness, he concludes that unemployment is the primary economic source of unhappiness. According to Layard (2005), the effect of unemployment on happiness is as important after one or two years of unemployment as it is at the beginning (people do not habituate to it in that sense) and even when back at work, a psychological scar remains.

## 1.4 Youth unemployment – across the UK

Declining levels of youth unemployment have been consistent across the UK, but some areas have been slower to get young people into work than others.

Recent figures show the percentage of those aged 16 to 24 who are unemployed in Scotland, Wales and England are 10.1, 8.6 and nine per cent respectively. In England, the highest level of unemployment is in the North East (at 12.3 per cent), followed closely by London (11 per cent) and Yorkshire (9.7 per cent). The situation is better in the South – especially in the South West where only seven per cent of those aged 16-24 are unemployed. And Northern Ireland comes top of the league with only 6.3 per cent of the age group unemployed, showing by far the highest rate of decline over the time period (1979-85 to 2000-05).

## The percentage of 16- to 24-year-olds who are unemployed by English Region and Country

	1979 -85	1985 -90	1990 -95	1995- 2000	2000 -05	2005	Change 1979/85 - 2000/05
London	9.2	9.4	12.4	11.4	10.2	11.0	0.9
North East	15.7	14.6	14.5	12.7	10.9	12.3	-4.8
North West	14.5	13.6	12.3	10.6	8.6	8.7	-5.8
Yorkshire	13.1	12.2	11.2	10.7	8.7	9.7	-4.4
East Midlands	10.5	9.8	10.2	9.2	7.9	8.3	-2.7
West Midlands	13.6	11.6	11.5	10.7	9.7	8.9	-3.9
East of England	10.0	8.0	9.6	8.4	7.4	8.1	-2.5
South East	8.0	6.9	9.2	7.7	7.0	8.0	-1.0
South West	9.0	8.1	10.0	8.4	6.9	7.0	-2.1
<b>England</b>	11.2	10.1	11.1	9.9	8.5	9.0	-2.6
<b>Wales</b>	14.4	12.8	12.3	11.4	9.2	8.6	-5.2
<b>Scotland</b>	14.6	13.8	12.0	11.4	10.4	10.1	-4.1
<b>Northern Ireland</b>	15.2	14.2	10.5	7.7	6.6	6.3	-8.6

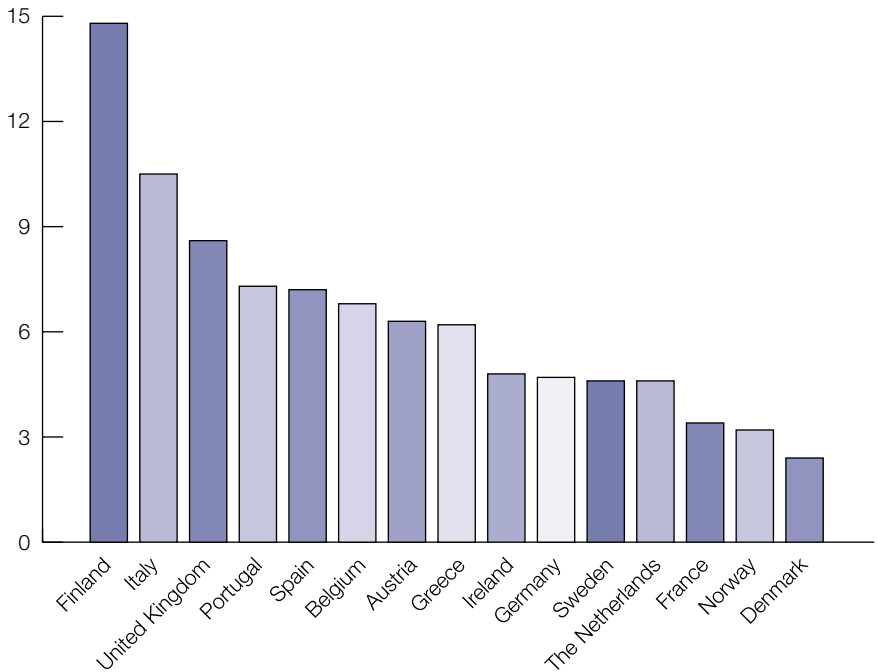
In a context where many people are not even seeking work, more revealing is the percentage of young people classified as ‘not in education, employment or training’ (the NEET group). Trends for England, Wales, Scotland and Northern Ireland are similar to the unemployment picture but with one striking difference: there are much higher levels of people not in education, employment or training among the population aged between 16 and 24. In almost every region, the percentage of the age group who are defined as NEET is at least twice as high as the percentage who are unemployed.

In England, Scotland and Wales, almost a fifth of young people are not in education, training or employment. Northern Ireland has by far the lowest level of NEET among this age group and the fastest rate of decline over the time period (with relative improvements taking place from the mid-1990s to about 2000). However, even here, a very significant number of young people are classified as NEET – 13.8 per cent of the age group, which is over twice the number classified as unemployed.

## 1.5 Youth unemployment – international perspectives

In the UK, 8.6 per cent of 15- to 19-year-olds are defined as not in education or employment (using OECD data) – which is very high by European standards. Of the 15 countries considered, the UK ranks third and performs very poorly in comparison to countries like Ireland, Germany, Sweden and the Netherlands (where the percentage NEET is between 4.6 and 4.8) and to countries like France, Norway and Denmark, where the percentage is just 3.4, 3.2 and 2.4 respectively.

### Percentage of 15- to 19-year-olds not in employment or education



## 1.6 Tackling youth unemployment – The Prince's Trust

The Prince's Trust has a range of programmes that support young people into education or employment. Of the 40,000 young people supported by The Trust last year, three in four went on to education, training or employment on completion of our programmes.

### **The Team programme**

Team is The Trust's flagship 12-week programme of personal development training, aimed mainly at unemployed young people. In 2005-6, 68 per cent of unemployed participants went on to jobs, education or training on completion of the course.

### **Get into . . .**

Get into . . . is a short course enabling young people to boost their confidence while gaining work experience in a specific industry sector. More than 50 per cent of young participants are in full-time work three months after they have completed the programme.

### **Business Programme**

The Prince's Trust Business Programme offers financial support and mentor advice to help disadvantaged young people to start up their own businesses. After 12 months, 96 per cent of people supported through this programme are still trading or in alternative employment, education or training.

## Workless not useless

When Roxanne dropped out of school at 15 with no qualifications she was heading for a life of unemployment.

The 16 year-old from Blaenau Gwent, South Wales, had no idea what to do with her life. Roxanne says: “I was bored at school. I couldn’t sit and learn stuff like others, nothing would ever go in, so I didn’t write things down. When I left school I was jealous of the people who passed their exams and soon worried it was too late to do anything with my life. I live in an area where jobs are really hard to get, so I wasn’t sure what I’d do.”

But building on her love her cars, she enrolled on a Prince’s Trust scheme supported by the RBS Group, which runs as a social enterprise to train and employ young people in the bottom 25% most deprived areas.

Roxanne adds: “The course has made a difference to my life. Now I want to open my own garage and run my own business.”



## 2. The cost of youth crime

### – £1 billion per year

By using the average cost associated with each crime committed, together with information on the total number of convictions, the estimated cost of youth crime for Great Britain is in excess of £1 billion a year. Clearly, any reduction in youth crime could lead to a significant saving to the British economy.

#### 2.1 Youth crime – the facts

Every year an estimated 70,000 school-age offenders enter the youth justice system <sup>5</sup>.

On 3 November 2006 there were 9,136 18- to 20-year-olds in prison in England and Wales <sup>6</sup>. According to a report by the Social Exclusion Unit (2005), young men are the most likely perpetrators of crime; 18- to 20 year-olds constitute 42 per cent of all first time offenders and three-quarters of male offenders aged between 18 and 21 re-offend within two years.

In England and Wales in 2004, 'theft and handling stolen goods' is the largest category of offence for all age groups. This is particularly the case for women, who are, however, much less likely to be offenders. Among male offenders, from the age of 15 onwards, crimes classified as 'violence against the person' and 'drug offences' are the largest categories of offence after theft.

The perception of crime is often as powerful a factor in determining how people feel as actual crime itself. The perception of crime in the UK is that it is often perpetrated by young people and that it is on the increase: 32 per cent of people interviewed for the British Crime Survey in 2005 said that young people hanging around on the streets was a big problem in their area, up from 29 per cent in 2004 <sup>7</sup>.

