national STATISTICS

horizons

the facts behind the figures

The big issue

Weighing up child obesity

Zero tolerance

Cracking down on anti-social behaviour

Poverty counts

Measuring poverty in the UK

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Issue 29 June 2004

Correction

The last edition of *Horizons* (March) featured the article 'Disadvantaged' on the economic disadvantage of elderly women relative to men of the same age. A quote in the article implied that this was partly attributable to government pensions policy. We should like to point out that this was the point of view of the contributor of the quote and was in no way a reflection of the views or policies of the Office for National Statistics.

The Office for National Statistics is an independent government agency that produces statistics according to the National Statistics Code of Practice. The information and analysis it produces is objective, impartial and free from political interference.

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contents

welcome

to the summer edition of *Horizons*, the magazine for National Statistics customers.

There are some weighty issues under discussion in this edition, the first being childhood obesity – our lead article and cover story. Recent reports have claimed that British children are exposed to more food advertising than any other country in Europe, the majority of which encourages poor eating habits. It's certainly true that the problem has now reached epidemic proportions. The reasons behind our children's worrying weight gain are explored in full on page 19.

Staying with the theme of children, we find out how statistics are helping to measure success in combating child poverty (on page 12) and, on a lighter note, cover the ever-popular topic of babies' names. Once again this has hit the headlines recently, when a celebrity couple decided to name their new-born baby daughter Apple (not yet in the top ten names, but watch this space!). You can find out what's hot and what's not for naming your tots on page 24.

Eating is not the only thing we're doing to excess, as the latest *Living in Britain* – which puts our drinking habits (among many other things) under the spotlight – shows. Our feature on page 10 explores the rise in the incidence of heavy drinking, and shows how women in particular are imbibing to a worrying degree.

Getting drunk is one of a number of factors contributing to another of society's ills – anti-social behaviour. We're lucky to have Louise Casey, the National Director of the Anti-Social Behaviour Unit at the Home Office, to update us on how the problem is being tackled.

As always, enjoy the magazine.

Jackie Byard
Editor

Contributors

Martin Moriarty

is a freelance writer who has contributed to a variety of award-winning public sector magazines, including *Direct* for the Graphical, Paper and Media Union, *Citizen* for Camden Council and *Parents+Schools* for the Department for Education and Skills. He is one of *Horizons*' longest-standing contributors, and regularly interviews the National Statistician, Len Cook, to give us '*Len on…*'

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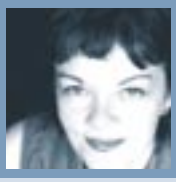
is an independent personal finance, consumer rights and property journalist who writes for a wide variety of publications and websites and occasionally does a stint on the radio as a 'money agony aunt'. She's been a part-time staff writer on *The Guardian* for over 10 years concentrating on its *Jobs&Money* section. She started her journalistic career on the trade paper *Accountancy Age*, having previously worked as a teacher in Greece and London.

Jerome Monahan

is a freelance journalist, writer and teacher. He contributes regularly to *The Guardian* and *The Times Educational Supplement*, and also provides material for the Department for Education and Skills *Teachernet* website and *Teachers* magazine. He has a voluntary sector background having worked as both press and publications officer for the housing charity SHAC (the London Housing Aid Centre). Before embarking on his current freelance writing career, he was a teacher for ten years.



Liz Bestic

started her journalistic career with the *Sunday Times*. She now contributes regular features to the *Daily Mail*, *Daily Express*, *The Times* and the *Evening Standard*. She writes for a range of consumer magazines and was editor of Emap Elan's *Parents* magazine for two years. She also launched and edited the brand new BBC magazine *Family Life* and has written three books. Liz is married with two children and lives in London.

Louise Casey

is the National Director of the Government's Anti-social Behaviour Unit, based in the Home Office. The Unit was established in January 2003 to ensure that response to tackling anti-social behaviour is improved.

Previously Louise led the successful strategy to reduce the number of people sleeping rough and established the Homelessness Directorate in the Office of the Deputy Prime Minister.

Between 1992–1999, Louise was Deputy Director of *Shelter* and, prior to that, held a number of posts in the social welfare sector.

Len on... reviewing revisions

I welcome the wide-ranging and thorough review of revisions to economic statistics by the Statistics Commission. Their final report has left us with a very good overview of the business of producing official statistics, and gives us a good basis for helping those that have concerns about some of our processes. This is a particular issue when we release statistical revisions, which are not always recognised as a natural part of the statistical process, given that in other fields similar changes to published information might be seen as 'mistakes'.

The review was prompted by a period of criticism in the media in the autumn, particularly after we revised our estimates for GDP (gross domestic product) growth for the second quarter of 2003. As I said at the time, much of what was written betrayed some pretty major misunderstandings about the nature of official statistics. News of the revision was interpreted by many commentators as an announcement of an error or mistake.

In their three-volume report, the Commission spell out where commentators were going wrong: revisions are part of the normal process of producing official statistics, occur for many reasons, will continue to be made and definitely should not be confused with the correction of errors.

In fact, Commission chairman, Professor David Rhind, writes in his preface that the review concluded that much of the public criticism about the GDP revisions was unfair. Indeed, the report recognises how international studies have shown that UK national accounts have been revised less over the last decade than those of other major G7 and European Union countries – a statistical feat we've achieved while publishing our first estimates 28 days earlier than any other country in Europe.

The review concludes that, of the revisions published last year that most concerned users, only a small part of the GDP revision (0.04 per cent of the 0.3 per cent revision to GDP second quarter growth) was 'avoidable' (in the form of a forecasting model for construction output produced by the DTI) and the Commission have made a number of suggestions about this.

However, I do part company with the Commission when they recommend that we publicly announce the need for substantial revisions before we know what the final figures may be. Of course, in accordance with the *National Statistics Code of Practice* and its protocol on consultation with Ministers, the Treasury and the Bank of England were given early notice of the upward revision to import figures last year to take into account VAT missing trader intra-Community fraud.

Although this conflicts with the Commission's view, there is no way that I would ever make a public statement about any significant unanticipated revision to a major market-sensitive statistic without knowing what the revised values were. The British economy is extraordinarily large and highly globalised , and many business decisions are taken every day based on a fine assessment of numerous risks and uncertainties. If ONS were to announce a forthcoming revision to a key market sensitive statistic without indicating its magnitude or its effect, we would unnecessarily create a significant further uncertainty, which would impact upon these decisions.

> ***"... revisions are part of the normal process of producing official statistics, occur for many reasons and will continue to be made"***

The Commission have added their thoughts on increasing public understanding of revisions, which could help avoid the sort of media coverage which we have seen in some cases. ONS is already working towards the goal of improving user understanding, with a major article on revisions to statistics published on the National Statistics website in January and in *Economic Trends* in February.

Most critically, the review and the issues that stimulated it reflect a more demanding context for the work of official statisticians across the world. It is now commonplace for statistics to be applied in situations that extend well past the original purposes for which they were designed. When this happens, a detailed knowledge of the quality and uncertainty of the statistics is essential. However, in ONS we need better systems to deliver the measures of quality that users need. In their report the Commission highlighted the importance of quality measures, and in doing this they have certainly recognised our focus on one of the key issues that is driving the ONS modernisation programme. Until our long run solutions are in place, I expect that we will continue to have more revisions than I would want us to. Right now, we're just beginning to benefit from new investment and development of our systems, and further benefits will be delivered as we continue to make progress with the modernisation programme

I commend Commission chairman David Rhind for his insight when he writes: "The business of collecting data, generating estimates and publishing the consequent statistics and advice is a skilled professional activity that deserves greater recognition and respect.". I believe that we are on the way to making that happen.

CV

Len Cook became Director of ONS and Registrar General for England and Wales in May 2000. He has an extensive background in managing economic and social statistics, having worked at the New Zealand statistics office for 30 years. He headed the office as Chief Executive of Statistics for eight years before coming to the UK.

What is... Sampling?

Sampling is an important element in the collection process of statistics – a technique used to simplify and standardise the way data are composed, without bias.

The procedure of obtaining data begins with construction of a target population (those we would like to collect data from) and from this information a sampling frame (a list of contact details of those we can collect data from) is devised.

Next, a sampling technique is used to impartially select the survey from the sampling frame. Different approaches include:

- **Simple random sampling** – randomly selecting members from the population. For example, the lottery machine randomly selects the 6 lottery balls;
- **Systematic random sampling** – selecting a start point in the sampling frame and then selecting every 10th member after that. For example, a market researcher may call at the first house in a street and then call at every 3rd house after that;
- **Stratified random sampling** – dividing the sampling frame into similar strata (groups), e.g. local authorities and selecting members from each stratum.

Once the sampling method is determined a sample is selected and the survey conducted.

What's in your basket?

The Consumer Prices Index and Retail Prices Index measure the changing cost of a representative selection or 'basket' of goods and services that households typically spend their money on. As part of a process of continual improvement – and also to ensure that the indices keep pace with changes in spending patterns over time – the contents of the basket are reviewed each year.

Analysis of spending habits, based on ONS's own *Expenditure and Food Survey*, private market research and feedback from the price collectors, has led to a range of changes to the basket in 2004. Developments in technology have led to the inclusion of digital cameras this year, while mini-disc players have been removed reflecting low spending relative to CDs. Elsewhere, changes in habits mean that fresh turkey portions have edged out frozen turkeys and dishwasher tablets have replaced powder, while increased spending on beauty treatments means manicures have entered the basket.

These changes provide some insight into changing consumer tastes, though there are many dimensions to the review. Improved coverage of high spending sectors is always a key objective, with fishing rods and acoustic guitars added this year to represent spending on traditional hobbies. The review also takes account of where people spend their money, with mineral water boosting coverage of soft drinks purchased on licensed premises and CDs purchased over the internet reflecting growth in on-line shopping.

Other new items include regional cheeses, electric heaters and pre-school toys, while a number of products including gin, toasters, wine glasses and exercise bikes have been removed to make way for the changes. This sometimes reflects declining popularity of particular products although many are removed because, relative to similar items, they do not provide sufficient extra information on prices to justify their continued inclusion.

