

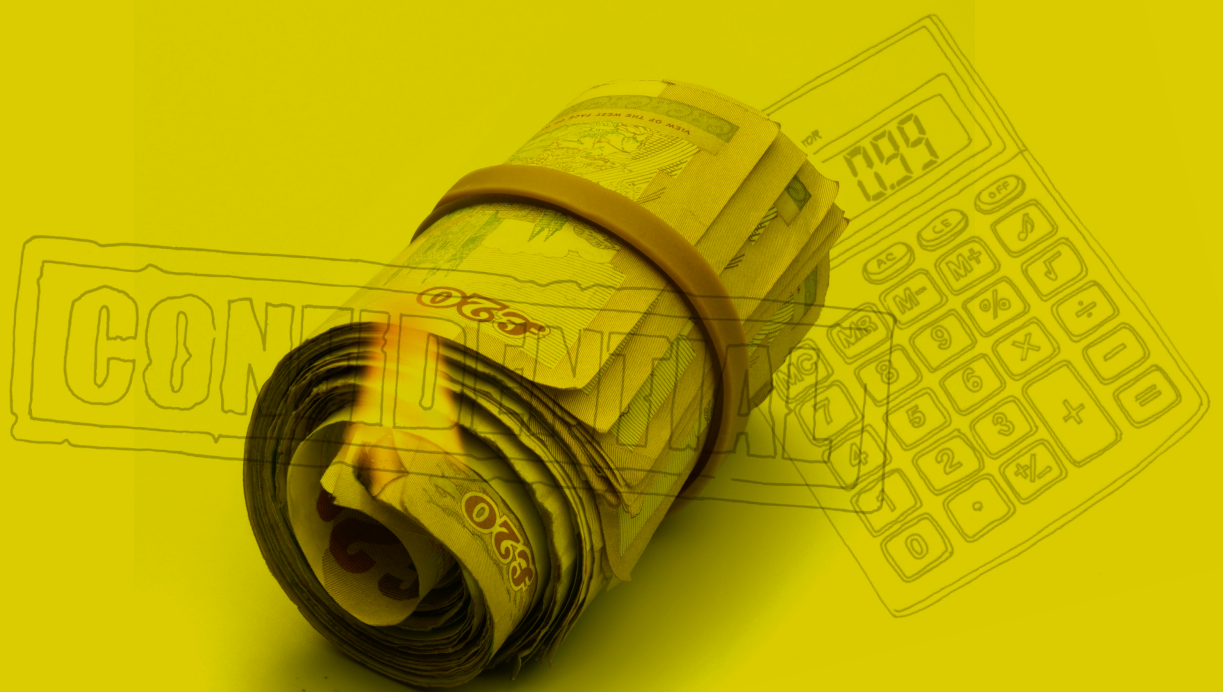
Counter fraud

The financial cost of fraud

What data from around the world shows

By Jim Gee, Mark Button and Graham Brooks

With a foreword by the Right Honourable Frank Field M.P.



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Foreword

Fraud is a challenging problem. Its economic effects are clear – worse public services, less financially stable and profitable companies, diminished levels of disposable income for all of us except the fraudsters. However, historically, fraud has been described as ‘difficult to cost’¹ and, until relatively recently, it has not been possible to quantify these effects. However, the last decade has seen this situation change.

In the UK, from the late 1990s, the Department of Work and Pensions and the NHS started to accurately measure fraud (and error) losses. In 2006, the Government’s ‘Fraud Review’ Report said, ‘better measurement is crucial to a properly designed and effective strategic response to fraud and to supporting better management of fraud risks’ and the new National Fraud Authority now has a specialist unit devoted to this task. Furthermore, the National Audit Office’s 2008 ‘Guide to Tackling External Fraud’ said, ‘Assessing the scale of loss from fraud is an important first step in developing a strategy for tackling external fraud’.

In Europe, the European Healthcare Fraud and Corruption Declaration of 2004, agreed by organisations from 28 countries, called for “The development of a European common standard of risk

measurement, with annual statistically valid follow up exercises to measure progress in reducing losses to fraud and corruption throughout the EU.”

In America, the Improper Payments Information Act of 2002 provided that public agencies should publish a ‘statistically valid estimate’ of the extent of fraud and error in their programs and activities.

As a result, many more exercises to measure losses have taken place than would otherwise be the case. For the first time, this Report documents what has been found.