<sup>5</sup> HM Government, Reducing re-offending through skills and employment, December 2005

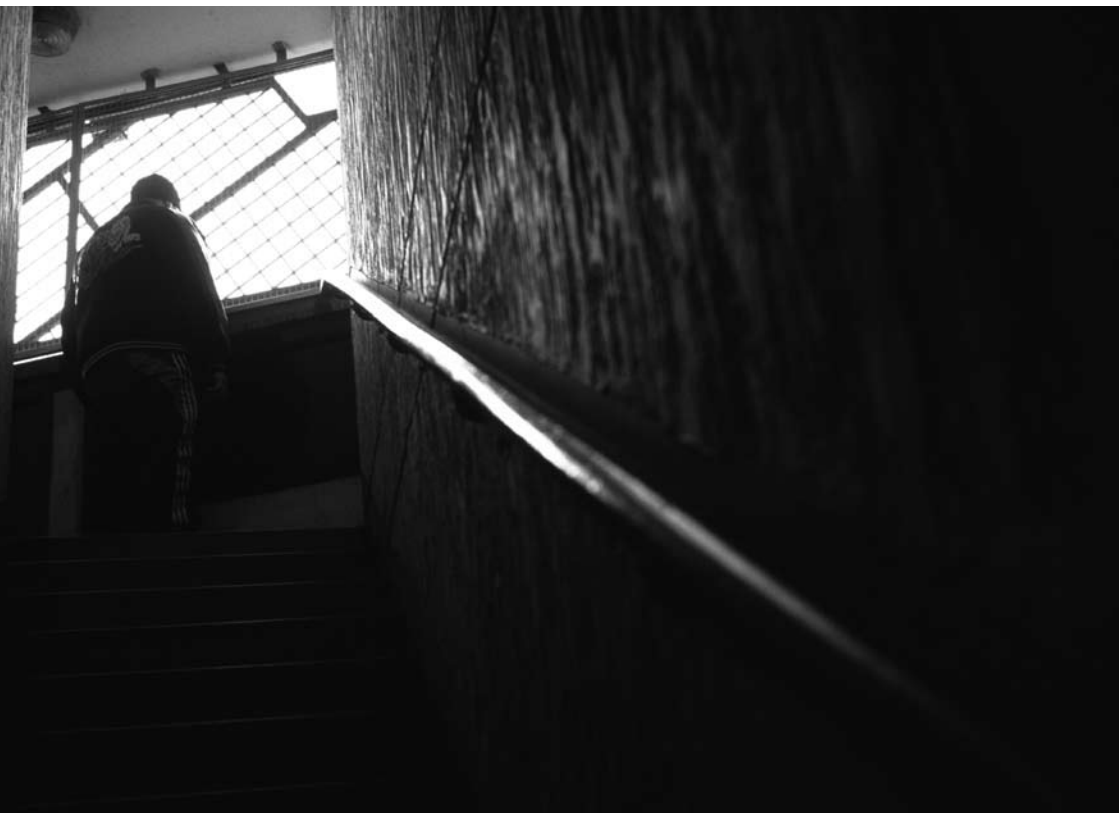
<sup>6</sup> Home Office (2006), Population in Custody

<sup>7</sup> Quarterly findings of the British Crime Survey, Home Office, 2006

18 to 20 year-old male prisoners released in 1997 reconvicted at a rate of 72 per cent over the following two years.

Whatever the perception of youth crime, it is apparent that becoming a young offender can be a one-way ticket to further exclusion. Young offenders are much more likely to be unemployed than their peers and, as a result, more likely to re-offend. Multiple exclusions stalk young offenders, even those with the best intentions to reform, severely damaging their chances of a decent future.

The total bill for youth crime is therefore something that plays out over a number of years, with costs compounding with every conviction and re-conviction.



## 2.2 Youth crime – calculating the costs

By using the average cost per crime, together with information on the number of convictions in each region in 2004, the total regional and national cost has been calculated.

### Estimated costs of crime by young people aged 10-21 in 2004

	Number of convictions	Estimated total cost (£000s)	Number of convictions	Estimated total cost (£000s)
South East	11538	52,901	23986	109,974
South West	6329	29,018	15936	73,065
West Midlands	9235	42,342	15552	71,305
East of England	8258	37,862	17048	78,164
East Midlands	7076	32,443	17972	82,400
London	11688	53,588	27899	127,914
North East	8847	40,563	18256	83,702
North West	16618	76,192	32579	149,372
Yorkshire	8775	40,233	18358	84,170
<b>England</b>	88364	405,141	187586	860,065
<b>Wales</b>	6016	27,583	16489	75,601
<b>Scotland</b>	7687	35,244	20149	92,381
<b>Great Britain</b>	102,067	467,968	224,224	1,028,047

Note: The average cost is a weighted average of the following types of crime: violence against the person, sexual offences, robbery, burglary, theft and handling goods, criminal damage. Weights are derived from the prevalence of these crimes among young people. This cost (£4,584.9) is multiplied by the number of convictions to obtain the estimated total cost.

For Scotland, the number of convictions relates to 2003. The average cost of crime in England and Wales is also applied to Scotland.

Brand and Price (2000) attempt to estimate the costs of a subset of crimes (under 'notifiable offence categories') where reliable information is available on the cost and the number of offences committed. Costs are incurred in anticipation of crimes occurring (such as security expenditure and insurance

The total sum for Great Britain is calculated to be £1,028,047,000.

## Driven by success

Geoffrey, 26, spent three years in prison before turning his life around. He now runs his own business running a cheap transport scheme to help the families of prisoners.

By day, Geoffrey was training to be a lawyer. But by night he returned to his street gang, leading a double life causing trouble. He soon found himself on the wrong side of the law and ended up in prison for armed robbery.

Geoffrey said: “I got seven years. It really hit me. I lost so many things. My car, all my clothes and, most importantly, my girlfriend had gone. Suddenly I realised that every time you go to prison, it gets worse. And you’re not getting younger. You get older and people start to see you as a waste.

“So I just started to think what I could do, to get me out of this. The Prince’s Trust came into the prison and did an “open session”. They gave me hope and made me realise that there were options. I did three years and four months. And when I got out I went to The Prince’s Trust, who I kept in contact with throughout my sentence, and just started from there. I already had the idea for a business, so just took it from there.

“Nobody gives you the time of day when you leave prison. You can’t get credit from a bank. You can’t get a job. But when I met The Prince’s Trust, I think I found a father-figure. I don’t know my dad; I’ve never known him. I worked for nearly nine months before I got the money from The Trust, but it taught me patience, assertiveness and, ultimately, if you work hard you will be rewarded.”

According to the Social Exclusion Unit, nearly two-thirds of young offenders are unemployed at the time of arrest.

administration costs), as a consequence of criminal events (such as property stolen and damaged, emotional and physical impacts and health services) and responding to crime and tackling criminals (costs to the criminal justice system). Estimates have been updated by Dubourg and Hammond (2005). Variation in the cost between regions reflects differences in the number of convictions but total convictions are not the sum of all recorded crime.

Costs to the criminal justice system can be particularly high if a young person needs to be sent to a male Young Offender Institution or a Secure Training Centre, estimated, respectively, at £47,000 and £130,000 per prisoner, per year (Social Exclusion Unit, 2002).

However, it is less easy to quantify the impact of a criminal record on young people's employment prospects; the fear of young people as criminals has on neighbourhoods; the loss of human capital when a young person is in prison; and the emotional and behavioural effect that negative perceptions of ex-offenders may have on the individual.

## 2.3 Youth crime – links to unemployment and educational underachievement

There is an inextricable link between unemployment and crime. And young people are often worst affected by crime: they suffer both as victims of crime and as dependants of offenders<sup>8</sup>. Simple economic models suggest that declining labour market opportunities increase the incentive to engage in economically-motivated crime (burglaries rather than violent crime).

The association between unemployment and crime is particularly evident among younger people: nearly two-thirds of young offenders were unemployed at the time of arrest compared to 46 per cent of those aged over 25 (Social Exclusion Unit, 2005).

<sup>8</sup> Social Exclusion Unit (2006)

Levitt (2004) states that, controlling for other factors, almost all studies report a statistically significant but substantively small relationship between unemployment rates and property crime. He suggests that a typical estimate would be that a one percentage point increase in the unemployment rate is associated with a one percentage point increase in property crime. Applying this estimate to England and Wales, a one percentage point increase in 'robbery', 'burglary' and 'theft and handling stolen goods' in 2004 would imply an extra 899 young people (aged 10-20) found guilty or cautioned by the courts. Multiplying the extra number in each category by the average cost of the respective crimes leads to a total additional cost of £2,194,881.

Youth offending is also often linked to educational underachievement. Academic studies have shown a causal link between an individual's education and labour market prospects and his or her probability of turning to economic-related crimes.

The fact that many young offenders also happen to have low educational achievement and/or poor employment credentials can make rehabilitation very difficult, especially after a period in prison. According to a report by the Social Exclusion Unit (2002), 18- to 20-year-old male prisoners released in 1997 reconvicted at a rate of 72 per cent over the following two years. They suggest that a sharp rise in social exclusion (for example: child poverty, drug use, school exclusion and inequality) is one of the factors responsible for a rise in the reconviction rate in the 1990s.

The report also presents a striking picture of social exclusion among the prison population. Compared with the general population, prisoners are:

- **13** times as likely to have been in care as a child
- **13** times as likely to be unemployed
- **10** times as likely to have been a regular truant
- **2.5** times as likely to have had a family member convicted of a criminal offence
- **6** times as likely to have been a young father
- **15** times as likely to be HIV positive

And even if unemployment was not the reason a young person committed a crime in the first place, he or she could find that a prison record is a huge barrier to finding employment after release. The stigma of a period in prison and the effect of imprisonment on the acquisition of human and social capital may

contribute to this.<sup>9</sup> According to Fletcher *et al* (1998), at least 90 per cent of those leaving prison enter unemployment, comprising two to three per cent of the average monthly in-flow to the unemployment pool. Ex-prisoners are also more likely to remain unemployed in the long term rather than take a number of short-term jobs. It is, however, difficult to know how much this is due to imprisonment and how much to characteristics which may have made these individuals less employable to begin with (for example, low levels of basic skills).

