

Who is in charge of public statistics?

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A stifled debate

The major statistical development since the 1990s has been growth in the use of performance indicators. But there has been little acknowledgment of differences between the use of performance indicators and other uses of statistics. Under New Labour there has been growing concern about the low level of public trust in official statistics, but this has not been related to the growth in the use of performance indicators. Steps have been taken to measure the value of public services without consideration of possible effects on public trust. One of the aims of the *Statistics and Registration Bill* going through Parliament is to create a statistical service that is independent of government. But what is meant by independence is unclear. There is no evidence to support the connection between this Bill and the other stated aim of increasing public trust in statistics.

The aim of this paper is to examine the gaps and contradictions that have stifled intelligent debate about official statistics since 1997. The paper points to some of the issues that have been neglected in this confused debate. The debate has said little about the genuine improvements in official statistics that have occurred. There has been no discussion of how the public interest should be taken into account in deciding on the scope of official statistics. Discussion of alternative ways in which statistics might be governed has been limited to a very narrow range. There has been no discussion about the creation of representative new bodies for the production of statistics in the public interest that are independent of the Government of the day.

An independent system?

The idea of an independent statistical system originated within the Labour Party and was expressed prominently in Labour's 1997 election manifesto. But the manifesto did not attempt to explain what was meant by independence and the debate since has not clarified what might be meant by independence. The Government newly elected in 1997 did not use the terms independence but instead published a consultation paper entitled *Statistics – A matter of trust*. The stated aim of the legislation currently before Parliament is to create independence for statistics. Independence is not defined, but discussion of the machinery needed implies that the independence means independence from Ministers and from the Government itself.

The production of official statistics and the machinery of government are closely intertwined. Does it make sense to think of the statistical system being independent of government? The primary function of official statistics is to support governmental activities. There is no other way in which the expenditure of public money on the production of statistics can be justified. Would it make sense to think of the nervous system as being independent of the human body? Why then has the idea of an independent statistics service been so plugged that it has resulted in a Bill before Parliament?

The development of the idea of independence did not come about through activity by the Government, or by the Labour Party, or by Parliament, but has largely come about through lobbying by statisticians. The *Vision Statement for National Statistics* of the Royal Statistical Society (RSS) originally published in 2002, actually gives a definition. "Statistical independence means that a large number of professional judgements and decisions are delegated to the producers of statistics". The RSS and the Government Statistical Service (GSS) want the role and status of statistics and the statistics profession to be fully appreciated. Statisticians see the claim of independence as enhancing the status of statistics as well as helping the Labour Government to fulfil its election pledge.

Most of the relevant documents are available on Government websites or that of the RSS. *Statistics – A matter of trust* is at <http://www.archive.official-documents.co.uk/document/ons/govstat/report.htm> under the authorship of the Economic Secretary to the Treasury. The Statistics and Registration Bill before Parliament is at <http://www.publications.parliament.uk/pa/ld200607/ldbills/053/07053.1-7.html#i121> under the authorship of the House of Lords. *A Vision Statement for National Statistics* is posted in a section of the RSS website devoted to *Statistical Legislation* at <http://www.rss.org.uk/main.asp?page=2614>. More publication detail about these and other documents quoted in this paper is given in the references listed alphabetically by author on page XX.

The *Vision Statement* definition is not very specific. It appears to mean that decisions about what are deemed statistical matters are delegated and that managerial matters remain with government. In practice this gives statisticians a subservient clerical role within the governmental machine. Members of the GSS decide on the detail of how the statistics are collected and presented. Government and ministers decide on what statistics are produced. Parliament uses the statistics to judge the performance of government.

The subservient role of the statisticians is consistent with recent statistical history. The statisticians' reaction to the alleged fiddling of unemployment statistics in the 1980s that gave rise to the idea of independence can at best be described as passive. Thatcher notoriously changed the rules governing entitlement for unemployment benefit thirty one times with little attempt to maintain comparability over time. The public, the press and members of

Parliament castigated statisticians for this problem. But neither the RSS nor members of the GSS pointed out that statisticians were blameless; they did not point out that it is the responsibility of the Government not that of statisticians to decide who is entitled to receive unemployment benefit.