You can find out more at **www.statistics.gov.uk/rpi**

An eventful time for National Statistics

The Government Statistical Service (GSS) Methodology Conference, *Methods for Statistics for UK Countries and Regions* will be held on June 28 at the Victoria Park Plaza, London. Many statistical outputs are broken down into broad regions which are typically not so affected by small sample sizes and small area estimates, but do present a number of methodological challenges. This conference will examine work being undertaken around the GSS on these sorts of outputs, and relate them to current pressures in this area, particularly for the Allsopp Review. For further information and registration, please see www.statistics.gov.uk/events/gss2004

Looking further ahead, the launch of the ONS Longitudinal Study link to the 2001 Census: *Documenting social change in England and Wales through three decades* will take place on the 21 September. This launch event will provide an opportunity to find out what is available by hearing about the uses already being made of the newly linked data. The ONS Longitudinal Study is a unique record linkage resource which brings together the records of a 1 per cent sample of individuals from each Census since 1971.

Information on events between censuses such as births, deaths and cancer registrations are also linked into the study.

The venue has not yet been confirmed, but updated information will be posted on the website as it becomes available. For further information and registration, please e-mail LS@ons.gov.uk

You can find information about all forthcoming National Statistics events at **www.statistics.gov.uk/events**

Mail

Please send your letters to **Jackie Byard**, ONS, Room D116, Government Buildings, Cardiff Road, Newport, NP10 8XG, or e-mail **jackie.byard@ons.gov.uk**

Share your views about what you've read in *Horizons*

A bug's life

Your article on Admiral Hopper missed the most famous story associated with her. During her time on the Harvard Mark II in 1945, an investigation of a malfunction revealed a moth trapped between the points of a relay. It became known as the first actual case of a bug in a computer (the term was already in use) and led to the term 'debugging' becoming common currency. The log page (with moth attached) is now in the Smithsonian and can be seen at http://americanhistory.si.edu/csr/comphist/objects/bug.htm

John Dean
Oxford

Your questions answered

Every census tells a story

We can all applaud the amount of effort ONS is proposing to put into ensuring the highest possible response rates and goodwill from all population groups when collecting the 2011 Census. Most of us who use census statistics will also approve of their statistical aims and the stated aim of producing results more promptly and completing the processing earlier. However, all of this only focuses on the production of statistical information which will incur a considerable cost to the taxpayer. There has, as yet, been little effort put into how all of this information may be used, by whom and for what purpose and, it seems, no consideration of how best to present it to the specialist user and the general public. To the man in the street, statistics and censuses are boring grey subjects, but every figure tells a story and people need to be made aware of just how much the censuses can tell us about who we are, how we live and how things have changed over the years. It would seem some publicity and market research is called for, not just before the census is taken, but also when the figures are made available. That is when the taxpayer will be able to get some benefit.

Yours sincerely,

Knud Molle
Principal Analyst & Information Officer
City of Stoke-on-Trent UA

Ian White, Head of Census Legislation and Communications at ONS, replies:

The elements of the design for the 2011 Census, outlined in the last issue of Horizons, are only initial proposals at present. These have been based on evaluations of the outcomes of the 2001 exercise, together with an early assessment of users' future requirements for information and the likely availability of alternative data sources. The proposal document stresses the need, as Mr Moller rightly points out, for better and more targeted publicity nearer the time of the census. In due course the ONS will announce more detailed plans to develop ways in which the public benefits of the census can be more widely publicised.

A major element in this will be the Community Liaison Project, through which ONS will work, in partnership with local authorities such as the City of Stoke, to improve the coverage and quality of, and the public support for, the census, particularly at the local area level.

ONS took great pains – more than before any other census – to ascertain, and respond to, the requirements of both the specialist user and the general public for information from the 2001 Census, and the various means of disseminating the facts and figures. This resulted in the unprecedented amount of census data that is now available, free at the point of delivery, through the Census Access initiative and via the National Statistics website. ONS hopes to build on these innovations for the 2011 Census so that the user will continue to be able freely to access, and benefit from, the incomparable wealth of data that the census provides.

*You can find more information about the Census at **www.statistics.gov.uk/census**, and about Neighbourhood Statistics at **www.statistics.gov.uk/neighbourhood***

The writer of any letter featured in *Horizons* will receive a FREE National Statistics publication of their choice.

Driving force

Following this year's World Health Day theme of road safety, **Claudine Munro-Lafon** finds out how the UK compares with Europe and the rest of the world when it comes to reducing traffic accidents

With some of the lowest death rates due to road traffic accidents, the UK is a world leader in improving road safety. Throughout the world, road fatalities are the second leading cause of death among young people aged 5 to 29 years, and third leading cause of death among people aged 30 to 44. Statistics from the World Health Organisation (WHO) reveal that road traffic accidents kill 1.2 million people every year. And given that these accidents cost low and middle income countries more money than the total they receive in development aid – in addition to the tragic loss of life – it's not surprising that road safety is right at the top of the agenda for the WHO.

Kofi Annan, United Nations Secretary-General, was fully supportive of this year's theme for World Health Day. "It is important to recognise that road safety does not happen by chance", he said. "Achieving and sustaining safety on the roads requires deliberate action from many sectors of society."

The UK has an excellent record for road safety compared with most other EU countries. Figures from ONS's *Social Trends 2004* show that in 2001, the UK had the lowest death rate in the EU, at 6.1 deaths per 100,000 of the population, while Portugal had the highest, with 21 deaths per 100,000 (in 1999 – the latest year for which Portuguese data are available). The UK rate was also substantially lower than those for

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other industrialised nations including Japan (7.9), Australia (9.0) and the United States (14.8).

The number of road traffic deaths and injuries have fallen in all EU member states in recent years. In fact, 15 EU countries have seen road fatalities fall by over 50 per cent in the past 30 years. But there is still much more to be done, especially as the countries that joined the EU in May this year are not making such good progress. Hungary saw a 15 per cent increase in road fatalities in 2002, and there were also increases of 7 per cent in the Czech Republic, 5 per cent in Poland and 12 per cent in Estonia.

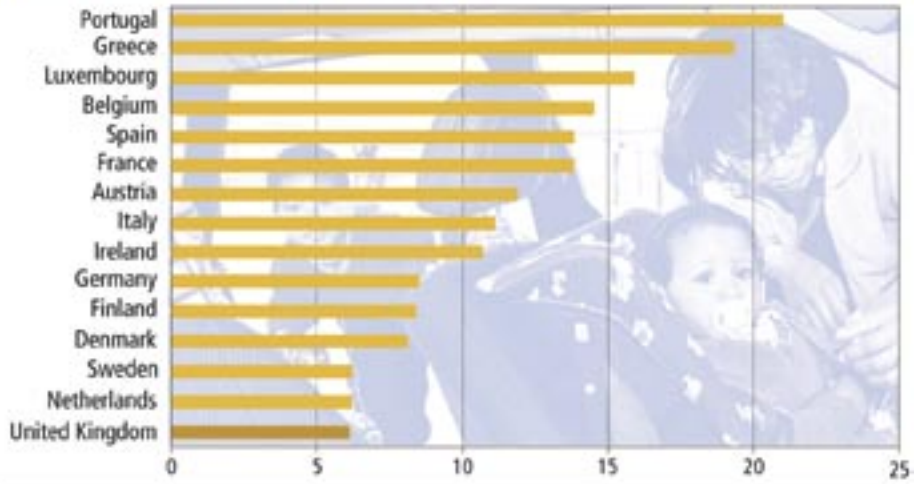
In a step towards improving road safety in Europe, the EU has set a target of reducing road deaths by 50 per cent by 2010. It also launched the European Road Safety Charter in April, which was signed by the WHO, along with the *Fédération International de l'Automobile* – the governing body behind Formula One racing – and over 30 other motoring and road organisations.

Formula One world champion Michael Schumacher was present at the signing of the Charter in Dublin, which calls on governments, companies and organisations across the EU to make a firm and measurable commitment to improve road safety. "Road safety is a vital concern for everyone," he said. "Initiatives like the European Road Safety Charter and World Health Day are important because they can raise the profile of road safety and help improve road safety standards".

According to the President of the International Road Federation (IRF), who also signed the European Road Safety Charter, much of what has been learnt about road safety in the UK can be used to help other countries. "Linking best practice from the UK and other European countries across the world is a fundamental objective of the IRF", he said. "Engineers and good road design have a key role to play in the vitally important issue of road safety."

Road deaths: EU comparison, 2001[1]

Rate per 100,000 population



1 Data for Greece and Italy are for 2000; Portugal are for 1999

Source: Department for Transport

The total number of accidents on British roads decreased by just over 3 per cent between 2001 and 2002. This fall is even more significant when you factor in the huge rise in the number of cars on the road and the greater distances that people travel in their cars. Great Britain experienced a 20 per cent increase in traffic on motorways and major roads between 1993 and 2002. The South East experienced the greatest traffic increase with a rise of 24 per cent, while the smallest increase (of only 3 per cent) was in London.

In 2002 the UK government set out its road safety targets for 2010, which included a 40 per cent reduction in the number of people killed or seriously injured in road accidents (based on a yearly average of fatal and serious accidents between 1994 and 1998).

Other EU countries are following suit. One year after President Chirac made road safety a political priority in 2002, France has seen a dramatic fall in the road traffic fatalities – down by a massive 20 per cent in 2003. Three months after the introduction of a penalty points system, Italy also saw some extraordinary changes, including a 23 per cent reduction in deaths, 22 per cent fewer accidents and a 25 per cent decrease in injuries.

Despite the significant improvements in the UK, it is clear that much more still needs to be done to improve road safety. Motorcycling and cycling are by far the most dangerous forms of transport in the UK – in 2002 death rates amongst motorcyclists were 40 times higher than those among car users.

We might do well to take a leaf out of Michael Schumacher's book. "As a professional racing driver I demand and expect the highest possible safety standards in my racing car and on the track", he says. "We should all expect the same attention to safety in our cars and on the roads".

15 EU countries have seen road fatalities fall by over 50 per cent in the past 30 years

For more information about the *Social Trends* and *Regional Trends* publications, visit the National Statistics website at www.statistics.gov.uk

A range of transport data are available from the Department for Transport website at www.dft.gov.uk

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According to an interim analytical report from the Prime Minister's Strategy Unit, more and more professional women are hitting the bottle to cope with the pressures of modern life. ***Jackie Byard*** *finds out if Britain's binge drinking culture really is on the rise*

Drunk in charge?

That young twenty-somethings enjoy going to pubs and getting drunk on a Friday and Saturday night comes as no real surprise. Alcohol has become socially acceptable in Britain today – indeed socially essential in some circles – and is linked with feelings of satisfaction, relaxation and pleasure in the nation's psyche. But a new stereotype is emerging in the media: that of the busy career woman, using alcohol as a crutch after a hard day at the office. So is this just dramatic licence or reality?