Whatever the results of these studies, it is clear that youth imprisonment can have a substantial impact over the course of a person's life. Sampson and Laub (1993, 1997) argue that early incarceration can contribute to an accumulation of disadvantage, often beginning with juvenile delinquency that 'may spark failure in school, incarceration and weak bonds to the labour market, in turn increasing later adult crime'. As noted by Western *et al* (2001), this argument suggests that incarceration can interrupt young men's transition to stable career employment.<sup>10</sup>

## 2.4 Youth crime – across Great Britain

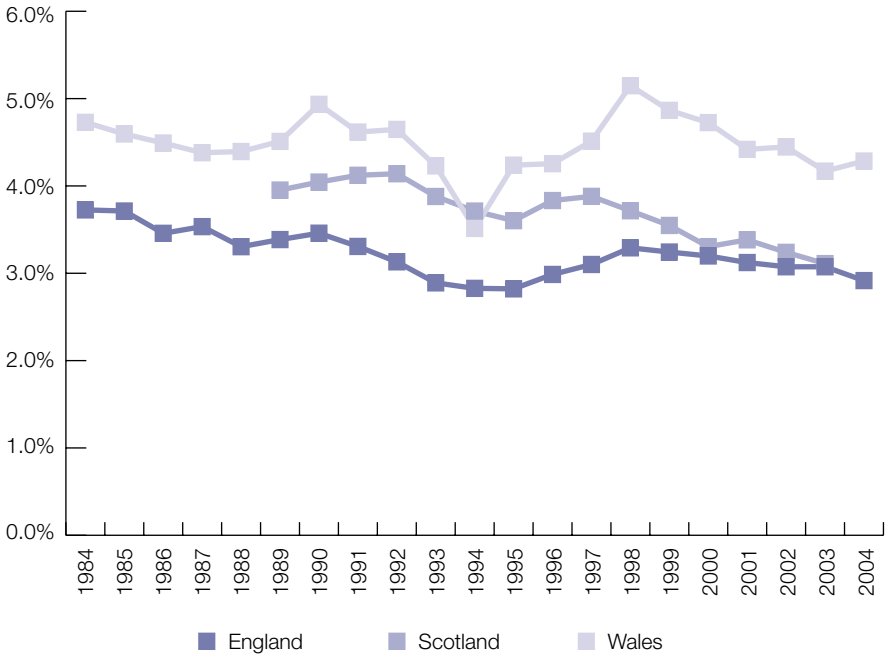
### **Convictions**

When we consider the number of convictions expressed as a proportion of 15- to 24-year-olds in each region, there appears to have been a decline between 1984 and 2004. In the older age category (18- to 21-year-olds) the decline has been very gradual (and not very dramatic) in England. For Wales, the pattern is more erratic – with relatively marked decreases in the periods 1990-94 and again from 2000-04, but with an increase in the middle. For Scotland, there has been a faster rate of decline in the number of convictions for this age group – eliminating the gap between England and Scotland such that convictions are now equally prevalent in both countries (adjusting for population size).

<sup>9</sup> as discussed by Western *et al* (2001)

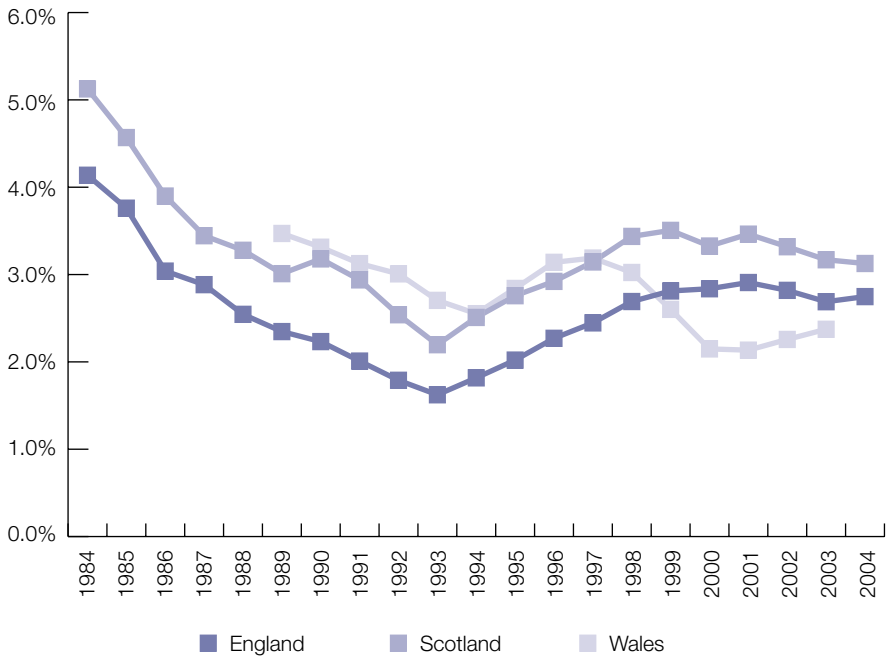
<sup>10</sup> Nagin and Waldfoegel, 1998; Western 2002

## Convictions of young people aged 18-21



Although there are many more convictions for young people in the older age category, trends over time are more pronounced for the younger age group. For those aged 10-17, there was a reduction in convictions in all countries up to about 1993 (we can only observe this from 1988 onwards for Scotland), but then a subsequent upward trend. This trend levelled out for England and Wales from the late 1990s (with a small decrease) and was reversed in Scotland from 1996.

## Convictions of young people aged 10-17



The regional picture shows pockets of high conviction rates.<sup>11</sup> In England in 2004, the total number of convictions is higher in London and the North West than elsewhere (for both age groups). But adjusting for population size, the North East appears to have the most serious problem. In fact, the North East is the only region where the number of convictions has increased for both age categories (adjusting for population size) if we compare 2000-04 to 1984-90. Also, there has been an increase in the number of convictions of 10- to 17-year-olds in London between these two time periods.

<sup>11</sup> We looked at the average number of convictions in each English region for four time intervals between 1984 and 2004, as well as the number in 2004 and the change over time. We considered the actual number of convictions as well as the number of convictions expressed as a proportion of 15- to 24-year-olds in each region.

## Prison population

Within the UK, the prison population rate is highest in England and Wales, a little lower in Scotland and only half the size in Northern Ireland. But Northern Ireland has the highest percentage of young prisoners – 5.7 per cent under 18 and 14.5 per cent between 18 and 21 years of age. For England, these figures are 3.9 and 12 per cent respectively; and for Scotland 2.8 and 10.9 per cent.

## 2.5 Youth crime – international perspectives

The UK compares unfavourably with other European countries: the rate of imprisonment is higher in England and Wales than in any country shown in the table opposite. It is substantially higher than 10 of the 12 countries and is broadly comparable only to Portugal or Spain. The share of the prison population that is under 18 years of age is nearly twice as high in England and Wales than in Portugal and higher, again, compared to any other country.



## Population of Penal Institutions on 1 September 2002

Countries	Prison population rate per 100,000 inhabitants	Median age	Percentage of Prisoners under 18 years	Percentage of Prisoners from 18 to 21 years
England and Wales	137.1	29	3.9	12
Northern Ireland	62.3	28	5.7	14.5
Scotland	128.7	29	2.8	10.9
Austria	92.3	28	1.5	9.4
Belgium	90.2	33.7	1.1	6.6
Denmark	64.1	...	0.3	...
Finland	66.7	33.3	0.5	3.3
France	87.6	31.6	1.3	8.9
Ireland	78.0	28	1.5	13.3
Italy	99.8	...	...	2.6
Netherlands	100.8	32.4	0.6	6.3
Norway	58.8	...	0.5	7.6
Portugal	132.8	34.3	2.1	4
Spain	126.2	34.2	...	2.6
Sweden	73	35	0	2.8

Note: Statistics from the Council of Europe, Annual Penal Statistics. Survey 2002.

The prison population includes pre-trial detainees.



## Finding a future

John Paul, 28, from Kettering was doing nothing with his life: he was unemployed for almost 13 years, taking drugs and stealing to support his family. His criminal record left him with very few options. He felt he had no future until he heard about The Trust's construction-themed Team. John Paul now has a job with Sir Robert McAlpine and is due to attend college in the evenings.

"I was doing nothing with my life, it was a mess. I was taking drugs, stealing. Everything was a mess. I had no routine, no structure, no set measures and took each day as it came. I lived from day to day and got on with it as best I could. I had no future.

"I'd heard about The Prince's Trust courses. At the time I was on a probation order and the senior Probation Officer mentioned that The Prince's Trust were starting a new course with a construction theme and I knew straight away it was for me. I was tired of not getting anywhere.

"My life has changed through my involvement with The Prince's Trust. I've ended up with qualifications and a good, paid job and made new friends. I'm not in a rut anymore. I've got a good life now. I'm even planning for the future."

## 2.6 Tackling youth crime – The Prince's Trust

The Prince's Trust is helping to break the cycle of crime by offering offenders training and support so they can turn their lives around and give back to society. The Trust works with young people in custody along with ex-offenders in the community. As well as direct recruitment, many offenders are referred from statutory agencies, including Youth Offending Teams, Probation and Prison Resettlement Units.