Of course, there are still some estimates published which are simply not reliable. Counting only those losses which are detected, or surveying those working in the area for their opinion, will never be accepted as a reliable indicator of the real economic cost of fraud. This Report takes the debate much further forward.

It shows that the financial cost of fraud and error can be accurately measured in the same way as other business costs; it shows that this is not unnecessarily costly or difficult; and most importantly it shows what the financial cost is likely to be. It also documents how measurement of losses has helped to reduce them.

The audit on the volume of data, the total value of the expenditure concerned, the number of different types of expenditure and the different organisations and countries concerned is impressive.

It will take a brave Chief Executive of either a public or private sector organisation who argues that their losses are outside what this Report finds to be the case – two thirds of the exercises reviewed showed losses of between 3 – 9%, with an average of just over 4.5%.

It would be important at any time to counter fraud on this scale. It becomes doubly so in an age of major public expenditure cuts which will ricochet into the private sector.

Right Honourable Frank Field M.P.

¹ “Counting the costs of crime in Australia: a 2005 update” – The Australian Institute of Criminology.

Introduction

This Report, for the first time, collates the latest, accurate, statistically valid information from around the world about the real financial cost of fraud and error. Once the extent of fraud losses is known then they can be treated like any other business cost – something to be reduced and minimised in the best interest of the financial health and stability of the organisation concerned.

It becomes possible to go beyond reacting to unforeseen individual instances of fraud and to include plans to pre-empt and minimise fraud losses in business plans.

Data from around the world

The Report doesn't just look at detected fraud or the individual cases which have come to light and been prosecuted. Because there is no crime which has a 100% detection rate, adding together detected fraud significantly underestimates the extent of the problem. It is also the case that if detected fraud losses go up, does that mean that there is more fraud or that there has been better detection; equally, if detected fraud losses fall, does that mean that there is less fraud or worse detection?

The Report also doesn't rely on survey-based information where those involved are asked for their opinions about the level of fraud. These tend to vary significantly according to the perceived seriousness of the problem at the time by those surveyed. While they sometimes represent a valid survey of *opinion*, that is very different from a valid survey of *losses*.

Instead, this Report considers and analyses 132 exercises which have been undertaken around the world during the last ten years, to accurately measure the financial cost resulting from fraud and error.

The difference between previous guesstimates of fraud losses and the data from the statistically valid and accurate exercises reviewed in this Report is equivalent to the difference between navigation by the stars and navigation by satellite.

This is surely the worst aspect of the problem. Yes, fraud is unethical, immoral and unlawful; yes, the individuals who are proven to have been involved should be punished; yes, the sums lost to fraud need to be traced and recovered. However, these are actions which take place after the fraud losses have happened – after the resources have been diverted from where they were intended and after the economic damage has occurred.

Measuring fraud and error costs

In almost every other area of business life, organisations know what their costs are – staffing costs, accommodation costs, utility costs, procurement costs and many others. For centuries, these costs have been assessed and reviewed and measures have been developed to pre-empt them and improve efficiency. This incremental process now often delivers quite small additional improvements.

Fraud and error costs, on the other hand, have only very rarely had the same focus. The common position has been that organisations have either denied that they had any fraud or planned only to react after fraud has taken place. Because of this, *fraud is now one of the great unreduced business costs.*

However, a cost can only be reduced if it can be measured, and a methodology to do this accurately has only been developed and implemented over the last decade.

Reducing the financial cost of fraud

Now that we can measure fraud and error losses, we can make proper judgements about the level of investment to be made in reducing them. Now that we can measure these losses, we can measure the financial benefits resulting from their reduction.

In the current tough business climate, reducing these losses is one of the least painful ways of reducing business costs. The British Prime Minister, Gordon Brown, has recently referred to the need to reduce ‘unnecessary’ public expenditure and it is very difficult to describe fraud as necessary. Much fraud is ‘unnecessary’ because it can be pre-empted. This Report identifies what the financial cost of fraud and error has been found to be and thus, the ‘size of the prize’ to be achieved from reducing them.

Of course, there is always more research to be done and any organisation should consider what its own fraud and error costs are likely to be, however, the volume of data which is already available from exercises covering almost £800 billion, points clearly to losses usually being found in the range of 3-9%.

We will continue to monitor data as it becomes available and publish further Reports as appropriate.