The interim analytical report, published in 2003 by the Prime Minister's Strategy Unit, shows that over 90 per cent of British adults drink alcohol, the majority in moderation and without risk to health. But what constitutes moderate consumption varies from person to person, with age, sex, health and body mass all playing a part in how alcohol affects you. As a general guide, the Government recommends sensible drinking levels of no more than 3–4 units of alcohol per day for men and 2–3 units for women.

While it's true that alcohol intake in women has been steadily increasing over the past decade, figures show that men consistently drink more, in terms of volume and frequency, than women. It is the patterns and trends in alcohol consumption that are changing.

ONS's latest *Living in Britain* report, which contains the results of the 2002/03 General Household Survey, shows that drinking levels for men have remained largely unchanged during recent years, and have actually fallen in some age groups. For example, the proportion of 16 to 24 year-old men who drank heavily at least once during the previous week fell from 39 per cent in 1998 to 35 per cent in 2002, while among women of the same age, the proportion increased from 24 per

cent to 28 per cent in the same period. Among these women, average weekly consumption almost doubled in the past decade, rising from 7.3 units per week in 1992 to 14.1 in 2002.

A recent increase in the incidence of 'heavy drinking' – defined as more than eight units on one day for men and more than six for women – is one of the trends highlighted by the report. In 1998, 8 per cent of women under the age of 45 drank heavily on at least 1 day of the previous week; by 2000 this had increased to 10 per cent and has remained at that level since. Even though drinking levels in men have not changed significantly during this time, the corresponding figure for heavy drinking in men (at 21 per cent) is still more than double the proportion of women – but the gap is closing.

Another characteristic of the new stereotype also rings true. Although there is no clear socio-economic link in relation to alcohol consumption among men, there is for women. Average consumption was highest, at 8.3 units per week, among women in managerial and professional households and lowest (at 6.5 units) among those in routine and manual worker households. Women in large employer or higher managerial households also drink more frequently – with 22 per cent drinking on 5 or more days of the week, compared with only 7 per cent of those in routine occupation households during 2002/03.

A recent increase in the incidence of 'heavy drinking' is one of the trends highlighted by the report

As a general guide, the Government recommends sensible drinking levels of no more than 3–4 units of alcohol per day for men and 2–3 for women

One thing is certain: whether alcohol intake is influenced by gender and occupation or not, alcohol consumption is on the increase in Britain and is an issue that needs to be taken seriously. This is the message at the heart of the Strategy Unit's interim analytical report, which found that alcohol misuse is costing the country a fortune: up to £1.7 billion per year in health provision; £7.3 billion for costs related to crime and disorder; and up to £6.4 billion in the cost of increased absenteeism and early retirement.

Public Health Minister, Melanie Johnson, says "While alcohol can have positive effects, the cost to the NHS of 150,000 alcohol-related hospital admissions each year is clear to see. And we also need to recognise the devastating effects, particularly on families, of the 15,000 to 22,000 deaths which can be attributed to alcohol misuse." She continues: "Identifying these problems will ensure that the Department of Health can work with the Strategy Unit and other key stakeholders to develop long-term, effective solutions."

You can find more information about the nation's drinking habits in the latest *Living in Britain* report at **www.statistics.gov.uk/lib2002**, and the *Interim Analytical Report* at www.strategy.gov.uk/output/page4498.asp

Short measure?

- **Men are more likely to drink than women** – in 2002, 74 per cent of men and 59 per cent of women had a drink on at least 1 day during the previous week
- **Men drink more often than women** – 22 per cent of men and 13 per cent of women drank on at least 5 of the previous 7 days, while 13 per cent of men and 8 per cent of women drank alcohol every day
- **Men are more likely than women to exceed daily benchmarks*** – 38 per cent of men and 23 per cent of women exceeded the daily benchmark on at least 1 day during the previous week, while 21 per cent of men and 10 per cent of women had drunk heavily
- **Older people drink more frequently than younger people** – 21 per cent of men and 11 per cent of women aged 65 and over had drunk every day during the previous week, compared with 4 per cent of men and 2 per cent of women aged 16 to 24
- **Young people are more likely to exceed daily limits than older people** – 49 per cent of men and 42 per cent of women aged 16 to 24 had exceeded recommended benchmarks on at least 1 day during the week, compared with 16 per cent of men and 5 per cent of women aged 65 and over.

* *Recommended daily benchmarks are **4 units or less** for men, **3 units or less** for women. Heavy drinking is classified as more than **8 units per day** for men and **more than 6** for women.*

*Source: Living in Britain: Results of the General Household Survey 2002/03 – **www.statistics.gov.uk/lib2002***

Poverty counts

Measuring poverty is a complex business, as **Jerome Monahan** discovers

Poverty is a complex notion and means different things to different people, though poverty counts in this country usually relate to the number of people on low incomes. Following a rise in poverty levels in the UK during the 1980s, they fluctuated throughout the 1990s until, by the end of the decade, the UK was towards the bottom of European league tables for child poverty rates. In 1998/99, there were 4.2 million children living in low-income households, after housing costs had been taken into account.

Since the 1990s the issue of poverty, and in particular child poverty, has been under close scrutiny. This has further intensified since the Government, at the end of the 1990s, set a target to reduce the number of children in poverty. Their aim is to eradicate child poverty in a generation, by 2020, with specific targets of reducing child poverty by a quarter by 2004, and halving child poverty by 2010.

Progress so far, as reported in the recent publication of the *Households Below Average Income* (HBAI), has been positive. On the most commonly quoted measure, the figures reveal that over half a million children have been lifted out of 'relative income poverty' since 1996/7.

> *"... the UK was towards the bottom of European league tables for child poverty rates"*

The report was released in March 2004, and marks an important milestone for all those with an interest in monitoring low income statistics and income distribution in general. A spokesperson for the Department for Work and Pensions (DWP) explains "Results for the *Households Below Average Income* report are drawn from the Family Resources Survey (FRS), which is one of the larger government surveys. It has a selected sample size of over 40,000 households in Britain of which, this year, some 27,000 actually participated. This helps support poverty indicators by ensuring there is a limited amount of misleading year-on-year volatility, and is valuable in helping to understand the make-up of low-income sub groups".

Standard of living is a difficult concept to measure, so how can we ensure that we accurately identify families that really

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are poor? Measuring material wealth is an option, but people's saving and spending patterns are diverse and limited information is available, so the link with poverty may be less clear. Expenditure patterns are another way of monitoring poverty but are more expensive to collect, as obtaining a robust measure of household expenditure requires monitoring over a long period of time because spending patterns can vary from day to day and even from month to month. Because of these problems, income is typically the chosen measurement when determining poverty.

As the HBAI statistics are an established tool with which to measure poverty, they are crucial in monitoring the Government's progress in reducing social inequality. "The test of reliable data year-on-year is the extent to which they change," says Guy Palmer, director of the think tank the New Policy Institute. "Surveys relying on small sample sizes are vulnerable to unrepresentative shifts – the HBAI does not jump around in an unpredictable manner and where it does change, this occurs in line with tangible events such as policies that have brought about improvements in benefit payments."

Dr Paul Dornan of the Child Poverty Action Group (CPAG) appreciates another key characteristic of the HBAI figures. "The scale of the exercise generates a great number of data 'fields', which are subdivisions of information according to different groups, characterised by age, ethnicity, employment and region", he explains. "They make it far easier to spot those in the greatest need or who are remaining in greatest risk of social exclusion." They are also uniquely subdivided to show differences between urban and rural areas.

> *"Standard of living is a difficult concept to measure"*

Child poverty is only one of several areas of emphasis in HBAI. It also focuses on relative poverty across the entire population, and specifically for working-age adults and pensioners.

Other parts of HBAI focus on different family types and the different compositions of families. For example, this year's HBAI underlined the difficulties facing families with large numbers of children

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or where there is a lone parent, and also emphasised the importance of work as the key means of elevating family income.

HBAI data will be used to monitor future child poverty targets once the existing target date is reached in 2004/05. In the Government's recent *Measuring Child Poverty* publication, released in December 2003, it indicated that it wanted to set future child poverty targets more closely in line with international practices, to allow better comparison with other countries.

The Government also announced in its December publication that poverty will also be measured using a concept known as 'material deprivation indicators', in an attempt to introduce a complementary measure of people's living standards. For the first time, the current *Family Resources Survey* in the field contains a series of questions that assess how families fare in terms of deprivation indicators. These include questions relating to the quality of a household's housing, a family's ability to take a week's holiday a year or give their children a once a month trip to the swimming pool. Adult measures will include the ability to afford to entertain friends with a drink or a meal once a month.

How are HBAI statistics collected and produced?

Data are collected from the Family Resources Survey (FRS) via face-to-face interviews with members of households. Once the interviews have been completed, the data are processed in a number of stages, including treatment from the FRS team to prepare release of the data, and quality assurance from an independent organisation, the Institute of Fiscal Studies. Despite these processes, the HBAI release compares favourably with other countries for timeliness among its field.

Another process the data undergo is an adjustment for incomes at the very top of the income distribution scale. Achieving a sample that is representative of the entire population is important, but can be challenging as even a small number of very high income values can distort the data. This additional step helps to stabilise year on year estimates of mean income using information taken from the Inland Revenue's Survey of Personal Incomes. More recently, focus has moved from comparisons against mean to comparisons against median, although both measures are currently presented in HBAI. The median measure is easier to produce, as it is not influenced by distortion from very high incomes, and is preferred by Eurostat, the EU statistical agency, for comparisons across member states.

The data are also subjected to a process known as 'equivalisation', whereby household income is adjusted for family size and composition so that families with different characteristics can be compared on a like-for-like basis. Equivalised income is essentially another way of measuring a household's standard of living, better enabling us to assess whether somebody can be construed as being poor or not.

You can find more information about the HBAI at: **www.dwp.gov.uk/asd/hbai.asp**
Measuring child poverty at: **www.dwp.gov.uk/consultations/consult/2003/childpov/final.pdf**
and Family Spending at **www.statistics.gov.uk/familyspending**

Consumer Price Inflation since 1750

by Jim O'Donoghue (ONS), Louise Goulding (ONS) and Graham Allen (House of Commons Library)

Summary

This article presents a composite price index covering the period since 1750 which can be used for analysis of consumer price inflation, or the purchasing power of the pound, over long periods of time. The index is based on both official and unofficial sources and replaces previous long-run inflation indices produced by the ONS, the Bank of England and the House of Commons Library. It shows that:

- between 1750 and 2003, prices rose by around 140 times
- most of the increase in prices has occurred since the Second World War: between 1750 and 1938, a period spanning nearly two centuries, prices rose by a little over three times; since then they have increased more than forty-fold.