Trust programmes are not designed exclusively for offenders, but they do offer opportunities for young people to break their offending cycle and fulfil their aspirations.

In 2005/06 more than 3,500 participants of Trust programmes were offenders or ex-offenders. Almost 65 per cent of them moved into employment, self employment, further education or training.

The Prince's Trust also provides positive choices for young people at risk of offending. Our xl programme helps tackle truancy and school exclusion, while our Group Awards provide financial support for young people to make a positive contribution to their communities, instilling a sense of ownership and pride.





## 3. The cost of educational underachievement – £18 billion

Each year, around five per cent of young people leave school with no qualifications.<sup>12</sup>

For these young people, life after school can be challenging. In *Reaching the Hardest to Reach* (2004), The Prince's Trust revealed that almost half of unemployed young people say a lack of qualifications prevents them from achieving their goals. Leaving school with no education means they are less likely to get a good job and more likely to rely on the state to support them. They are also more likely to commit a crime. The costs of unemployment and crime are quantified in chapters 1 and 2 of this report.

Underachievement has a substantial effect on the UK economy over a long period of time as well as on the prospects of the individuals affected. Underachievement rates have stalled in the UK, presenting us with a considerable and costly problem that isn't getting any better.

### 3.1 Educational underachievement – the facts

A young person's underachievement at school can range from obtaining no qualifications at all to failing to reach the same level as the majority of their peers – particularly in English and Maths. In England, for example, by the time they reach age 14, educational underachievers may not have achieved National Curriculum Level 5 in English, Maths and Science.

Young people most at risk of educational underachievement include those:

- who truant
- who are excluded from school
- with offending behaviour
- with poor literacy or numeracy skills
- with basic skills needs

<sup>12</sup> DfES, Statistics of Education (2002)

Other influential factors include:

- prior attainment – those who underachieve at primary school often fail to ‘catch up’
- gender – girls outperform boys in national tests
- health – for example, physical illness leading to time off school
- factors such as low family income, parental unemployment, poor housing and parent’s education and level of attainment
- family structure – students who grow up in institutional care or multiple foster places, or in large families
- pupil mobility – number of schools attended
- ethnic background and fluency in English

### 3.2 Educational underachievement – calculating the costs

The cost of educational underachievement is borne to a great extent by the individuals affected. This in turn may lead to unemployment or crime, and the impact on the UK economy is discussed earlier in this report.

#### **Employment and wage returns**

There is much evidence that successfully completing additional years at school can lead to large average wage returns. In the UK, research suggests that the financial returns vary quite substantially for different types of qualification. Typically, there are higher wage returns to academic qualifications than vocational qualifications and no returns to low-level qualifications (defined as below Level 2).<sup>13</sup>

However, even though low-level vocational qualifications have no wage return, McIntosh (2004a) shows that they can have an important effect on the probability of gaining employment for young people aged between 23 and 25 who leave school without any qualifications. Using the Labour Force Survey, he shows that if such people subsequently obtain a Level 1 vocational qualification, the probability of finding a job is increased by four percentage points for men and 16 percentage points for women. Estimates are higher if they obtain Level 2 or Level 3 vocational qualifications. For men, this raises the probability of

<sup>13</sup> See, for example, Dearden et al. (2002, 2004) and Sianesi (2003)

finding employment by 10 and 12 percentage points respectively. For women, the probability is raised to 19 percentage points for either Level 2 or 3.

For the group of workers who leave school with no qualifications, there are positive wage returns to many types of vocational qualification. The magnitude of the return varies by gender and by type of qualification. A study by Blundell et al. (2005), which focuses more on academic qualifications, finds average returns to achieving O-levels, A-levels and Higher Education of 18 per cent, 24 per cent and 48 per cent respectively.

Dearden et al. (2004) analyse the returns to education for the individual at the margin of deciding whether or not to stay on in education beyond the age of 16. They use the British Cohort Study, which surveys individuals born in a week of April 1970 at intervals through their lives. Returns to staying on in education are estimated for various subgroups of 'marginal learners' when they were aged 29-30 (1999/2000). They find substantial returns to staying on in education for all subgroups of the population. On average, the wage return to 'staying on'

On average, the wage return of staying on in education is about 11% for men and 18% for women.

is about 11 per cent for men and 18 per cent for women. Lower returns of six to eight per cent are estimated for male drop-outs of either low ability or low social class. However, higher returns are estimated for people from low income families. Within this subgroup, the wage return estimate is 13 and 17 per cent for men and women respectively.

McIntosh and Vignoles (2000) and Layard et al. (2002) consider the importance of basic literacy and numeracy skills for labour market returns. They show that even acquisition of very basic skills in numeracy and literacy has an important effect on the probability of employment and on wages. The measure of literacy/numeracy, Level 1, is equivalent to standards of literacy and numeracy that should be achieved by age 11, according to the National Curriculum.

However, around 20 per cent of adults do not meet this standard. These studies found that, controlling for other characteristics, acquisition of Level 1

numeracy or literacy skills raises the probability of employment by about five percentage points and, for workers, it raises wages by about nine percentage points in the case of numeracy skills and seven percentage points in the case of literacy skills.<sup>14</sup>

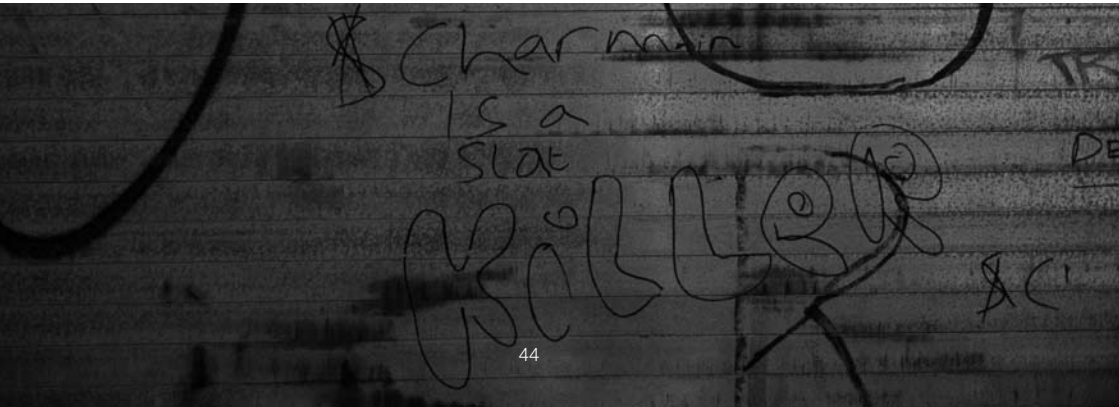
There are therefore large payoffs to investment in education – either in terms of boosting employability or from wage returns. It follows that individuals who do not access education are, on average, more disadvantaged.

To get an idea of how much a wage return of 10 per cent is worth over working life, the Family Resources Survey was used to obtain a wage profile for a cross-section of men of each age between 20 and 64.<sup>15</sup> The aggregate discounted value of a 10 per cent rise in average wages was then calculated. This comes to around £36,000, illustrating the high potential loss of income for those who are unable to take advantage of opportunities to pursue their education.

Using estimates from the Labour Force Survey of the percentage of people with no qualifications, together with population figures to estimate the number of young people with no qualifications in the UK – and assuming each person suffers an average 10 per cent loss in earnings over their lifetime – the cost to the UK economy can be estimated at about £18 billion. However, in practice, if all people stayed in education and obtained a qualification, the dynamics of the economy would change, which in turn would change wage returns to education.

<sup>14</sup> The estimate for literacy is not statistically significant. However, results for literacy skills are more sensitive to the data set used. Estimates using the International Adult Literacy Survey suggest higher effects. Estimates reported here control for family background and age 7 ability.

<sup>15</sup> We use the Family Resources Survey from 2002-03 and a discount rate of 3.5%.



## **Health penalties**

The consequences of educational underachievement for the individual are not just financial. There is evidence of a relationship between education and health (see Grossman, 2000).

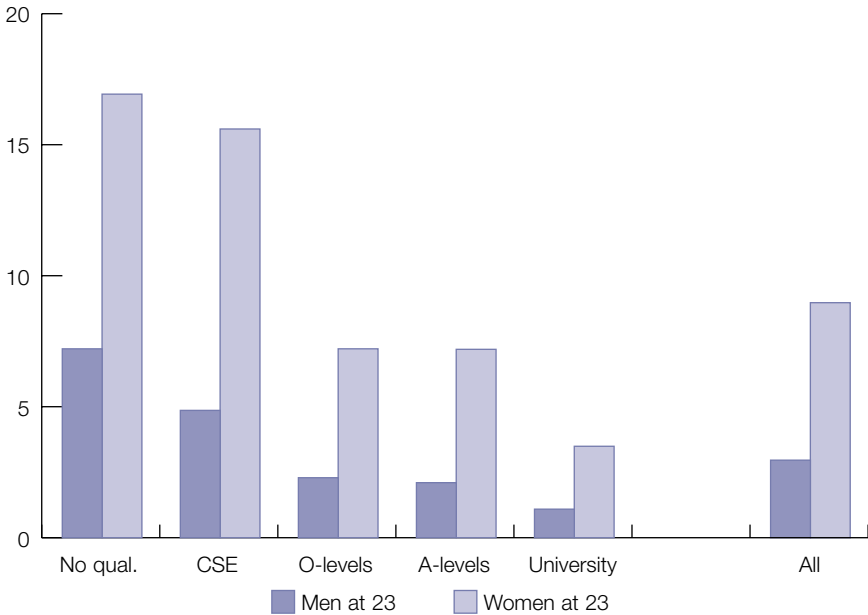
Education may affect health outcomes directly by enabling individuals to process information and become health conscious. For example, Goldman and Smith (2001) find that more highly educated people are more likely to comply with treatments for diabetes and AIDS. Goldman and Lakdawalla (2001) suggest that more educated people are better able to manage chronic conditions. The relationship might also be indirect: a more educated individual may get a better job and/or working conditions and a better wage may promote a lifestyle that avoids or mitigates certain health problems.