The lack of assertiveness by the RSS and GSS in this situation is understandable. The statisticians were cowed by Thatcher. They feared that the Thatcher government that instigated the Rayner Review would inflict further serious damage on the GSS (Rayner, 1980). The Rayner Review had led to what became known as the *Rayner Doctrine*. The Rayner Doctrine proclaimed that information should not be collected primarily for publication, but should only be collected because the Government needs it for its own business. The result was to reduce by about a quarter the staff and administrative costs of official statistics. The number of staff employed in the GSS fell sharply between 1981 and 1989 (see Annex A of *Statistics; A Matter of Trust*)

It could be said that there was a *threat* of political interference, but it is difficult to argue that Government insistence that it should define who was entitled to receive unemployment pay should be classified as political interference in *statistics*. It is equally difficult to argue that this episode provides support for the idea that statisticians can play any significant role in the creation of a statistical service independent of the government.

The pathetic performance by the RSS and GSS in the 1980s was to some extent compensated by the production by the RSS in 1995 of a paper on unemployment statistics (Working Party, 1995). At the time the RSS paper seemed to be a useful contribution. It recommended that the International Labour Office (ILO) survey based series be used in place of the Count of claimants. But the RSS paper did not note any of the defects of the ILO series (see Adams, et al (2006), Thomas (2005) and (2006)).

Jack Straw to the rescue

The paper Jack Straw gave at the RSS earlier in 1995 year made a very significant contribution (Straw, 1995). Straw's paper drew attention to the persistent growth in the reporting and use of statistics and argued that the GSS should be responsible to Parliament rather than to the Government of the day. Straw recognised the inextricability of official statistics and government and the unavoidable consequence that official statistics give a governmental view of society. But Straw recognised that statistics for one Government may not be the same as the statistical needs of the next Government. Straw saw that Parliamentary control would foster continuity.

Straw was following up a point made by Claus Moser former head of the GSS who pointed out in his Presidential Address to the RSS in 1980 that: "It must be the central aim of the GSS to provide the government of the day *and its*

successors - for a statistical system has to be planned and viewed for the long run ..“ (Moser, 1980). Straw and Moser were in effect arguing that the statistical system should serve the long-term public interest as well as the needs of the government of the day. In proposing Parliamentary control Straw was arguing that a representative body was best qualified to identify the long-term public interest. Straw was giving what could be described as working definition of a statistical service that would be independent of the government of the day. The significance of this definition in the 21st Century is different from that of the 1980s or 1990s because of the expansion in the range and variety of statistics produced.

The RSS ignored Straw's paper for many years. It appears that the RSS and GSS want to be close to the Government of the day rather than be subject to Parliamentary control. The *Vision Statement for National Statistics* that includes the RSS's own statement on independence does not mention Straw's paper. Neither the RSS nor the GSS appear to recognise the concept of the public interest.

The Government, apparently pushed by the RSS and GSS, has in effect gone in the reverse direction to that advocated by Straw. It has been widely claimed that official statistics give a comprehensive view of society. It could be said that this claim is supported by the remarkable expansion in access to official statistics under Len Cook – the National Statistician appointed in 2000. Credit should be given to the Labour Government for allowing for this expansion. But the claim of comprehensiveness is unnecessarily extravagant. The claim is imperialistic in that it in effect decrees that the Government of the day has a comprehensive view of society. The claim is a bit silly - both in asserting that statistics *can* give a comprehensive view and insulting to those who are producers of statistics about society that are not deemed official statistics.

Trust

New Labour transformed the matter of independence into one of public trust with the 1998 Green paper *Statistics – A matter of trust*. Blair, the master of trust and mistrust, exhibited boundless trust in statistics by declaring in that everyone's performance, including that of his Government, should be judged by measurement in terms of statistics. But the Green paper of 1998 and the White paper *Building Trust in Statistics* that followed in 1999 were counterproductive for two reasons. First because they cultivated seeds of distrust, and second because the new emphasis on the use of statistics for performance indicators provided genuine reasons for distrust.