Put another way, the index shows that one decimal penny in 1750 would have had greater purchasing power than one pound in 2003.

Background

Researchers are often interested in knowing how consumer price inflation, or the purchasing power of the pound, has changed over a period of time. Typically, researchers want to revalue sums of money from a period in the past to today's prices, or to compare how much a pound could buy at different periods in time, often spanning a century or more. This type of question can be answered by reference to an appropriate price index. Unfortunately, there is no single source available for making comparisons over long periods of time, and a composite index has to be specially constructed for this purpose. This will often involve choices. For instance, in recent periods, the ONS has published two direct measures of consumer price inflation – the retail prices index and the consumer prices index (which was published as the harmonised index of consumer prices until December 2003, when it became the basis for the Government's target measure of inflation) – and one indirect measure, a household expenditure deflator derived from the National Accounts.

This article presents a composite price index covering the period since 1750, which allows long-run comparisons to be made of consumer price inflation and the purchasing power of the pound. It replaces similar indices that have been published in the past by the Office for National Statistics, the Bank of England and the House of Commons Library. The article describes and assesses the sources which make up this composite price index, and explains why some sources are preferred over others for the purpose of long-run comparisons.

Changes in the purchasing power of a currency are the inverse of changes in the levels of prices: when prices go up, the amount that can be purchased with a given sum of money goes down. If prices double, for example, any given amount of currency will buy only half the quantity of goods and services it previously did. Questions about changes in the purchasing power of the pound are usually framed in terms of what the domestic consumer can buy. The price index presented in this article therefore reflects movements in the prices of goods and services purchased by the private domestic consumer, that is, ordinary households, rather than those purchased by businesses or public authorities. It shows the change in the internal purchasing power of the pound for goods and services purchased in the UK; no attempt is made to measure changes in the external value of the currency arising as a result of movements in exchange rates.

It should be noted that in general the relevance and quality of the primary sources diminishes the further one goes back in time. This means that comparisons further back in time and over long periods should be regarded as more approximate than comparisons over short periods in more recent years. In addition, there have been continual changes in the pattern of household expenditure over time. These changes can be accommodated in a price index, such as the retail prices index or the consumer prices index, by regularly updating the commodities for which prices are collected, and the expenditure weights associated with them. However, over a period of time these changes build up, with the result that the commodities for which we measure prices now are very different from 50 years ago, let alone 250 years ago. As a result, it is not possible to compare the cost of exactly the same fixed basket of goods and services over an extended time period (for example, to answer questions such as how much a basket of goods and services costing £100 today would have cost 100 years ago).

Sources

The composite price index is obtained by linking together indices from several different published sources. When there is a choice between different sources, the decision about which one is to be preferred is not always clear-cut. The criteria used to assess the alternative sources include the form of the index and whether it is a direct or derived measure: for example, all other things being equal, a directly constructed price index is preferable to an implied deflator. Continuity is also important, as are breadth and representativeness of the coverage of goods and services and the quality of the expenditure weights used to combine the component indices. The preferred sources are described below in reverse chronological order, together with brief comments on their quality and, where appropriate, how they compare against alternative sources.

1947 to current day

The decision is clear-cut. The retail prices index (RPI) is the preferred index over this period. It is of the correct index form; it is available monthly back to June 1947; and it is the most familiar measure of inflation in the UK. More information about the RPI can be found on the National Statistics website, www.statistics.gov.uk/rpi, and in the *Retail Prices Index Technical Manual*.

1870 to 1947

During this period, the implied deflator for consumers' expenditure is used, derived

Figure 1

Composite Price Index: annual percentage change: 1751 to 2003

Per cent

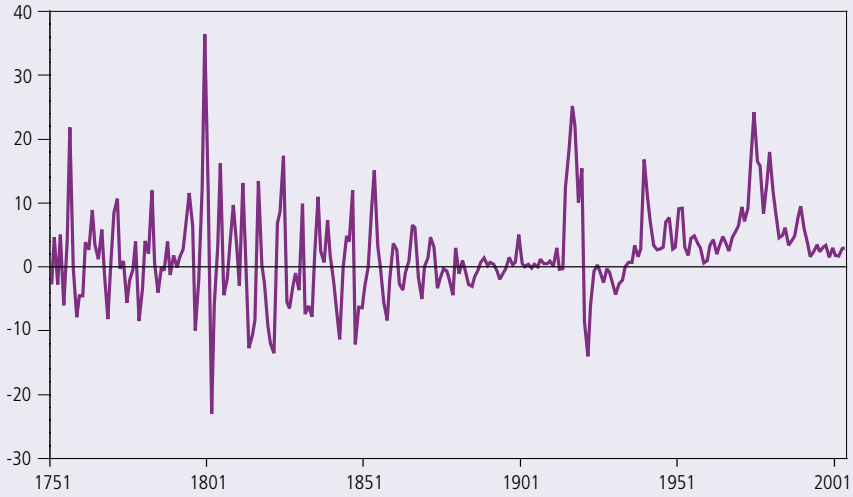


Figure 2

Composite Price Index 1750 to 2003

January 1974 = 100 (linear scale)

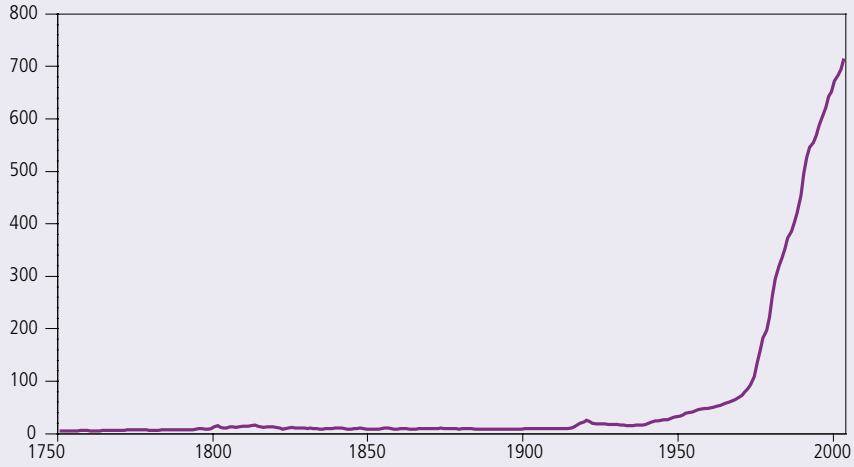
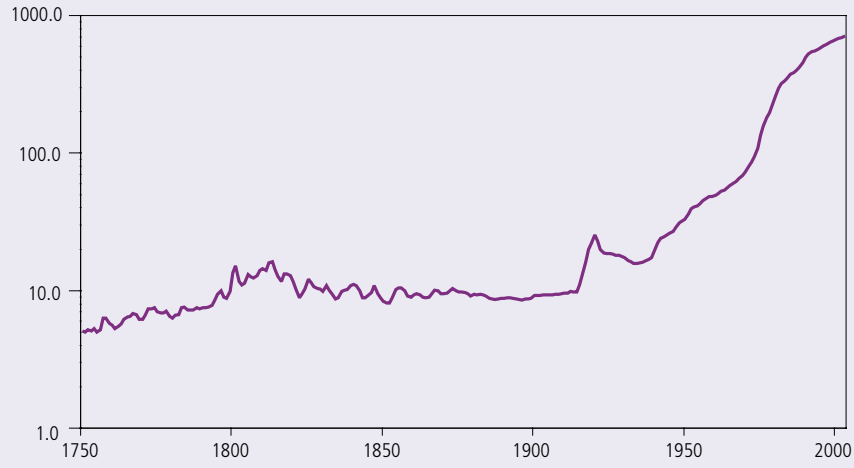


Figure 3

Composite Price Index 1750 to 2003

January 1974 = 100 (logarithmic scale)



from estimates of consumers' expenditure valued at current and constant prices. These are taken from the unofficial national accounts of the United Kingdom, prepared by the Department of Applied Economics at Cambridge University (Feinstein, 1972). These results were put together in a form which was as nearly as possible consistent in concept and definition with the then Central Statistical Office's (post-1947) official estimates of the National Accounts.

Feinstein assesses the quality of the figures for levels of consumers' expenditure as shown below. It should be noted that there is no assessment of the quality of the implied deflator, but this is likely to be substantially lower:

- 1914 to 1938: firm estimates: margin of error = < 5 per cent
- 1890 to 1913: good estimates: margin of error = +/– 5 per cent to 15 per cent
- 1870 to 1889: rough estimates: margin of error = +/– 15 per cent to 25 per cent.

Feinstein comments that there was a heavy reliance on interpolation during the two wartime periods. The year-to-year movements in prices during the First and Second World Wars should therefore be treated with caution. He also notes that in the period to 1920, the data includes Southern Ireland (comprising roughly 2 per cent of total consumers' expenditure), although this is unlikely to have had a significant effect on the implied deflator. From that date, the geographical coverage is the UK.