But it is difficult to show causality because health may affect educational achievement as well as the other way round. And good health and educational outcomes may reflect other individual characteristics that are hard to measure in data sets, like a happy home environment. The most convincing way to address this issue is to find a source of variation in education that does not directly affect health outcomes, like changes to the compulsory school leaving age. It is then possible to implement an 'instrumental variable' approach to examine whether the specific change in education led to any change in health outcomes.

Llearas-Muney (2005) used this approach to estimate the relationship between education and adult mortality in the US. She shows a large effect of changes to compulsory school leaving laws on adult mortality. However, effects are estimated for changes in laws from 1901-1925 in the US, when average education levels were very low. It is not clear that this conclusion would apply in a situation where children are compelled to stay at school up to the age of 16.

Chevalier and Feinstein (2005) consider the impact of education on mental health. They try to identify causality but do not have as good instruments at their disposal as the former study so whether or not they identify a genuine causal effect of education on mental health is controversial. However, it can certainly be shown that there is a strong association between the education level of young people aged 23 and their probability of having depression.

### Probability of depression at 23 by education level



Provided by Arnaud Chevalier. See also Chevalier and Feinstein (2005.)

The National Child Development Survey, a longitudinal survey of all people in Britain born in a week of 1958, shows that people with higher education levels have a lower probability of getting depression. The probability of having



depression at age 23 in this survey is seven and 17 per cent respectively for men and women with no qualifications. This compares with an average probability of three and nine per cent for all men and women in the survey.

After including quite detailed controls (for example, for early ability and family characteristics), regressions suggest that achieving one O-level or more is associated with a lower probability of having depression by about two percentage points for men and five percentage points for women at age 23, in comparison with people who do not have these qualifications.

Thomas and Morris (2003) summarise the prevalence of depression in England and estimate various types of outcomes and associated costs. The number of 16- to 24-year-olds in England suffering from depression in 2000 is estimated at 180,094. One would have to make quite strong assumptions to use the result by Chevalier and Feinstein (2005) in this context<sup>16</sup> but applying their result of a two to five per cent increase in the probability of depression by educational underachievers suggests that 3,602 to 9,005 people could be affected. The cost to the NHS alone is about £139 per person on average<sup>17</sup> which makes the estimated total cost between £500,678 and £1,251,695.

But indirect costs arising from lost earnings – due to inability to work – are likely to be much higher. In the Thomas and Morris study, these are estimated as 23

<sup>16</sup> One would have to assume that the measure of depression is comparable in both studies; that the result estimated by Chevalier and Feinstein (2005) has a causal interpretation; and that this result can be generalized beyond the survey population – specifically, to 16- to 24-year-olds in England in 2000.

<sup>17</sup> Derived from estimates available in Thomas and Morris, (2003)



times higher than direct costs. Multiplying our estimated direct cost by 23 would put the total cost of depression (arising from educational underachievement in young people) at between £11 and £28 million.

Hammond and Feinstein (2006) consider the association between broader measures of educational success and health (though they do not claim to identify a causal relationship). Using the National Child Development Survey, they define flourishing at school not just in terms of examinations passed, but more generally in terms of functioning well intellectually, psychologically and socially at school. Some of their findings focus on cohort members who had poor school attainment. For this subgroup, they show that those who were

The total cost of depression arising from educational underachievement in young people could be as much as between £11 and £28 million.

more engaged at school had better adult health and well-being than those who were less engaged at school.

Any positive causal relationship between education and health may also benefit the next generation. Currie and Moretti (2003) demonstrate an important link between increases in women's education in the US and the health of their children, as measured by birth weight. They show that an increase in the availability of further and higher education in the US in the 1960s and 1970s (through the construction of new colleges) had a significant impact on the education of mothers. They estimate that an additional year of education as a result of this increased availability of colleges reduced the incidence of low birth weight by about 10 per cent and reduced the incidence of pre-term birth by six per cent on average. These effects arise because education affects maternal behaviour – for example, by reducing smoking.

A recent study by Black et al. (2006) shows that birth weight can have important causal effects on future outcomes for children. They show that increasing birth weight by 10 per cent raises earnings by about one percentage point (in Norway).



## Becoming productive

Abby, 19, from Kent suffered through a childhood of emotional and physical abuse. Unsurprisingly, her schooling suffered and she entered a spiral of depression. Abby was forced out of her home at 15 and found herself unemployed, homeless and in trouble with the police.

“At 15 I was homeless and suffering from depression. Having had a turbulent relationship with my mother, it became clear that I could no longer live with her. I enrolled in and dropped out of college twice. I got stuck in a rut and doing nothing all day and living in a hostel, my self confidence became very low. I had no motivation and my depression became worse. I had very little money and took part in criminal activities for extra money. There was nothing constructive happening in my life and I felt really miserable.

“I found out about Sound Live through an advert on the television. I had always enjoyed singing. It sounded like something I might enjoy. My depression made it hard for me to take the chance and go but I’m glad I did. It was a wonderful experience. I made new friends and gained self confidence and motivation.

“I was motivated enough to begin an Access to University Course. I passed my exams and a year on I’m going to university to study psychology. I want to be an educational psychologist and help children in schools to overcome any problems they might have.

“My life has changed in a really positive way and I’m glad I overcome my problems to begin a successful and productive life.”

## **Value over time**

Encouraging young people to remain in education not only benefits this generation, but can also help break the cycle of educational underachievement for future generations.

Despite repeated efforts to tackle the problem of young people leaving education without qualifications or workplace skills, recent figures for England show that 11 per cent of 16- to 18-year-olds are still outside education, training or work.

To help tackle this issue, the Department for Education and Skills has confirmed plans to raise the school leaving age, requiring young people to stay in school, training or workplace training until the age of 18.

The potential long-term impact of such a policy can be examined by studying previous reports such as Chevalier (2004) who looks at the consequences of increasing parents' education on the education of their children using the extension of the compulsory school-leaving age from 15 to 16 in 1972.

Chevalier (2004) finds that an extra year of a mother's education increases her child's probability of staying on in school beyond compulsory school-leaving by eight to 10 percentage points. The effect of fathers' education is much lower and not well determined in the regressions. Oreopoulos et al. (2003) use a similar approach for the US and find strong effects for both mothers' and fathers' education on the educational outcomes of their children.

Educational underachievement has substantial – and lasting – effects on individuals such as the probability of employment, the level of wages and other aspects of well-being like health. But at a macro-economic level, educational underachievement also affects the relative performance of the UK economy over time. The UK has between 10 and 25 per cent lower output per hour than France, Germany and the US and much of this can be accounted for by a poorer level of skills and a shortfall of capital investment (CEP, 2005).<sup>18</sup>

Although there are signs of improvement, there is a long way to go before the UK is on a par with Germany and France in the extent of educational underachievement among those aged 25-28, or (in the case of France) those aged 19-21.

<sup>18</sup> The two factors are related since low skills attract less physical capital.

### 3.3 Educational underachievement – across the UK

Although the percentage of young people with no educational qualifications declined very rapidly in the 1980s and, to a lesser extent, in the following decade, the percentage of young people with no qualifications is still very high. This is true in all regions of the UK: in 2005, the percentage of people aged 16-24 with no qualifications was as 12.6 per cent, 12 per cent, 8.3 per cent and 19.9 per cent in England, Wales, Scotland and Northern Ireland respectively.