The government's Omnibus Survey has been used to examine confidence in official statistics (ONS, 2006). Jones and Kelly (2004) found a high degree of mistrust in official statistics and even more suspicion of their integrity, The Government and the statisticians had dug a hole for themselves. People had

never been asked before whether they trusted statistics. So when they were asked it can be expected that they would give wary replies.

Throughout our inquiry we have sought to consider the impact of the proposed policy changes on public confidence in official statistics. Recent figures from the ONS show that, while 37% of adults in Great Britain agree that official statistics are generally accurate, just 17% believe that they are produced without political interference and only 14% say the Government uses official figures honestly. Lord Moser told us that the public did not distrust figures, so much as "the people who use the figures and the institutions". He said that the UK was the "only country in which there [was] a major trust problem": (House of Commons, 2006) At <http://www.publications.parliament.uk/pa/cm200506/cmselect/cmtreasy/1111/1111.pdf>)

It is not clear that a conclusion of low public trust was justified or is justified. The concept of public trust in statistics is itself not clear. Is public trust in statistics lower in Britain lower than in other countries? We don't know – because the question has not got on the agenda in other countries. Malcolm Sorrell made a survey of National Statistical Offices and found that there was agreement that understanding the factors underlying confidence was important. But he did not find enough evidence to benchmark the performance of the UK (Sorrell, 2005).

Trust in statistics is generally taken for granted. Statistics are systematically collected and produced information. Statistics aspire to higher standards of reliability and accuracy than other forms of information. Is trust in statistics less than trust in other sorts of information? Why should we trust statistics less than other forms of information? Is it appropriate to ask *which* statistics are not trusted?

According to the National Statistician there are more than a thousand 'statistical products' that achieve the status of 'National Statistics' and 249 'Non-National Statistics'. The National Statistician also reports that there are no reliable figures on the number of statistical 'products' that are produced by central government officials who are not members of the Government Statistical Service. Statistical products cover statistical press releases, publications, databases, etc., but not individual statistical tables, or statistical inputs such as statistical surveys, and administrative sources (House of Commons, 2006, pp 13-15)

Do members of the public know of existence of this range of statistical products? Do the users of these more than 1300 statistical products trust the statistics they use? Do users of the more contentious series such as the Retail Price Index, the Consumer Price Index and the Earnings Index really distrust these series? Is there any evidence of distrust in any of the 1300 or so statistical products?

Asking such questions helps put questions of public trust into perspective. It appears that the Governmental concern about public trust view statistics through

an unusual lens created by the RSS. That lens focuses attention on a longstanding dispute between the RSS and the Government about the question of pre-publication availability of statistics to ministers and questions about who should write the press release when the statistics are published (see RSS, 2006, Section 9). These questions are important for matters to do with the extent to which governments can manipulate the mass media. The failure of the Bill before Parliament to deal with these questions is regrettable. But the questions raised by the RSS are not relevant to trust in the statistics themselves.

Trust in statistical systems is rarely a practical problem. Statistical systems are typically non-hierarchical cooperative activities. Typically individuals or organisations provide information for a central agency. The agency processes the information to produce aggregate statistics. Often that aggregated information is available to the information providers, Often the providers of the information are also among the main users of the aggregate statistics. Where well-informed users find the statistics credible we can take it for granted that the statistics are worthy of our trust. Trust in statistics is usually a matter of trust by informed users.

Performance indicators and the creation of hierarchies

That kind of equitable situation does not exist where statistics are used as performance indicators. The emphasis given to the use of statistics as performance indicators is a new factor that is counterproductive to the development of trust. David Byrne points out the ways in which performance indicators are widely used as instruments for the centralisation of decision making and the denial of local participation in decision making (Byrne, 2006). The individuals and organizations whose performance is being measured are aware of the strengths and weaknesses of the chosen measures. But we cannot assume that the public who are drawn into the assessment process through the publication of league tables are informed users. Nor can we assume that all managers are informed users. Yet managers, in the public sector at least, are being urged to use performance indicators as tools of management.