During the period 1914 to 1947, an alternative index, the Cost of Living Index (COLI) produced by the former Ministry of Labour, also exists. The implied consumers' expenditure deflator is preferred to the COLI, mainly due to the latter's relatively limited coverage in terms of both products and population, together with concern about the quality of the weights used to produce the aggregate index. This concern is recognised in the report of the first RPI Advisory Committee, *Interim Report of the Cost of Living Advisory Committee*. The COLI uses the same fixed weights during the entire period, based on a survey of

Table1

Composite Price Index 1750 to 2003

	Index		Index		Index		Index
1750	5.1	**1825**	12.1	**1900**	9.2	**1975**	134.8
1755	5.0	**1830**	9.9	**1905**	9.3	**1980**	263.7
1760	5.6	**1835**	8.9	**1910**	9.6	**1985**	373.2
1765	6.4	**1840**	11.1	**1915**	11.0	**1990**	497.5
1770	6.2	**1845**	9.3	**1920**	25.3	**1995**	588.2
1775	7.0	**1850**	8.4	**1925**	18.6	**2000**	671.8
1780	6.3	**1855**	10.5	**1930**	17.3	**2001**	683.7
1785	7.2	**1860**	9.3	**1935**	15.9	**2002**	695.1
1790	7.5	**1865**	9.0	**1940**	20.2	**2003**	715.2
1795	9.4	**1870**	9.5	**1945**	26.2		
1800	13.5	**1875**	9.8	**1950**	33.0		
1805	13.1	**1880**	9.4	**1955**	43.1		
1810	14.4	**1885**	8.8	**1960**	49.1		
1815	12.7	**1890**	8.8	**1965**	58.4		
1820	11.7	**1895**	8.6	**1970**	73.1		

Table 2

Composite Price Index: Annual percentage change: 1750 to 2003

	Per cent		Per cent		Per cent		Per cent
1751	-2.7	**1826**	–5.5	**1901**	0.5	**1976**	16.5
1756	4.2	**1831**	9.9	**1906**	–	**1981**	11.9
1761	-4.5	**1836**	11.0	**1911**	0.1	**1986**	3.4
1766	1.2	**1841**	–2.3	**1916**	18.1	**1991**	5.9
1771	8.5	**1846**	4.0	**1921**	–8.6	**1996**	2.4
1776	-2.2	**1851**	–3.0	**1926**	–0.8	**2000**	3.0
1781	4.1	**1856**	–	**1931**	–4.3	**2001**	1.8
1786	0.0	**1861**	2.7	**1936**	0.7	**2002**	1.7
1791	-0.1	**1866**	6.5	**1941**	10.8	**2003**	2.9
1796	6.4	**1871**	1.4	**1946**	3.1		
1801	11.7	**1876**	–0.3	**1951**	9.1		
1806	–4.4	**1881**	–1.1	**1956**	4.9		
1811	–2.9	**1886**	–1.6	**1961**	3.4		
1816	–8.4	**1891**	0.7	**1966**	3.9		
1821	–12.0	**1896**	–0.3	**1971**	9.4		

expenditure patterns of urban working class households conducted in 1904. The weights were influenced by a highly subjective assessment of what constituted legitimate expenditure for a working-class family; beer was completely excluded and the weight used for tobacco was much less than the actual proportion of expenditure on tobacco. By the 1930s, the COLI's weights were very out of date and unrepresentative.

1850 to 1870

For 1850 to 1870 a retail price index produced by G H Wood is used. This is constructed partly from statistics in the Board of Trade's Report on Wholesale and Retail Prices, and partly from data collected by Wood himself from Co-operative Society records (Layton and Crowther).

Wood's index extends further, up to 1910, but this later period is not used in the composite long-run index. Layton and Crowther comment that "the basis for Wood's figures is comparatively slight, many of the figures being contract rather than genuine retail prices; hence too much reliance should not be placed on the details of the calculation, which is rather in the nature of an intelligent guess than an authoritative statement of the course of retail prices."

1750 to 1850

For the years up to 1850, the price index used is one compiled by Phelps-Brown and Hopkins. There is no suitable alternative index available for this period. Phelps-Brown and Hopkins' index covers the prices of consumables, drawn from a variety of sources: until the early 19th century, prices are generally based on records from a few local markets, the accounts of colleges and hospitals in the South East of England, and from records of the Navy Victualling Service. Subsequent to that, some of the sources cease and are replaced by wholesale prices from the organised produce markets (for example, Smithfield's wholesale meat market in London). The price index is built up from six main categories of expenditure, each of which has a constant weight during the entire course of the index. Within these main categories, the weights of the components were allowed to vary to take account of the changing pattern of consumption, and the availability of data sources.

Phelps-Brown and Hopkins' price index extends further into the 20th century, but is not preferred to the other sources listed above because its coverage is restricted to consumables. Their index also extends back to the 13th century.

Results

Trends in inflation

Table 1 shows for each year the level of the price index, based on January 1974 equal to 100. January 1974 was chosen so the index numbers at the start or the end of the period are not inconveniently large or small. Table 2 shows the percentage change in the index over the previous year – that is, the annual rate of inflation (see also Figure 1). The figures in this table are derived from the primary sources used to construct the composite index shown in Table 1. This ensures that the annual rates of change are consistent with those published elsewhere. It should be noted that because the index levels of the primary sources are different from those shown in Table 1 (reflecting the different reference dates), rates calculated from these primary sources may differ slightly from those derived from the data in Table 1.

The tables show that over the period as a whole, prices have risen by around 140 times. Prices roughly doubled between 1750 and the end of the 18th century, but were at about the same level over 100 years later, prior to the start of the First World War. The fluctuations prior to 1914 partly reflect harvest quality and wars, with European Wars having the most marked impact on

UK inflation. Prices increased by 50 per cent over the first ten years of the Napoleonic Wars (1803 to 1815), and doubled over the four years of the First World War and two succeeding years. Prices fell in most years between 1921 and 1936, or showed very small year-on-year increases of less than one per cent, reflecting the falls in profits and wage costs associated with rising unemployment during the Depression. Prices have risen in every year since.

Taken as a whole, in the period between 1750 and 1938, before the start of the Second World War, prices rose by a little more than three times. Since then prices have increased more than forty-fold. The most rapid increases in prices occurred in the early years of the Second World War, and more particularly between 1973 and 1981. Over this latter 8 year period, prices more than tripled, with inflation reaching 24 per cent in 1975, and exceeding 10 per cent in each year except 1978. The situation in Britain reflected the experience of the entire industrial world, which was struck by a series of supply shocks during the 1970s, including a quadrupling in the world price of crude oil in 1973. Internationally, the effect of these supply shocks was most evident in 1974 when consumer price inflation exceeded 10 per cent in the US, Italy, France and Japan, while German inflation peaked at 7 per cent. In the UK, in the 10 years from 1982 to 1991, inflation was above 4 per cent in most years, but has been below that in every year since.

These results are also presented graphically. Figure 2 plots the price index on a linear scale. It clearly shows the rapid increase in prices that has occurred since the Second World War, though over-emphasises the rate at which this change has taken place, since the level of prices was already much higher compared to the 18th and 19th centuries. For instance, a doubling in the price index from 10 to 20 appears as a much smaller vertical distance on the scale than a doubling from 100 to 200. This problem can be overcome by the use of a logarithmic scale as in Figure 3. In this chart, a given proportional increase in the index (that is, the same inflation rate) appears as the same vertical distance on the index axis, regardless of the actual starting value of the index.

Calculating changes in the purchasing power of the pound

The results in Table 1 can also be used to calculate changes in the purchasing power of the pound. Two examples of how to do this are given below.

Example 1: what is the equivalent sum of money in 2003 prices of £50 in 1850?

This question is answered by determining by how much prices have risen over this period. The calculation is:

$$\textit{amount to be revalued} \times \frac{\textit{later year's index}}{\textit{earlier year's index}}$$

Inserting the relevant index values from Table 1 gives:

$$£50 \times \frac{715.2}{8.4} = £4{,}257$$

Example 2: what was the purchasing power of the pound in 1995, compared with 100p in 1965?

In other words, if one pound could buy one hundred pence worth of goods and services in 1965, what would the same pound buy in 1995 in view of the general rise in the prices of those goods and services in the intervening period? The calculation to answer this question is:

$$100 \times \frac{\textit{earlier year's index}}{\textit{later year's index}}$$

Inserting the relevant index values from Table 1 gives:

$$100p \times \frac{58.4}{588.2} = 9.9p$$

In other words, the purchasing power of the pound fell by 90.1 per cent during the period in question. By inverting the numerator and denominator in the above equation, one could also say that it required £10.07 in 1995 to buy what a pound could purchase in 1965

Publication

Tables 1, 2 and 4 will be published monthly in the *Focus on Consumer Price Indices* on the National Statistics website. It should be noted that because of the limitations of some of the primary sources, particularly before 1947, the results shown in Tables 1, 2 and 3 are not within the scope of National Statistics.

The results presented in this article also appear in the House of Commons Library Research Paper *Inflation: the value of the pound 1750–2002*.

Note

1. The consumers' expenditure deflator is calculated as the ratio of indices of current price and constant price expenditure:

$$I_t = \frac{\cancel{CP_t}\ /\ \cancel{CP_0}}{\cancel{KP_t}\ /\ \cancel{KP_0}} \times 100$$

   where CPt is current price expenditure in period t and KPt is the corresponding constant price expenditure.

   The implied deflator, It, is likely to be subject to a smaller margin of error than the underlying expenditure data as it is based on relative, rather than absolute, levels; furthermore, errors in the level of current price expenditure are likely to be reflected in the constant prices values, since the two are closely linked.

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The big issue

One aspect of the rise in obesity claims more column inches than any other – the issue of our children's expanding waistlines. **Liz Bestic** finds out why

Only a hermit living on a remote island could claim to have missed the acres of column inches in the newspapers devoted to the subject of obesity in the UK. Indeed the Government and experts are now so concerned about the rise in obesity that a whole range of new measures have been adopted to try and change people's eating habits. But although obesity is a growing problem, it is childhood obesity which is really worrying experts.

A recent ONS report *The Health of Children and Young People* highlighted the fact that eating patterns in childhood and adolescence affect health in later life. So why has childhood obesity almost doubled since the mid 1980s with the trend showing no signs of abating?

One of the answers is that children's diets have changed immeasurably over the past 50 years. At a recent conference on childhood obesity, nutritionist Dr Pauline Emmett presented a paper which showed that children today are consuming 30 times more soft drinks and 25 times more sweets than they did 50 years ago. Her findings came out of the Avon Longitudinal Study of Parents and Children (ALPAC) and also showed that although children in 1950 consumed more bread and potatoes, they also ate far fewer sweets and soft drinks than their counterparts today. "Sweets consumption is up from less than 1g to 25g and soft drinks and juices have risen from 13g to an astonishing 446g a day" she explains.

"Children today are consuming 30 times more soft drinks and 25 times more sweets than they did 50 years ago"

Dr Susan Jebb, Head of Nutrition and Health Research at the Medical Research Council, Cambridge, warns that the consumption of fizzy drinks has almost doubled in the past 15 years with young adults and teenagers now drinking an average of six cans a week. "The current guidelines state that no more than 11 per cent of calories should contain sugar and yet less than 20 per cent of school age children achieve that. In fact about one in four children are getting more than 20 per cent of all their calories from confectionery and soft drinks" she adds.

"The problem with soft drinks is that the energy which is consumed as a drink rather than food does not seem to impact on the normal appetite control system in the brain. If you eat a plate of sandwiches for example, your brain sends messages to your stomach that you are full. The same message does not go out if you drink a can of coke and so young people are literally doubling up on their calorific intake" she explains.