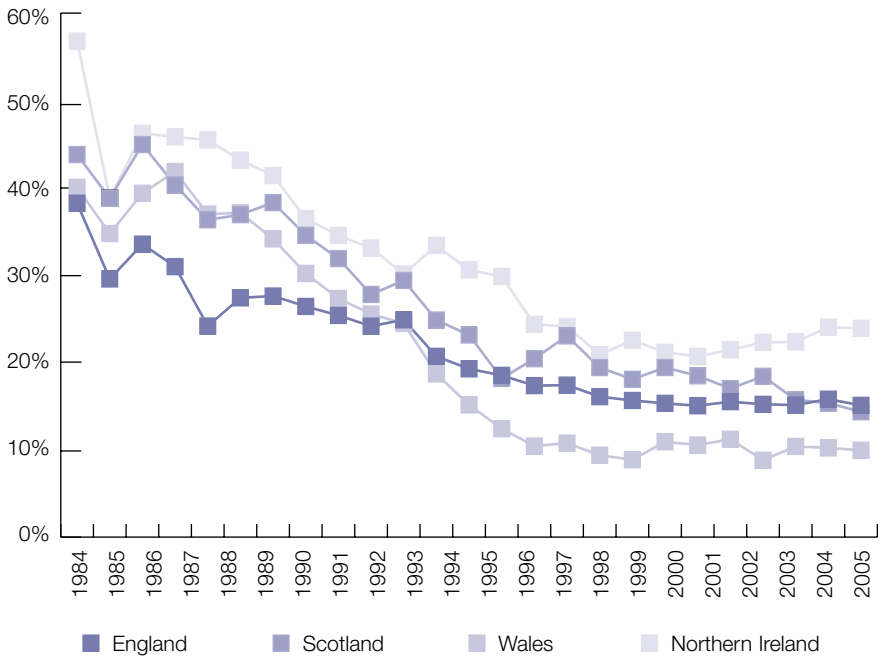
In England, there is some variation, with regions in the North, the Midlands and London having a relatively poor performance (especially in the West Midlands, where 15.5 per cent have no qualifications) and the better-performing South of England where the percentage with no qualifications is under 10 per cent.

Over time, the rate of progress has been higher in Scotland than anywhere else. In 1979-85, Scotland was similar to Wales in terms of the percentage of young people with no qualifications (and about seven percentage points behind Northern Ireland). Relative to other parts of the UK, the improvement in Scotland seems to have taken place in the early 1990s. By the end of the period (2000-05), an 11 percentage point gap had opened up between Scotland and Northern Ireland. But, as with elsewhere in the UK, there has not been much change since the mid-1990s.

It would seem that progress has stalled everywhere at a relatively high level of educational underachievement.



## The percentage of young people (aged 16-24) with no qualifications



### 3.4 Educational underachievement – international perspectives

The UK's educational performance fares badly next to other comparable countries. Forty per cent of the UK's population do not have at least a Level 2 qualification. These are people who have either received low-level qualifications or no qualifications at all. This compares with 32 per cent in the US, 28 per cent in France and 28 per cent in Germany.

Although the situation improves when looking at the population aged between 25 and 28, the UK still compares unfavourably with France and Germany. Within this age category, 27 per cent of people are educational underachievers in the UK and US. This compares with 14 and 16 per cent in France and Germany respectively. In the youngest category (19-21 year olds), there is hardly any change in the UK: 28 per cent are classified as 'educational underachievers' by this measure. However, in this case, the UK compares well relative to Germany and the US, where the figure is 34 per cent.

Although the greatest relative improvement over time has been in the UK (between 1997/98 – 2002/03), especially for those aged between 25 and 28, there still is considerable scope for improvement.

**Percentage of people who do not have a qualification of at least Level 2**

Year	Age: 19-21		Age: 25-28		Total population (age 16-64)	
	1997/98	2002/03	1997/98	2002/03	1997/98	2002/03
UK	31	28	38	27	45	40
France	19	16	17	14	32	28
Germany	35	34	15	16	24	24
US	34	34	26	27	34	32

Note: For the UK and US, years are 1998 and 2003; France 1998 and 2002; Germany 1997 and 2002.

Source: Steedman et al. (2004)

In terms of numeracy and literacy, performance indicators again illustrate the considerable scope for improvement in the UK relative to other European countries. In this case, International Adult Literacy Survey (IALS) Level 2 represents the minimum level of skills required to function effectively in the labour market (as defined by policy makers). Britain is among the worst performers within each age group. Twenty-two per cent of 16 to 25 year-olds surveyed did not have these minimum basic skills. This compares with four to eight per cent in five of the other countries (Belgium, Switzerland, the Netherlands, Sweden, and Germany) and is exceeded only by the US at 26 per cent.

**3.5 Educational underachievement – the link to crime**

As well as its negative impact on national productivity and economic growth, educational underachievement has a role to play in relation to crime. Prisoners have very low levels of basic skills compared with the rest of the population. The position is even worse for prisoners between 18 and 20 years of age whose basic skills, unemployment and social exclusion background are all over a third worse than that of older prisoners.

The number of 19 to 21 year-olds in the UK who don't have at least a 'level 2' qualification is almost twice as high as in France.

There are many reasons to expect a causal link between education and crime. Lochner and Moretti (2004) identify the following:

- Schooling increases the returns to legitimate work, raising the opportunity costs of illicit behaviour.
- Education may directly affect the financial or psychic rewards from crime itself.
- Schooling may alter preferences in indirect ways which may affect decisions to engage in crime – risk aversion, for example.

Although it has proven difficult to demonstrate a causal relationship between education and crime, Locher and Moretti have managed to show that schooling significantly reduces criminal activity.<sup>19</sup> Completing high school reduces the probability of incarceration by about 0.76 percentage points for whites and 3.4 percentage points for blacks. They also estimate high social returns from such a reduction in crime: social benefits from a one per cent increase in the high school completion rate are equivalent to 14 to 26 per cent of the (aggregate) private return.

There are important caveats to applying these results in the UK: the measure of educational underachievement is different; the relationship between crime and educational underachievement may be different; the costs may be different; changes in crime that can be attributed to a small improvement in educational achievement are not necessarily of the same order as might be expected from a large improvement in educational achievement because the relationship between crime and education may not be linear. But, if estimates could be directly transferred, the cost for the UK as a whole would be around £2-5 billion. A regional breakdown of estimated costs is shown in the table on the next page.

<sup>19</sup> Locher and Moretti (2004) use changes to state compulsory schooling laws in the US. This gives variation in years of education that is independent of the crime rate.

## Estimated social cost of crime arising from educational underachievement

Region	% with no qual. (2005)*	Population: 17-24 **	Estimate of number of people with no qual.	Foregone earnings (£000s)	Social cost of Educational Underachievement (bottom range) £000s	Social cost of Educational Underachievement (top range) £000s
London	9.0	812,697	73,412	2,642,840	369,998	687,138
North East	9.5	277,241	26,267	945,595	132,383	245,855
North West	9.5	717,814	68,139	2,453,009	343,421	637,782
Yorkshire	8.8	550,567	48,641	1,751,076	245,151	455,280
East Midlands	8.6	440,385	37,864	1,363,094	190,833	354,405
West Midlands	11.3	551,495	62,462	2,248,620	314,807	584,641
East of England	7.1	508,756	36,323	1,307,633	183,069	339,985
South East	5.4	784,912	42,222	1,519,997	212,800	395,199
South West	5.5	477,250	26,471	952,941	133,412	247,765
<b>England</b>	8.2	5,121,117	420,976	15,155,128	2,121,718	3,940,333
<b>Wales</b>	8.0	304,955	24,275	873,910	122,347	227,217
<b>Scotland</b>	6.8	523,983	35,462	1,276,623	178,727	331,922
<b>Northern Ireland</b>	13.8	196,212	26,988	971,562	136,019	252,606

\* Labour Force Survey; \*\* Office for National Statistics (2004 data)

In the United States, completing high school reduces the probability of prison by about 0.76 percentage points for white people and 3.4 percentage points for black people.

In the UK, Feinstein and Sabates (2005) examined the impact of introducing the Education Maintenance Allowance (EMA) on youth crime. The EMA is a programme designed to increase participation in post-compulsory education. It is targeted at economically disadvantaged teenagers and was first piloted in certain disadvantaged areas of England.<sup>20</sup> However, many of these areas were also covered by a crime reduction initiative, the Reducing Burglary Initiative, making it difficult to independently evaluate policies.

Using data on Local Education Authorities, the authors show that burglaries fell between 1.1 and 1.5 convictions per 1,000 pupils relative to areas where these programmes were not introduced. Since the average cost of a burglary crime is £3,268, this represents a saving of between £3,595 and £4,902 per 1,000 pupils.<sup>21</sup>

While the extent of educational underachievement has reduced since the late 1970s in the UK, it remains at an unacceptably high level. And it is partly responsible for the productivity gap between the UK and its competitors.

The cost of educational underachievement in the labour market in terms of unemployment and wage penalties is significant. And underachievement at school appears to increase the probability of turning to crime and negatively affects the health and emotional well-being of the individuals concerned. With youth crime costing upwards of £1 billion and public costs for treating depression at between £11 and £28 million, the total bill for educational underachievement is undeniably huge.

<sup>20</sup> These areas were Middlesbrough, Walsall, Southampton, Cornwall, Leeds, areas of Inner London (Lambeth, Southwark, Lewisham, Greenwich), Oldham, Nottingham, Bolton, Doncaster, Stoke-On-Trent and Gateshead.

<sup>21</sup> It is inaccurate to assume a one to one mapping between convictions and individual crimes (there can be multiple convictions per crime). However, convictions are a very imperfect measure of crime since many recorded crimes do not lead to convictions. Hence, the effect of the programmes on overall crime may be under-stated.

### 3.5 Tackling educational underachievement – The Prince's Trust

The Prince's Trust is tackling educational underachievement in school with our xl clubs for pupils at risk of truanting or exclusion. The clubs empower young people to play an active role in planning their activities, helping keep them in school and gain nationally accredited ASDAN qualifications.

Last year, The Prince's Trust worked in partnership with 820 schools and local authorities, helping 6,883 14- to 16-year-olds through 2,105 xl clubs.