In effect this gives new power to managers over subordinate individuals and organizations. It also gives power to those with the authority to produce statistics centrally over individuals and organizations who are the providers of the statistics. The emphasis on performance has created a hierarchy where none need exist.

Goodhart's law is the equivalent in the social sciences of the uncertainty principle in physics. Though it has been expressed in a variety of formulations, the essence of the law is that once a social or economic indicator is made a target for the purpose of conducting social or economic policy, then it will lose the information content that would qualify it to play such a role.
<http://patrissimo.livejournal.com/343159.html>

Typically the new power is based on statistics that emphasise the measurable aspects of performance and derogate from those aspects that are not measured. The use of performance indicators is widely unpopular with the subject individuals and organizations. The use of such indicators can also distort the aims and purposes of individuals and subject organizations and the functions of the supervising organization. The widespread use of performance indicators has created a new set of attitudes and feelings associated with distrust of statistics. These negative attitudes are likely to spill over into other areas leading to falling response rates and poor quality inputs to other statistical systems.

The Statistics Board, CeMGA and Dr Fosters

The Government has not recognised that the use of performance indicators might lessen trust. Nor has it recognised that emphasis on trust might lessen measurable trust. Instead the Government insists in its proposals for new legislation that public trust depends upon the supervisory body and whether or not that body is seen as independent of government. Under the proposed new arrangements official statistics will continue to be the responsibility of the Treasury. A Statistics Board, a new body to replace the Statistics Commission and the ONS, will be created as a non-ministerial Department to manage the ONS and the GSS (House of Lords, 2007).

The question may well be asked: If the Statistics Board is responsible to a non-ministerial Department, why will official statistics still be regarded as the responsibility of the Treasury? No answer to that question has been given and there is no evidence to support the assumptions that public trust in statistics is related to the nature of the central government governing body. The idea that public trust in statistics depends upon relationships between different offices in Whitehall is fanciful – to say the least.

The Statistics Commission created in 2000 has played a useful role in informing the public of aspects of the debate about statistics. But it is not clear that the new Statistics Board will be able to fulfil this kind of role. The Board, unlike the Commission, will be staffed by civil servants who are deemed responsible to their minister and the Government and are unlikely to enjoy the freedom to participate public debate that has been exercised by staff of the Commission.

The Government does not appear to recognise the range of factors that may influence public trust in statistics. A comparison and contrast of the work of

CeMGA (Centre for the Management of Government Activity) and Dr Fosters Intelligence (for the production of 'information products' for the NHS) does not reveal any governmental consistency in policies related to gaining public trust in statistics

CeMGA has been set up in order to estimate the value of the goods and services produced by Government that are not sold – like education and the NHS. This is a bold step. The National Accounts tradition is to value goods and services at market prices or, where the good and services are not actually sold, they are valued at cost. Governments in the future will be able to call upon statistics from CeMGA that measure their own performance in terms of the value of services provided as managers of the nation's health and as managers of the nation's education. Ministers in the future may be able to claim that their Government should be re-elected on the grounds that it has increased the value of government services to the health of the public by 20% and/or that it has increased the value of the output of the British educational system by 30%.

Such statistics are almost unchallengeable because they will be based upon numerous arbitrary assumptions. One central assumption will be that the value of a service provided by government should be based upon that of a similar service produced and sold in the private sector. Other assumptions such as those associated with the quality of government outputs may be more difficult to defend. As the Atkinson Review, that presaged CeMGA, cryptically noted "ONS has to steer a careful course with regard to changes in government policy, guaranteeing the independence of the approach to measuring output while ensuring that its implementation reflects the realities and circumstances of public spending (Atkinson, 2004, p 25). One of the consultation documents asks "is it appropriate to make an allowance of the order of 1.5 to 2% a year based on real earnings and real incomes growth". Such an allowance would be highly dubious. But the statistics of overall value of public services will be unchallengeable because they will be based upon a complex mixture of defensible, not so defensible, and undefensible assumptions.