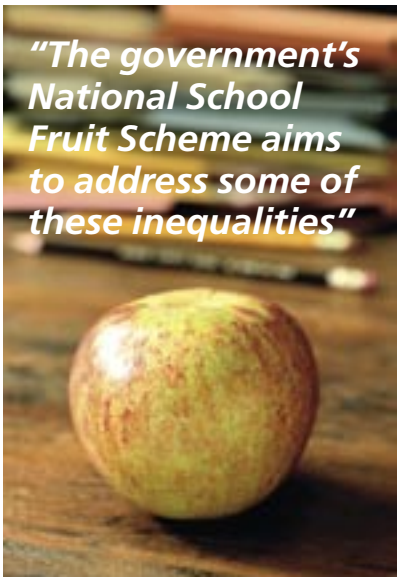
And sugar is not the only foodstuff in the firing line. In June 2000 the ONS published its *National Diet and Nutrition Survey* on young people aged 4 to 18 years – the largest and most detailed survey ever undertaken in this particular age group. The statistics made grim reading. Although most children and young people appeared to have adequate intakes of most nutrients, their intake of saturated fatty acids, sugars and salt was high, and on average British children were eating less than half the recommended five portions of fruit and vegetables a day. Computer games, fast food and the car culture have obviously had a profound effect on children's lifestyles.

But can parents be held fully responsible for not giving their children the right health messages about food? It seems clear that the food industry and schools must also shoulder some of the responsibility for lack of healthy choices too. In Finland, for example, children are weighed at the end of every school year, and their parents are told if obesity is suspected.

Schoolchildren in the UK now spend more than £1.3 billion a year on food with one third of their pocket money going on snacks eaten travelling to and from school. Not only that but portion sizes are getting ever larger and 'supersizing' of fast food is an increasing trend in the UK. But as the *National Diet and Nutrition Survey* explains, children need a healthy, balanced diet rich in fruits, vegetables and starchy foods.

The report also shows clear evidence that inequalities exist between different socio-economic households in the consumption of fruit and vegetables, with less eaten by children and young people from lower socio-economic households. Some fail to meet the recommended levels of five portions a day. The Government's National School Fruit Scheme, which entitles school children between the ages of four and six a free piece of fruit every school day, aims to address some of these inequalities.

Many experts believe that the food children eat is only a part of the story and it is a combination of factors which has led to the frightening rise in childhood obesity. "Childhood obesity generates a whole range of problems from the psychological, such as bullying, to the more serious life threatening illnesses of diabetes and



heart disease" says nutritionist Amanda Wynne from the British Dietetic Association. "The problem needs to be tackled on a number of different levels right across the board. Safer environments would mean that children can walk or cycle to school and education would help them to make healthier choices in what they eat".

The ONS report backs this up and highlights the fact that in 1999 children spent more time watching television and videos than any other out-of-school leisure activity. "The proportion of primary school children walking to school declined from 63 per cent in 1992/1994 to 54 per cent in 1999/2001. This combination of an unhealthy diet and non-active lifestyle could have a significant impact on children's health and wellbeing" warns the report.

> *"It seems that a combination of unhealthy food choices and lack of exercise may be to blame for the inexorable rise in childhood obesity"*

The fact that primary school children are much more likely to be driven to school these days could be due to the fact that many parents seem to be concerned for their children's safety. Meanwhile, secondary school children tend to live further away from their schools, making the average journey length to and from school double that of their primary school counterparts. This accounts for an even lower proportion of secondary pupils walking to school than primary pupils.

So it seems that a combination of unhealthy food choices and lack of exercise may be to blame for the inexorable rise in childhood obesity, even though a recent study by the Food Standards Agency showed that children are more aware of healthy eating these days but most ignore the advice.

Taking action

The House of Commons Health Committee recently published the most comprehensive study on childhood obesity to date – released on the 27th May this year. It reports that England has the fastest growing obesity problem in Europe and that childhood obesity has tripled in 20 years, prompting the gloomy prediction that this will be the first generation where children die before their parents as a consequence of childhood obesity.

Commenting on the report, the Health Committee Chairman, David Hinchcliffe, said "Obesity will soon supersede tobacco as the greatest cause of premature death in this country. It is staggering to realise that, on present trends, half of all children in England in 2020 could be obese. Already a third of children in America, which is ahead of us only by a few years in obesity trends, are likely to become diabetic".

To prevent this happening, the Committee has called for an industry-led, voluntary withdrawal of junk food advertisements on TV that specifically target children and exploit 'pester power' (like those featuring sporting superheroes such as David Beckham, Gary Lineker and Michael Owen, who have promoted products such as crisps and fizzy drinks). The report recommends that this should be backed by action to reduce promotion and availability of unhealthy foods in schools and that if companies do not withdraw their promotions voluntarily, a ban should follow in 2007.

Another suggested measure is the introduction of a 'traffic light' system for labelling food – using red, amber and green labels to show the difference between healthy and unhealthy, energy dense foods – according to criteria devised by the Food Standards Agency.

Activity, or lack of it, is also identified as a key player in rising obesity levels, so the report suggests measures to increase children's levels of physical activity. These include raising the recommended activity levels from two to three hours per week, and measuring schools' performance in physical activity as part of their Office for Standards in Education (Ofsted) inspection.

The Food Commission, which campaigns for safer, healthier food, recently launched a Parents' Jury at which one mother asked: 'Surely footballers need the goodness from fruit and vegetables to keep them in good condition? Why can't they advocate fruit so that children could emulate their sporting heroes by eating healthily?'. Dr Jebb from the Medical Research Council agrees and believes that there is now a window of opportunity where parents, schools and the government can act. 'It's time to stop sitting on our hands and do something about it' she says.

You can find more information about the health of children and young people at **www.statistics.gov.uk/children**; and the National Diet and Nutrition survey at **www.statistics.gov.uk/nutrition**

Through the roof

Are property prices still rising? One thing is for sure: with the introduction of the official House Price Index, property statistics are definitely looking up, says **Jill Papworth**

UK house prices are still going up, though the pace of house price inflation appears to have eased, according to the Government's new official House Price Index. The index, published by the Office of the Deputy Prime Minister (ODPM), reveals that UK annual house price inflation declined from 9.8 per cent in February to 7.8 per cent in March 2004.

This slight fall was mainly caused by a rise of just 0.2 per cent in prices between February and March, compared with a much larger rise of 2.1 per cent over the same period last year. ODPM explains that seasonal factors can affect movements in its new House Price Index as the figures are not yet seasonally adjusted. This will change in a year or so, once the index, which presents data going back to February 2002, has enough data for seasonal adjustment to be reliably determined.

All average house prices quoted in the new ODPM statistics are 'mix-adjusted', not 'simple' averages as are used in some other house price indicators such as those published by the Land Registry. A mix-adjusted average price for a particular region tells you the average amount spent on purchasing a property in a given period, assuming a constant mix of property characteristics based on sales in that region over the previous three years.

This ensures, for example, that the average price does not shoot up unrealistically one month if a high proportion of the properties sold are expensive, detached houses, and then dive down the next month if the majority of sales are one-bedroom flats. Overall, mix-adjusted averages give us a better picture of how house prices are actually moving up or down, rather than what types of properties are being sold.

Annual house price inflation varies considerably, of course, from country to country within the UK and from region to region within England. The latest ODPM figures show that a 'catch-up' process appears to be taking place, serving to gradually narrow the traditional north-south divide on the cost of buying a home.

Price inflation has slowed down and is low in those areas where house prices have been recently high, while in areas where prices have been low, inflation is rising at a cracking pace. All the home countries except for Northern Ireland saw a fall in annual house price inflation in March. The fall was greatest in Scotland, down from 26.2 per cent in February to 22.3 per cent, giving an average house price of £101,628.

England experienced the next biggest inflationary fall at 6.7 per cent, down from 8.7 per cent in February, bringing the average house price to £173,056. The shallowest fall was in Wales – down from 21.7 per cent to 20.5 per cent in March – where the average house price was £116,953.

Annual inflation in Northern Ireland, on the other hand, rose from 6.5 per cent in February to 7.6 per cent in March, to give an average house price of £102,657.

Figures show that a 'catch-up' process appears to be taking place, serving to gradually narrow the traditional north-south divide on the cost of buying a home

Across England, inflation fell in all but one region between February and March – the South West saw a small rise from 4.4 per cent to 4.6 per cent. The steepest inflationary falls were in the West Midlands (from 16.2 per cent to 10.2 per cent), the East Midlands (down from 12.3 per cent to 8.7 per cent), and the Eastern region (down from 5.2 per cent to 0.5 per cent).

House price inflation in the North East at 26.2 per cent, the North West at 19.1 per cent and Yorkshire and the Humber at 17.9 per cent remain substantially higher than in the rest of England.

www.gettyimages.com

The House Price Index aims to help confused buyers make sense of the market

The UK house price inflation rate for first time buyers fell to 10.0 per cent from 12.0 per cent in February. This, the ODPM explained, was due to a marginal decrease in prices of 0.1 per cent between February and March, compared with a rise of 1.7 per cent over the same period last year. The average house price in the UK for first time buyers stood at £125,271 in March compared with £125,322 in February. The inflation rate for owner-occupiers, who paid an average price of £180,833 in March, also declined – from 8.7 per cent to 6.7 per cent.

This may give a glimmer of hope to the one in three first-time buyers who say they have given up any aspirations of being able to buy a property in the next 12 months because of increasing property prices. According to a housebuyers survey from the Yorkshire Bank, 37 per cent of first-timers had given up in despair while 41 per cent were so determined to buy that they were prepared to consider buying properties they didn't really like just to get a foot on the property ladder!

The Government started producing its own monthly House Price Index last September (2003) in a bid to help confused consumers make sense of the market. This was prompted by the fact that the handful of existing house price indices published by, for example, Nationwide, the Halifax and the Land Registry don't always agree with each other. Hence the Government's decision to step in and publish an index it argues will eventually be the most dependable and authoritative available.

On its launch, housing minister Keith Hill said: "Interest in the private housing market continues undiminished and this new, official House Price Index is an exciting development that will provide a clearer indication of the state of the market."

The new index, currently being published monthly on an experimental basis, uses information on around 30,000 completed mortgages per month from more than 50 lenders who supply data through the monthly Survey of Mortgage Lenders.