62% of young people helped by The Prince's Trust are educational underachievers, including young people with low basic skills, those truanting and those excluded from school.



## **Qualified**

The Trust recently launched a new national qualification to improve the employment prospects of young people who leave school with no GCSEs. The Certificate in Personal, Teamwork and Community Skills, developed in partnership with City & Guilds and the Learning and Skills Council, provides school leavers who get poor grades with a certificate comparable to a GCSE to help them get their lives back on track.

The Certificate in Personal, Teamwork and Community Skills is available to 16- to 25-year-olds who complete our flagship 12-week personal development programme, Team, and gives around 8,000 young people a year the chance to gain their first nationally recognised qualification.



# Conclusion

Despite all the economic and social gains the UK has made since the 1970s, all the indicators examined in this report suggest that social exclusion remains a serious problem. The extent of educational underachievement may have reduced since the late 1970s but it remains at a high level compared with other European countries. A similar picture emerges for the percentage of young people classified as 'not in education, training or employment'.

Within the UK itself, the scale of these problems varies according to the indicator. Relative to population size, Northern Ireland has the highest percentage of 16- to 24-year-olds with no qualifications but the lowest percentage classified as 'not in education, employment or training'. Exactly the opposite holds true for Scotland. One might speculate about the reason but stronger economic growth in Northern Ireland in recent years is one likely explanation. In England, problems are generally greater in the North and West Midlands (and sometimes London) relative to the East and South.

Crime data on the overall number of convictions of young people suggest some deterioration in recent years in England and Wales when considering the age category 10-17 but not so much for the age category 18-21, where there has been less change. Within England, the number (and rate) of convictions is particularly high in the North. There has been a notable reduction in the number and rate of convictions in Scotland between 1997 and 2000, although relative to population size, there are more convictions of young people aged between 18 and 21 in Scotland and Wales than there are in England.

The indicators for social exclusion are strongly interlinked and analysis makes it possible to make some interesting connections: educational underachievement has a cost in the labour market (in terms of the probability of employment and wages) and increases the probability of turning to crime.

Underachievement at school represents a huge cost to the individual and is also partly responsible for the productivity gap between the UK and its competitors. Crime has always represented a significant cost to society – and the taxpayer – but it also has longer-term consequences for the individuals themselves. A criminal record makes it more difficult to find a job after prison and perpetuates a negative cycle for individuals who may have been driven to crime partly by low employability in the first place.

Unemployment costs the economy upwards of £90 million per week and youth crime represents a staggering £1 billion bill for the taxpayer each year. Depression caused by underachievement at school could cost the NHS between £11 and £28 million a year. Social exclusion is evidently a costly problem for the UK. And this is without taking into account many costs that are harder to measure relating to inactivity, educational underachievement, crime and being in care.



# Notes on methodology

## Loss of earnings

We have used the information available in the Labour Force Survey to estimate the probability of unemployment for people in the 20-24 age range according to observable characteristics – age, gender, marital status, ethnicity, qualifications, health and dependents. Collectively, these variables have relatively low power in explaining unemployment. Hence, our methodology does not produce different results than if we simply use average earnings for employed persons in this age range as an estimate of the average earnings unemployed persons might expect to receive.

We use an average of £242 per week, per person. This should be thought of as an upper bound since young people who are unemployed may be different from those in employment in a way that is difficult to capture using variables in the Labour Force Survey. However, researchers often assume that wages faced by the non-employed on returning to work are close to the average wage (see discussion in Gregg and Wadsworth, 2000). This assumption may be more plausible in this context since workers are close to labour market entry and in a similar age range. According to Godfrey et al. (2002), about half of young people aged between 16 and 18 are unemployed for 3 months or less, whereas above this age, the most common length of time is six months.

Weekly pay of £242 on average compares very favourably to the income and non-income related benefits received by unemployed persons in the same age range (£90.34 on average – estimated using the Family Resources Survey). The estimated costs vary by region, depending on the proportion of persons unemployed and the number of people in the 20-24 age range.

## Crime

We have been able to obtain information on convictions by region (except for Northern Ireland) and on the population of penal institutions for all countries of the UK. However, such data are only indicators of the extent of crime. It is important to note that many recorded crimes are never brought to justice.

The graphs show the number of convictions of young persons in England, Wales and Scotland for two age categories: age 18-21 and age 10-17. These

numbers are presented as a percentage of the population aged between 15 and 24 so as to adjust for demographic trends. It is not possible to get population numbers in exactly the right categories for the whole time period. In any case, since there are often multiple convictions per person, it would not make sense to interpret numbers as the percentage of the population who are convicted.

### **Educational underachievement**

To discover the scale of underachievement in the UK, we looked at the percentage of 16- to 24-year-olds in the population who do not have any educational qualification, using successive waves of the Labour Force Survey (from 1979 to 2005). Weighting factors are applied to each survey respondent in such a way that results are representative of the population in terms of age distribution, sex and region of residence (see LFS Survey User Guide for further details).

For international comparisons, it is difficult to measure and compare qualifications across countries because of definitional differences and because the quality of education for a particular category of qualifications may vary across countries. For example, Steedman (1996) suggests that there is significant under-reporting of qualifications in a number of OECD countries, largely due to the exclusion of many vocational qualifications from the statistics. We report statistics constructed by Steedman et al. (2004), where the measure of educational underachievement is the percentage of people who do not have a qualification of at least Level 2. This category consists of people who have either received low-level qualifications or no qualifications at all. The qualifications assigned to this category are described in detail by Steedman et al. (2004) and are based on the National Qualifications Framework ([www.qca.org.uk/qualifications/types/493.html](http://www.qca.org.uk/qualifications/types/493.html)), together with further work analysing relative standards across countries. In the UK, low-level qualifications include City & Guilds qualifications and an apprenticeship without recognised vocational qualifications. Statistics for the UK, France, Germany and the US are discussed.

## **Underachievement and crime costs**

We estimated the aggregate private cost of educational underachievement in terms of the foregone earnings of young people without educational qualifications. We use a US study to estimate the social cost of educational underachievement in terms of the increased levels of crime (Lochner and Moretti, 2004). As discussed in the text, there are important caveats to applying these results to the UK. Applying their estimates to 14 to 26 per cent of foregone earnings is the estimated social cost of educational underachievement in terms of increased levels of crime. The estimated cost across regions is driven by the extent of educational underachievement (i.e. the proportion of individuals aged 17-24 with no qualifications) and population size (age 17-24) in different regions.



# References

- Blundell, R., L. Dearden, and B. Sianesi, (2005) 'Measuring the Returns to Education', in S. Machin and A. Vignoles (eds.) *What's the Good of Education?*, Princeton University Press, Princeton, US.
- Black, S.E., P.J. Devereux and K.G. Salvanes, (2005), "Why the Apple Doesn't Fall Far: Understanding the Intergenerational Transmission of Human Capital," *American Economic Review*, Vol. 95, No. 1, pp. 437-449.
- Black, S.E., P.J. Devereux and K.G. Salvanes, (2006), "From the Cradle to the Labor Market? The Effect of Birth Weight on Adult Outcomes," *CEE Discussion Paper* 61.
- Brand, S., and R. Price, (2000), "The Economic and Social Costs of Crime," *Home Office Research Study*, 217.
- Burgess, S., C. Propper, H. Rees, and A. Shearer, (2003), "The Class of 1981: the Effects of Early Career Unemployment on Subsequent Unemployment Experiences," *Labour Economics*, 10, 291-309.
- Card, D., (1999), "The Causal Effect of Education on Earnings," in O.Ashenfelter and D. Card (eds). *Handbook of Labor Economics*, Volume 3. Amsterdam: North-Holland.
- Card, D. (2001), "Estimating the Return to Schooling: Progress on Some Persistent Econometric Problems," *Econometrica*, Vol. 69, No. 5, pp. 1127-1160.
- Caruth, A.A., and A.J. Oswald (1991) *An Empirical Study of Unemployment and the Number of Children in care*, *Oxford Economic Papers*, 3: 502-514.
- CEP, (2005), "Election Analysis: Business and the UK's Productivity Gap: Policies to Promote Innovation, Investment and Skills," CEP, London School of Economics <http://cep.lse.ac.uk/briefings/election.asp>.
- Centre for Economic and Social Inclusion, (2005), "A UK Youth Allowance?," *An Inclusion Policy Paper*, Policy Paper 4. [www.cesi.org.uk/public/showpone.asp?plD=111&typeID=4](http://www.cesi.org.uk/public/showpone.asp?plD=111&typeID=4)
- Chevalier, A., (2004), "Parental Education and Child's Education: A Natural Experiment," *Mimeo*, University College Dublin.
- Chevalier, A. and L. Feinstein, (2005) "Sheepskin or Prozac: The Causal Effect of Education on mental health", *mimeo*
- Council of Europe (2003), "Council of Europe Penal Statistics, Space 1: 2002 Survey on Prison Statistics," *Strasbourg: Council of Europe*.
- Currie, J., and E. Moretti, (2003), "Mother's Education and the Intergenerational Transmission of Human Capital: Evidence from College Openings," *Quarterly Journal of Economics*, Vol. 118, pp. 1495-1532.
- Dearden, L., S. McIntosh, M. Myck., and A. Vignoles, (2002), "The Returns to Academic and Vocational Qualifications in Britain," *Bulletin of Economic Research*, Vol. 54, pp. 249-274.
- Dearden, L., L. McGranahan, and B. Sianesi, (2004), "Returns to Education for the 'Marginal Learner': Evidence from the BCS70," *CEE Discussion Paper*, No. 45.