The stated aim of the bill before Parliament is to create an independent statistical service. But the siting of CeMGA within the ONS is a direct contradiction of independence. That siting is a violation of the general governmental principle that an individual or organization should not be judge of their own cause. The body that makes a valuation of a major aspect of the performance of the civil service is situated within the civil service itself – to be separated only by being labelled as a 'non-ministerial department'. CeMGA is being required to make judgements on the performance of its overseer and paymaster. The location of CeMGA is supported only by the myth that public trust in statistics is dependent on the relations between different offices in Whitehall.

The establishment of Dr Foster's Intelligence provides a contrasting example to that of CeMGA. Dr Fosters Intelligence is a joint government/private firm set up

for the production of “information products” for the National Health Service (NHS). A National Audit Office Report (available at <http://www.nao.org.uk/pn/06-07/0607151.htm>) gives an account of the origin of Dr Fosters and concluded that it could not be demonstrated that the Department of Health had achieved value for money in establishing Dr Fosters Intelligence. The home page of Dr Fosters Intelligence at <http://www.drfooster.co.uk/> lists its functions as management information, research and consultation, social marketing and information for the public. The website does not elaborate on what this work involves. It appears that the activities of Dr Fosters in the provision of information are unrestricted.

Dr Foster does not have any protective non-ministerial department but is effectively under direct ministerial control. In the case of Dr Fosters Intelligence, in contrast to CeMGA, there are no clear terms of reference, and no relationship to the ONS or the GSS. Dr Foster appears to give the Government of the day an opportunity to spin statistics about the health of the population and the activities of the NHS in whatever ways it thinks will help win the next election.

A role for public corporations?

Neither CeMGA nor Dr Fosters Intelligence provide good models for the government of statistics. But together they indicate that there is a much wider range of possibilities for the government of statistics than has entered the debate over the past decade or that is considered in the Statistics and Registration Bill before Parliament. One way of achieving independence from the Government would be through the establishment of public corporations that would be independent of the Government and the Government Statistical Service. A vital part of the terms of reference of such corporations would be to produce statistics that served the public interest as well as the needs of government. The identification of the public interest would be fostered by the appointment of boards of governors or governing trusts for these corporations that were representative of the public. Such representativeness could be achieved by giving responsibility to Parliament for making appointments to the boards of governors or governing trusts and for financing their activities.

Such public corporations have long historical antecedents – such as the BBC and the New Town Development Corporations. As these antecedents indicate there is no need to for public corporations to be profit making – that is alien to statistical traditions. Such public corporations that might cover the same areas as CeMGA, Dr Fosters Intelligence, or that covered by the ONS itself, or a single corporation might be established to cover all these areas. The corporations would be endowed with clear terms of reference, an obligation to consult, to be open to public scrutiny and with a requirement to publish and defend the detail of the methods used to produce statistics.

The establishment of such public corporations would aim to take the scope of official statistics outside the perceived sphere of dominance of the Government

of the day. Matters such as the valuation of public services would be subject to public discussion and political debate instead of being confined to technical exchanges under the 'Non-Ministerial Department' sobriquet and so-called 'public consultations' among civil servants and 'users'. Such public corporations would take the sting out of the longstanding dispute between the Government and the Royal Statistical Society about the production of press releases. Press releases would become responsibility of corporations not ministers. It could be expected that the statistics produced by such public corporations would be supported by all political parties as well as members of the public and those who claimed to represent the public. Such independence would be achieved in accordance with prescriptions of Jack Straw's 1995 paper.

Conclusions

Developments in statistics since 1997 have been confused and confusing. There has been a mock battle about independence of statistics and public trust in statistics. The debate has been conducted in terms of the self-interest of ministers and their departments and the self-interest of the statistics profession – not about the interest of the public. This battle has occupied a lot of time by the RSS, by public servants and by others. The debate has been enlivened from time to time with contributions from the Statistics Commission that have taken up matters of public interest, but it is not clear that the proposed Statistics Board will be able to maintain such enlivening contributions.