An interesting difference in its approach to that of the indices produced by the Halifax and the Nationwide is that it uses a different weighting system. Instead

37 per cent of first-time buyers had given up in despair

of giving equal weight to every house included, the ODPM index gives greater weight to a house the more expensive it is. This means that inflation in higher-priced areas has a greater influence on the overall national figure. Because house price inflation in the more expensive South East is slower at the moment, this explains why the latest ODPM figures tend to show lower general growth than the Halifax and Nationwide indices.

Development of the methodology has been in conjunction with the ONS and the new index will undergo a quality audit later this year with a view to gaining accreditation as a 'National Statistic'.

Aside from the new index, the ODPM's Housing Directorate produces a very wide range of statistics related to housing issues from sales and transfers of social housing to land prices and grants, all of which can be found on its website at **www.odpm.gov.uk**

According to Shakespeare, there's not much in a name. But while this may be true of roses, when it comes to people the situation is a little different

The name game

Names, like our appearance, can say a lot about who we are – reflecting our gender, class, family values, ethnic heritage and even our age. They are as subject to changes in popularity as clothes or hairstyles and, as with fashion, what goes around comes around.

Lately we've been stuck in something of a rut when naming our newborns, but there are signs that change is afoot. Although Jack still reigns supreme at the top of the chart of most popular boys' names in England and Wales (a position it has held for the past nine years) and in Northern Ireland, in Scotland it has been pushed into second place for the first time in four years by Lewis.

For girls, Chloe had once proved very popular, holding the top spot in the England and Wales chart for six years, only to be ousted this year by Emily in first place and Ellie in second. In Scotland, Chloe had topped the charts for five years, but has now been bumped off in favour of Emma – also the 2003 favourite in Northern Ireland.

TV Nation

In today's less formal society we tend to call people by their forenames only, which puts even more pressure on parents to come up with an original name. Many people are turning on the TV for ideas – witness the surge in popularity of Alfie and Spencer, the

Top of the Tots 2003

	England & Wales		Northern Ireland		Scotland	
	Boys	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**
1	Jack	Emily	Jack	Emma	Lewis	Emma
2	Joshua	Ellie	Matthew	Katie	Jack	Ellie
3	Thomas	Chloe	Adam	Caitlin	Cameron	Amy
4	James	Jessica	James	Chloe	James	Sophie
5	Daniel	Sophie	Ryan	Amy	Kyle	Chloe
6	Oliver	Megan	Joshua	Ellie	Ryan	Erin
7	Benjamin	Lucy	Conor	Hannah	Ben	Rachel
8	Samuel	Olivia	Daniel	Rachel	Callum	Lucy
9	William	Charlotte	Ben	Sarah	Matthew	Lauren
10	Joseph	Hannah	Dylan	Megan	Jamie/Adam	Katie

> ***There are two things you must remember when someone rings you to say they have produced an off-spring. First, and for no obvious reason, you must ask how much it weighs, and second, you must try not to drop the phone when they tell you what name they've chosen. "Chardonnay?" you have to say in measured tones. "How very, ummmm, oaky."***
>
> *Jeremy Clarkson writing in The Sunday Times*

affable Moon brothers from Eastenders. Alfie rose from 49th in the 2002 chart to a ranking of 18th in 2003, while Spencer broke into the top 100 at 89th.

Chardonnay, which became popular in 2002 after the ITV soap opera-style drama Footballers Wives, maintained momentum in the 2003 chart – 91 girls were given this name, compared to only 52 in 2002. The BBC reality show Fame Academy has also shown its influence on popular culture, with dozens of Lemars born in 2003, compared with almost none in 2002.

The celebrity effect

Unsuprisingly, celebrities are some of the most influential trend-setters. Take Jamie Oliver for example – his daughters Poppy and Daisy have both seen their names shoot up the charts. Poppy climbed from 63rd in 2002 to 43rd in the 2003 chart, while Daisy proved even more popular, rising from 42nd to 31st. I wonder how much influence Gwyneth Paltrow and Chris Martin will have, after naming their daughter Apple? Will we see a windfall of Apples in next year's chart?

Freak or unique?

According to a scientific study carried out by Dr Alex Bentley of University College London, and Mathew Hahn of Duke University in the USA, girls are 40 per cent more likely to be given a unique name than boys. "This has a lot to do with life in a patriachal society, where boys more often get traditional names", says Hahn. "It might also show the 'playground effect' – boys with unusual names are going to be teased mercilessly."

When it comes to unusual names, some people go much further in their quest for originality and call on some unlikely sources for inspiration. In America, big brands such as L'Oreal, Armani, Del Monte and Courvoisier have proved influential, as have car companies – spawning Celica, Infiniti, Dodge and Chevy. Two unfortunate boys in Texas and Michigan have even been named after the popular sports channel, ESPN! I bet they wish they had been born in France, where parents have to select a name from an approved register.

You can find more information about popular first names in England and Wales, Scotland and Northern Ireland at **www.statistics.gov.uk/babynames**

Zero Tolerance

Louise Casey, Director of the Anti-Social Behaviour Unit at the Home Office, explains the measures being taken to tackle anti-social behaviour

www.gettyimages.com

When I took up my role as Director of the Anti-Social Behaviour Unit just over a year ago, I made it my first task to visit as many local communities affected by anti-social behaviour as possible.

Looking back, my overall recollection is that of meeting local people who really care about what is happening to their communities; of meeting tenants' and residents' associations determined to shape their own lives and to participate fully in their local community – to tackle the anti-social behaviour of the few that ruin the lives of many. Meeting these people and witnessing their determination and drive to take on and overcome the problem has stayed with me and my colleagues in the Anti-Social Behaviour Unit. It has inspired and informed the work we have carried out over the past year or so, and will continue to influence our future direction.

Back in Whitehall, it became clear that the communities we visited were not particularly unusual – the *British Crime Survey* demonstrates just how widespread the concern is about anti-social behaviour. Awareness has increased since the early 1990s and about a third of all adults now consider anti-social behaviour to be a big problem in their local area. More than one in three adults (37 per cent) said that disorder in their area had a negative impact on their quality of life. People living in council estates and low-income areas are the most likely to perceive high levels of anti-social behaviour (39 per cent compared with the national average of 22 per cent).

But our understanding of the true 'amount' of anti-social behaviour is hindered by a lack of a common definition. This means that, unlike crime, there is no national data on incidence or prevalence.

One of the first tasks for analysts within the Unit was to carry out the first ever one-day count of anti-social behaviour in England and Wales, in order to understand more about reports of these incidents and the burden they place on the variety of agencies that deal with it.

The One-Day Count of Anti-Social Behaviour

On 10 September 2003, we asked a variety of agencies to record all reports of anti-social behaviour they received in the 24-hour period. This included the police, local authorities, the fire service, and agencies as diverse as primary schools, citizens' advice bureaux, housing associations, supermarkets and doctors surgeries. In total, more than 1,500 organisations responded. Information was received relating to every Crime and Disorder Reduction Partnership in England and Wales, making the daycount representative of a large proportion of contacts concerning anti-social behaviour made on a typical weekday. The daycount showed that there were:

- 66,107 reports of anti-social behaviour in one day;
- One report every two seconds;
- An estimated 16.5 million reports of anti-social behaviour a year;
- 10,000 reports of litter and rubbish, nearly 8,000 reports of criminal damage and vandalism, around 5,000 reports each of intimidation, noise, rowdy behaviour, and abandoned vehicles, and more than 3,000 reports of begging and street drinking.

Based on the information collected by the daycount, anti-social behaviour costs agencies in England and Wales around £13.5 million a day. This could imply costs of around £3.4 billion per year: £2 billion for local authorities, £1.1 billion for the police, £246 million for Housing Associations and £44 million for the fire service for the year as a whole. And these relate only to the financial costs to agencies in dealing with anti-social behaviour – such as the cost of recording the report, attending and dealing with the incident, and costs of mediation and enforcement (arrest, injunctions, and anti-social behaviour orders). They do not include any of the costs to individuals and communities who have to suffer the effects of the anti-social behaviour. We can assume that the costs estimated here are a significant underestimate of the true total costs.

Together: Tackling Anti-Social Behaviour Action Plan

The daycount has proved an invaluable tool to demonstrate that anti-social behaviour is a significant problem – that it is widespread, that it impacts on a wide range of agencies, and that the financial implications are sizeable. It has acted as a backdrop against which we have developed our action plan for tackling

More than one in three adults (37 per cent) said that disorder in their area had a negative impact on their quality of life

What is anti-social behaviour?

Section 1(1) of the *Crime and Disorder Act 1998* defines acting in an anti-social manner as a manner that caused or was likely to cause harassment, alarm or distress to one or more persons not of the same household as the defendant.

The types of anti-social behaviour this may include are deliberately not defined in the Act, to allow for the legal remedy of anti-social behaviour orders (ASBOs) to be used in a variety of circumstances and to tackle a wide range of behaviours.

Anti-social behaviours identified during the daycount included:

- **misuse of public space:**
  drug or substance misuse & dealing; street drinking; begging; prostitution; kerb crawling; inappropriate sexual conduct/indecent exposure; abandoned vehicles
- **disregard for community or personal wellbeing:**
  noise; rowdy behaviour; nuisance neighbours; hoax calls; animal-related problems
- **acts directed at people:**
  intimidation or harassment
- **environmental damage:**
  criminal damage or vandalism (eg graffiti); litter or rubbish

anti-social behaviour. This was launched in October 2003 by the Prime Minister and the Home Secretary, and focuses clearly on making an impact on the ground – making a difference to the lives of the many thousands who experience anti-social behaviour, by encouraging individuals and organisations who are determined to address the problem to work together. The main elements of our approach are:

- **TOGETHER** – a national campaign to support and highlight action to tackle anti-social behaviour
- **Improving the response to anti-social behaviour** in all areas across England and Wales – driving up the performance and capacity of all Crime and Disorder Reduction Partnerships, local authorities and practitioners
- **TOGETHER Action Areas:Trailblazers** – focused initiatives to tackle nuisance families, begging and abandoned cars in 10 local areas; and targeted work in 50 additional areas to support their efforts to tackle anti-social behaviour
- **Action across Government** – work to address anti-social behaviour, by ensuring that young people are given opportunities, public spaces are clean and safe, and victims and witnesses are protected and supported.

This action plan is backed with £75 million. However, as our early visits and the daycount demonstrate, this problem is not just about resources. It is about renewing the determination, promoting the responsibilities that we owe each other. By working together, we can make a real and lasting difference to the lives of those people who have had to live with anti-social behaviour day after day.