Department for Education and Skills, (2005), "Statistics of Education: Outcome Indicators for Looked After Children", HMSO.

Department for Work and Pensions, (2005), "Households Below Average Income 1994/95 – 2004/05". [www.dwp.gov.uk/asd/hbai/hbai2002/contents.asp](http://www.dwp.gov.uk/asd/hbai/hbai2002/contents.asp)

Dubourg, R., and J. Hamed, (2005), "Estimate of the Economic and Social Costs of Crime in England and Wales: Costs of Crime Against Individuals and Households 2003/04," Home Office Report (online) 30/05.

Dixon, J., J. Lee, J. Wade, S. Byford, and H. Weatherly, (2004), "Young People Leaving Care: A Study of Costs and Outcomes," A Report to the Department of Health. Social Work Research and Development Unit, University of York.

Farrington, D.P. B. Gallagher, L. Morley, R.J. St.Ledger, and D.J. West (1986), "Unemployment, School Leaving and Crime," *British Journal of Criminology*, 26, 335-356.

Feinstein L. and R. Sabates (2005) "Education and Youth Crime: Effects of Introducing the Education Maintenance Allowance Programme", Centre for Research on the Wider Benefits of Learning Research Report Number 14.

Fletcher, D., Woodhill, D. and Herrington, A. (1996), "Building Bridges into Employment and Training for Ex-Offenders," Joseph Rowntree Foundation.

Fougère, D., F. Kramarz and J. Pouget, (2006), "Youth Unemployment and Crime in France," IZA Discussion Paper No. 5600, Institute for the Study of Labor, Bonn.

Freeman, R.B., (1999), "The Economics of Crime," in O.Ashenfelter and D.Card (eds.) *Handbook of Labor Economics*, Vol. 3. Elsevier Science B.V.

Freeman, R.B., (1992), "Crime and the Employment of Disadvantaged Youth," in G. Peterson and W. Vroman (eds.), *Urban Labor Markets and Job Opportunity*, Urban Institute Press. Washington DC.

Godfrey, C., S. Hutton, J. Bradshaw, B. Coles, G. Craig, and J. Johnson, (2002), "Estimating the Cost of Being 'Not in Education, Employment or Training' at Age 16-18," Research Report No. 346, Department for Education and Skills.

Goldman, D.P., and J.P.Smith, (2001), "Can Patient Self-Management Explain the SES Health Gradient?" RAND Working Paper.

Goldman D.P., and D. Lakdawalla, (2001), "Understanding Health Disparities Across Education Groups," NBER Working Paper 8328.

Gregg, P. (2001) "The Impact of Youth Unemployment on Adult Unemployment in the NCDS," *Economic Journal*, 111: 626-653.

Gregg, P. and Tominey, E. (2004) *The Wage Scar from Youth Unemployment*, CMPO Working Paper Series No. 04/097, University of Bristol. Forthcoming in *Labour Economics*.

Gregg, P. and J. Wadsworth, (2000), "Mind the Gap, Please: The Changing Nature of Entry Jobs in Britain," *Economica*, 67, 499-524.

Grogger, J., (1995), "The Effects of Arrests on the Employment and Earnings of Young Men," *Quarterly Journal of Economics*, 110:1, 51-71.

Grossman, M., (2000), "The Human Capital Model," in A. Cuyler and P. Newhouse (eds.), *Handbook of Health Economics*, North Holland.

Hammond, C. and L. Feinstein, (2006) "Are Those Who Flourished at School Healthier Adults? What Role for Adult Education?" Wider Benefits of Learning Research Report No.17.

Levitt, S.D., (2004), "Understanding Why Crime Fell in the 1990s: Four Factors that Explain the Decline and Six that Do Not," *Journal of Economic Perspectives*, 18, 1, 163-190.

Lleras-Muney, A. (2005) "The Relationship Between Education and Adult Mortality in the United States", *Review of Economic Studies*, 72, 189-221.

Layard, R., (2005), *Happiness*, The Penguin Press, New York.

Layard, R., McIntosh, S., and Vignoles, A., (2002), "Britain's Record on Skills", CEE Discussion Paper 23.

Lochner, L. and E. Moretti (2004) "The Effect of Education on Criminal Activity: Evidence From Prison Inmates, Arrests and Self-Reports", *American Economic Review*, 94, 155-89.

Machin, S., and O. Marie, (2005), "Crime and Police Resources: The Street Crime Initiative," IZA Discussion Paper No. 1853. Institute for the Study of Labor, Bonn.

Machin, S., S. McNally, S. Rajagopalan, (2005), "Tackling the Poverty of Opportunity," Report by The Prince's Trust. March 2005. Developed and edited by Simon Watson and Rob Cope of The Prince's Trust.

McIntosh, S., (2004a), "The Impact of Vocational Qualifications on the Labour Market Outcomes of Low-Achieving School-Leavers," CEP Discussion Paper No. 621.

McIntosh, S., (2004b), "Further Analysis of the Returns to Academic and Vocational Qualifications," CEE Discussion Paper 35.

McIntosh, S., and Vignoles, A., (2000), "Measuring and Assessing the Impact of Basic Skills on Labour Market Outcomes", CEE Discussion Paper No. 3.

Mooney, E., P. McDowell and K. Taggart, (2004), "Outcome Indicators for Looked After Children: Year Ending 30th September 2002," Social Services Analysis Branch, Northern Ireland.

Mroz, T.A., and T.H.Savage, (2006), "The Long Term Effects of Youth Unemployment," *Journal of Human Resources*, 41, 2, 259-293.

NACRO (2003), "Cost of jailing children too high a price to pay," [www.nacro.org.uk/templates/news/newsitem.cfm/2003091500.htm/archive](http://www.nacro.org.uk/templates/news/newsitem.cfm/2003091500.htm/archive), London

Nagin, D., and J. Waldfogel, (1998), "The Effect of Conviction on Income through the Life Cycle," *International Review of Law and Economics*, 18, 25-40.

Nickell, S. (2004) "Poverty and Worklessness in Britain", *Economic Journal*, 114, C1-C25.

Oreopoulos, P., M.E. Page, and A. Huff Stevens, (2003), "Does Human Capital Transfer from Parent to Child? The Intergenerational Effects of Compulsory Schooling," Working Paper 10164, National Bureau of Economic Research.

Oswald, A.J., (1997), "Happiness and Economic Performance," *Economic Journal*, 107, 1815-1831.

The Prince's Trust, (2004), "Reaching the Hardest to Reach," Report, March 2004.

Sampson, R.J. and J.H. Laub, (1993), *Crime in the Making: Pathways and Turning Points through Life*, Harvard University Press. Cambridge MA.

- Sampson, R.J. and J.H. Laub, (1997), "A Life-Course Theory of Cumulative Disadvantage and the Stability of Delinquency," *Advances in Criminological Theory*, 7, 133-161.
- Shaw, J., and L. Sibieta, (2005), "A Survey of the UK Benefit System," The Institute for Fiscal Studies, Briefing Note No. 13.
- Sianesi, B., (2003), "Returns to Education: A Non-technical Summary of CEE Work and Policy Discussion," Institute for Fiscal Studies, Mimeo.
- Scott, S., M. Knapp, J. Henderson and B. Maughan (2001), "Financial Cost of Social Exclusion: Follow-Up Study of Anti-Social Children into Adulthood," *British Medical Journal*, 323, 1-5.
- Scottish Executive, (2004), "Children's Social Work Statistics 2003-04," Statistics Publication Note. Health and Care Series, Scottish Executive.
- Social Exclusion Unit, (2002), "Reducing Re-Offending by Ex-prisoners," Report by the Social Exclusion Unit, Office of the Deputy Prime Minister, London.
- Social Exclusion Unit, (2003), "A Better Education for Children in Care," Office of the Deputy Prime Minister, London.
- Social Exclusion Unit, (2005), "Transitions: Young Adults with Complex Needs," Office of the Deputy Prime Minister, London.
- Steedman, H., (1996), "Measuring the Quality of Educational Outputs: A Note," Centre for Economic Performance, Discussion Paper 302.
- Steedman, H., S. McIntosh, and A. Green (2004) "International Comparisons of Qualifications: Skills Audit Update," DfES Research Report, No. RR548.
- Thomas, C.M., and S. Morris, (2003), "Cost of Depression Among Adults in England in 2000," *British Journal of Psychiatry*, 183, 514-519.
- Western, B., J.R. Kling and D.F. Weiman (2001), "The Labor Market Consequences of Incarceration," *Crime and Delinquency*, 47:3, 410-427.
- Western, B., (2002), "Incarceration, Wages, and Inequality," *American Sociological Review*, 67:4, 526-546.





Prince's Trust

Head Office  
18 Park Square East  
London NW1 4LH

Tel 020 7543 1234  
Fax 020 7543 1200  
Minicom 020 7543 1374  
Email [info@princes-trust.org.uk](mailto:info@princes-trust.org.uk)  
[princes-trust.org.uk](http://princes-trust.org.uk)