The Bill before Parliament, if it becomes law, may not inflict direct damage on official statistics. But legislation about independence and trust based on myths is likely to damage the public image of statistics and the public image of those who produce statistics. The hollow insistence of independence, like the hollow insistence on trust, will be counterproductive. Scepticism and cynicism about statistics will increase.

The mock battle about independence and trust has drawn attention away from the main areas that should be of interest and concern. There has been a massive expansion in the accessibility and use of statistics over the past decade which has brought many benefits. That expansion should be celebrated. But a major component of that expansion has been associated with the increased use of statistics as performance indicators that has had many undesirable side effects.

The growth in the use of performance indicators has not been seen as a problem by the Government and has not been acknowledged by the statistics profession. The Government and the statistics profession are sleepwalking into a situation that may lead to contempt for statistical evidence and associated organizational anarchy. That contempt for statistical evidence is likely to manifest itself with lack of public cooperation on programmes involving statistics. The public is aware, for example, that the main evidence supporting the need to counter

climate change is statistical in nature. The impact of Government exhortations for lifestyle changes in order to combat climate change will be reduced if there is a general disregard for statistical evidence.

The mock debate has also by-passed the issue of the importance of developing statistics that serve the public interest. The cavalier claim that official statistics give a comprehensive view of society indicates that there is room for development in the Government's view of the public interest. The claim also indicates the need for the statistics profession to be aware the concept of statistics that serve the public interest. The neglect of the public interest points to the need for representation of the public in the government of statistics.

Jack Straw advocated in the 1995 that the GSS should be made responsible to Parliament. Under the current arrangements and those proposed in legislation the Government of the day would still be responsible for taking decisions about statistics that would affect the statistics available to future governments. Jack Straw's idea needs to be placed back on the public agenda. A proper way forward would be the creation of public corporations that would assume responsibility for the production of official statistics that would meet the needs of the public as well as those of the Government of the day.

REFERENCES

- Adams, John, Hasan Al-Madfai and Ray Thomas (2006) 'The production and presentation of statistics of unemployment. Comparability issues', *IASSIST Quarterly* 29-1, 2006. pp.11-23. Also at <http://iassistdata.org/publications/iq/iq29/iqvol291adams.pdf>
- Atkinson, Tony (2004) *Atkinson Review: Interim report, Measurement of Government Output and Productivity for the National Accounts*, TSO, July.
- Byrne, David (2006) 'Urban Governance – the complex politics of measuring performance' *Radical Statistics*, 93, 2006 pp 30-45.
- Economic Secretary to the Treasury (1998) *Statistics: A Matter of Trust* (The Green Paper), CM382, TSO, February 1998. At: <http://www.archive.official-documents.co.uk/document/ons/govstat/report.htm>
- Economic Secretary to the Treasury (1999) *Building Trust in Statistics* (The White Paper) CM 4412, TSO, October 1999. At: http://www.statistics.gov.uk/about/national_statistics/downloads/WhitePaperText1.pdf (Introduction). And http://www.statistics.gov.uk/about/national_statistics/downloads/WhitePaperText2.pdf (Chapters)
- Hoinville, G and T M F Smith (1982) 'The Rayner review of Government Statistical Services'. *JRSS Series A (General)*, Vol 145, Part 2, pp 195-207.
- House of Commons Treasury Committee (2006), *Independence for statistics*, Tenth Report of Session 2005–06, Report, minutes, oral and written evidence, July 2006, TSO. At <http://www.publications.parliament.uk/pa/cm200506/cmselect/cmtreasy/1111/1111.pdf>
- House of Lords (2007) *Statistics and Registration Service Bill*, Session 2006 – 07 Internet Publications. at; <http://www.publications.parliament.uk/pa/ld200607/ldbills/053/07053.1-7.html#j121>.
- Jones, Francis and Maryanne Kelly (2004) Omnibus Survey: Initial Findings on Public Confidence in Official Statistics <http://www.statistics.gov.uk/about/data/downloads/OmnibusInitialFindings.pdf>
- Moser, Claus (1980) 'Statistics and public policy: The Address of the President (with proceedings)' *JRSS Series A (General)*, Vol 143 Pt 1, pp. 1-31.