You can find out more about the one-day count of reported anti-social behaviour, and the costs applied to the results of the count, at **www.homeoffice.gov.uk/crime/antisocialbehaviour/daycount/index.html**

A report on measuring and defining anti-social behaviour will be published this summer by the Research, Development and Statistics Directorate of the Home Office.

For more information about the work of the Anti-Social Behaviour Unit, visit **www.together.gov.uk**

The **TOGETHER Actionline** – **0870 220 2000** – is available every weekday to practitioners throughout England and Wales to provide help and support in tackling anti-social behaviour.

On the horizon

The latest releases from National Statistics

Labour Market Statistics: Regional (First Release)

Contains the latest employment, unemployment, economic activity and inactivity, and vacancy data at regional and subregional level. A series of releases, comprising one for Scotland, one for Wales and one for each Government Office Region in England.
Free at: **www.statistics.gov.uk**, or hardcopy, annual subscription for each individual region available for £51.00
Release date: 14 July
To order: call **0870 600 5522**, or visit www.tso.co.uk/bookshop

Monthly Digest of Statistics

An important reference work containing the latest monthly and quarterly statistics for UK businesses, economy and society, presented in 20 chapters of tables.

Includes national accounts, population and vital statistics, prices and wages, law enforcement, agriculture and manufacturing data.
Free at **www.statistics.gov.uk**, £15.00 for hardcopy, or £150 for annual subscription
Release date: 26 July
To order: call **0870 600 5522**, or visit **www.tso.co.uk/bookshop**

Economic Trends

A monthly compendium of statistics and articles on the UK economy, including some regional and international statistics. Contains data on UK economic accounts, prices, labour market, output and demand indicators, selected financial statistics, GDP, consumer and wholesale price indices, households' final consumption expenditure, final expenditure prices index, visible and invisible trade balance, earnings, and regional and international economic indicators.
Free at: **www.statistics.gov.uk**, single issue £23.50, annual subscription (including Annual Supplement and United Kingdom Economic Accounts) £380.00 for hardcopy
Release date: Week commencing 26 July
To order: call **0870 600 5522**, or visit **www.tso.co.uk/bookshop**

Migration Estimates (Northern Ireland)

The Northern Ireland Statistics and Research Agency compiles estimates of migration based on a number of sources including the Central Services Agency Central Health Index and the Population Census. Net migration estimates are prepared annually as part of the production of mid-year population estimates. A review of migration is currently being carried out following the publication of the 2001 Census results and it is hoped to publish details of this in Summer 2004. Estimates will be available by age and sex for moves between Local Government Districts and moves between Northern Ireland and the rest of the UK once the review is complete.
Free at: **www.nisra.gov.uk** (internet only)
Release date: 30 July

Asylum Statistics (United Kingdom) 2003

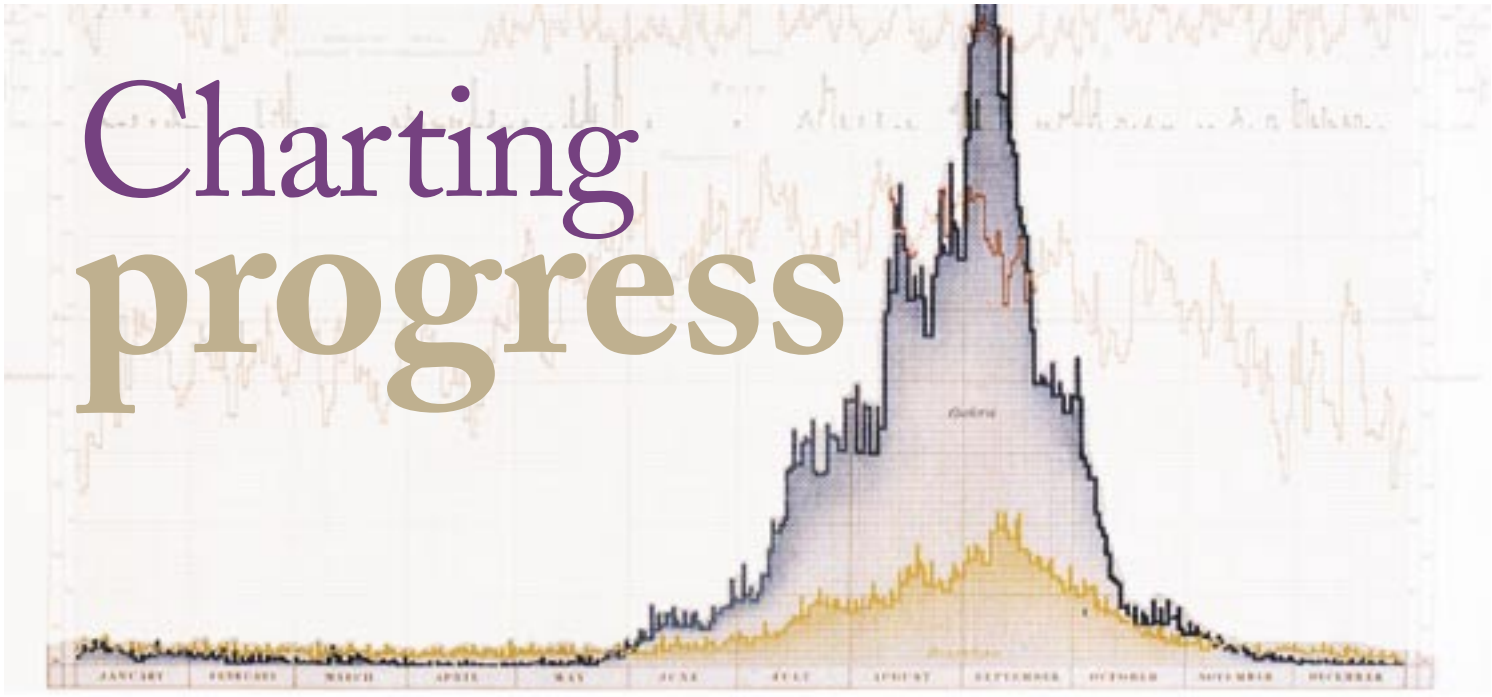
An annual bulletin which gives detailed figures (including historical statistics) analysed by nationality on asylum applications, initial decisions, appeals, removals, as well as numbers of applicants in receipt of NASS support, numbers detained, and numbers of cases awaiting decision.
Free at: **www.homeoffice.gov.uk**
Release date: August
To order: call **020 7273 2084**

British Timber Statistics

Estimates of wood production and consumption by wood processing industries using British timber, for the latest calendar and previous 10 years. Based on surveys of sawmills and fencing manufacturers and other enquiries to the wood-processing industries.

Includes balances of harvesting and deliveries of softwood and hardwood; results of surveys and enquiries for conifer harvesting, sawmills, pulp industry, wood-based panels, round fencing and other products; and conversion factors.
Free at: **www.forestry.gov.uk** or £15.00 for a hardcopy
Release date: 26 August
To order: call **0870 121 4180**

Charting progress



His name may be unfamiliar to most, but without his innovation statistics just wouldn't be the same. Bev Williams finds out about the man who pioneered the common statistical graph

William Playfair was born in 1759 in Scotland to the Reverend James Playfair, of the Parish of Liff & Benvie. Strangely, nothing is known of his mother. Playfair's up-bringing was predominantly overseen by his older brother, John (a mathematician and geologist), after their father died when William was just 13.

Growing up during the Enlightenment – a period of great development in the arts, sciences and industry – Playfair was exposed to a vast array of possibility and opportunity. He began his working life as an apprentice to Andrew Meikle, the inventor of the threshing machine – an agricultural device for removing the husks from grain . In 1777 he moved to Birmingham when he became draftsman and assistant to James Watt of Boulton & Watt steam engine manufacturers. Five years later he moved to London to set up his own business enterprise in silversmithing.

During this time Playfair's interest in the representation of figures in graphs, or "linear arithmetic" as he more often called them, came to the forefront of public attention through his book, *The Commercial and Political Atlas*. It was in this publication where he first recorded some of his drawings of time series and bar charts, using them to support his views on economic and political matters. By no means the first to attempt the representation of figures in a graphical form, Playfair was the inventor of statistical graphs as we know them today.

Playfair moved to Paris in 1787 to make greater use of his engineering skills and seek better fortune, arriving during the revolution. Here he joined the many inhabitants of the St Antoine quarter in forming a militia group who aided the capture of the Bastille. He also became involved in an impetuous money making scheme to sell land, but was forced to leave Paris for Belgium when this failed miserably. While in Belgium, Playfair came into contact with a semaphore telegraph and developed an English alphabet for the machine, taking it back to England with him and claiming it as his own invention.

Arriving back in England, Playfair set up another corrupt business venture, which failed when the Bank of England did not approve of his business procedures. He eventually turned to journalism, editing many journals.

When the French Revolution ended, Playfair returned to Paris for the last time where he continued his work as an editor, working for a French periodical. But after printing some dubious comments about a duel between two French diplomats, he was sentenced to imprisonment so fled the country back to England.

In the remainder of Playfair's years he found a renewed interest in economics and published several pamphlets and books' utilising his drawings of charts and graphs. William Playfair, man of many guises, died in London in 1823, aged 64, unaware of the lasting impression he had created with his graphical representations. Throughout his eventful life, Playfair had pursued an assortment of careers and was more widely renowned for being a scoundrel than for his statistical achievements. It was not until a century after his death that he was given the recognition he deserved.

Stats of life

A light-hearted look at the wider world of statistics

Percentage of disabled parking bays at supermarket car parks are being used by non-disabled drivers

Proportion of people who admit to using electronic communications to flirt with potential partners or nurture an affair

Proportion of Britons who said they believe in God, compared with 98 per cent in Nigeria

46%

150,000

Amount in tonnes of tea the people of the United Kingdom consume a year

The amount of time that a cockroach can live without its head before it starves to death

9 days

500 million

The amount in litres of rain that can fall from a single thunderstorm

National Spam Appreciation Week celebrates the 63rd birthday of the chopped pork and ham product. More than six billion cans of spam have been sold in total, with the residents of Guam eating the most in the world – 16 cans per person per year

www.corcis.com

40 lbs

The amount of skin that each person sheds in his or her lifetime (that's nearly three stone)

Sources: 1 Baywatch, 2-3 The Times, 4 The Tea Council, 5 www.boreme.com 6 www.metoffice.com, 7 The Times, 8 www.firstscience.co.uk

These data are not National Statistics and we cannot guarantee their accuracy

www.statistics.gov.uk/horizons