National Audit Office (2007) *Dr Foster Intelligence: A joint venture between the Information Centre and Dr Foster LLP*, Report by the Comptroller and Auditor General, HC 151 Session 2006-2007, 6 February 2007

Office for National Statistics (2006) *Public Confidence in Official Statistics – reports*. At:
<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=13967&More=Y>

Rayner, Derek (1980) *Review of government statistical services: report to the Prime Minister*, Central Statistical Office, pp 71 plus Appendix (typescript). Among the few commentaries are Hoinville and Smith (1982), and Thomas (1984a) and (1984b)

Royal Statistical Society (2005) *A Vision for National Statistics*, At
<http://www.rss.org.uk/pdf/A%20Vision%20for%20National%20Statistics.pdf>

Sorrell, Malcolm (2005) *International Awareness: Public Confidence in Official Statistics*.
http://www.statistics.gov.uk/about/data/public_confidence/downloads/OtherCountries.pdf

Straw, Jack (1995) *Address to the Royal Statistical Society*. Not published. This version, edited by Des McConaghy, on Archive of National Statistics Documents at:
<http://www.rss.org.uk/pdf/Address%20to%20RSS%20by%20Jack%20Straw%201995.pdf>

Thomas, Ray (1984a), 'Why Have Government Statistics? (And How to Cut their Cost)', *Journal of Public Policy*, 4, 2, pp 85-102 and

Thomas, Ray (1984b), 'A critique of the Rayner Review of the Government Statistical Service', *Public Administration*, Summer 1984, pp 224-229

Thomas Ray (2005) 'Is the ILO definition of unemployment a capitalist conspiracy?' *Radical Statistics*, 88, 2005 pp 4-21. Also at
<http://www.radstats.org.uk/no088/Thomas88.pdf>

Thomas, Ray (2006) 'Government Spin and Statistics' *Radical Statistics*, 91, pp 6-18. Also at <http://www.radstats.org.uk/no091/Thomas91.doc>

Working Party on the Measurement of Unemployment in the UK (1995) 'The measurement of unemployment in the UK (with discussion)', *JRSS Series A (Statistics in Society)*, Vol 158, Part 3, pp 363-417.

WEBSITES

The list of References give URLs for websites that include important documents relating to the government of statistics.

The RSS website at <http://www.rss.org.uk/main.asp?page=2614> includes Jack Straw's address to the RSS made in 1995 (in the Archive of National Statistics documents), a number of papers putting forward RSS comments and amendments on successive drafts of the Bill presented in Parliament, copies of a number of a speech by John Healey, Financial Secretary to the Treasury and of the Speaking notes of Michael Fallon MP, Chairman of House of Commons Treasury Sub-committee. Both speeches were made at a meeting organised by the Statistics Commission was held in November 2006.

The website of the Statistics Commission at <http://www.statscom.org.uk/> is a mine of information about the development of policy for statistics since 2000.

An ONS information page on CeMGA is at:

<http://www.statistics.gov.uk/about/data/methodology/specific/PublicSector/output/about.asp>.

The Dr Foster Intelligence homepage is at <http://www.drfooster.co.uk/>.

The reference ONS (2006) given above at:

<http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=13967&More=Y> gives links to a series of papers relating to public confidence in statistics – including Developing a Quantitative Measure of Public Confidence in Official Statistics, Public Confidence in other Countries (cited above). Omnibus Survey - Findings on Public Confidence March 2005 , Omnibus Survey - Initial Findings on Public Confidence in Official Statistics (cited above), Quantitative Analysis of the General Public's view of Official Statistics, Qualitative Analysis of the General Public's view of Official Statistics.