Jim Gee
Director of Counter Fraud Services,
MacIntyre Hudson LLP

Overview

This Report has reviewed 132 exercises to accurately measure fraud and error losses, covering 32 different types of expenditure totalling almost £800 billion, in 44 organisations from 9 countries. Including the types of expenditure where exercises have been repeated, they have examined a total of expenditure valued just under £3 trillion, sterling equivalent. The value of the expenditure examined has not been updated to 2009 values.

This Report is based on extensive global research, building on previously established direct knowledge, to collate information about relevant exercises. The data was then analysed electronically. Exercises were collated from Europe, North America and Australia and New Zealand. None were found in Asia or Africa.

Setting high standards

The Report has *excluded* guesstimates, figures derived from detected fraud losses, and figures resulting from surveys of opinion. It has also excluded some loss measurement exercises where it is clear that they have not met the standards described below.

It has *included* exercises which

- have considered a statistically valid sample of income or expenditure
- which have sought and examined information indicating the presence of fraud, error or correctness in each case within that sample
- which have been completed and reported
- which have been externally validated
- which have a measurable level of statistical confidence
- which have a measurable level of accuracy

Caveats

There are a number of caveats.

Some of the exercises have resulted in estimates of the fraud frequency rate, some of the percentage of expenditure lost to fraud, and some have measured both.

It is also the case that, some exercises have separately identified measured fraud and error and some have not.

In some cases, there have been repeated exercises to measure fraud and error losses in a single area of expenditure. To avoid skewing the overall results by including a disproportionate quantity of data from one source, only the results from the first and most recent exercises have been included.

In most of these instances, fraud and error losses have been significantly reduced since the initial measurement exercises.

Sometimes, once such exercises have been completed, the organisations concerned have, mistakenly in the view of the author of this Report, decided not to publish their results. Transparency about the scale of the problem is a key factor in its solution, because attention can be focussed and a proportionate investment made.

In some cases, those directly involved in countering fraud have decided, confidentially, to provide information about unpublished exercises for wider consideration. In those cases, while the overall figures have been included in the findings of this Report, no specific reference has been made to the organisations concerned.

The authors of this Report are also aware of a very small number of other exercises which have been completed, but which have not been published and where nothing is known of the findings.

Finally, it is important to emphasise that this research will never be complete. More evidence becomes available each year. However, the preponderance of the evidence does point clearly in one direction, as is explained later.

Conclusion

While it is necessary to make these caveats clear, the importance of the evidence collated in this Report should not be underestimated. The evidence shows fraud and error losses can be measured – when they have been successfully measured so many times, in respect of so many different types of expenditure, in many different organisations and across the world, to assert otherwise is the modern day equivalent of arguing that the world is flat.

However, even more important is that the evidence shows that losses to fraud and error represent a significant, damaging and, crucially, unnecessary, business cost.

Data from around the world

The nine countries in which the authors are aware that fraud loss analysis exercises have taken place are:

- the UK
- the United States
- France
- Belgium
- the Netherlands
- Ireland
- Canada
- Australia
- New Zealand

By value of income or expenditure measured, the United States has undertaken the greatest amount of work in this area. This is a direct reflection of the Improper Payments Information Act of 2002 (IPIA) which requires designated major U.S. public authorities to estimate the annual amount of payments made where fraud and error are present, and to report the estimates to the President and Congress with a progress report on actions to reduce them.

The guidance relating to the IPIA states "The estimates shall be based on the equivalent of a statistical random sample with a precision requiring a sample of sufficient size to yield an estimate with a 90% confidence interval of plus or minus 2.5%"². Many U.S. agencies undertake work to the higher standard often found in the U.K. and Europe – 95% statistical confidence and +or- 1%.

In other countries, while there has not hitherto been any legal requirement, there is a growing understanding that the key to successful loss reduction is to understand the nature and scale of the problem. For example, in Europe, the European Healthcare Fraud and Corruption Declaration of 2004, agreed by

organisations from 28 countries called for "The development of a European common standard of risk measurement, with annual statistically valid follow up exercises to measure progress in reducing losses to fraud and corruption throughout the EU."³

Types of income and expenditure

The range of types of income and expenditure where losses have been measured include:

- payroll
- procurement
- housing
- education
- social security
- healthcare
- insurance
- tax credits
- pensions
- agriculture
- construction

The nature of the figures

Two types of figures have been produced:

- a percentage loss rate (PLR - i.e. the proportion of expenditure lost to fraud and error)
- a fraud frequency rate (FFR - i.e. frequency of fraud and error)

The same exercise can produce different PLR and FFR figures. For example, one hundred items of expenditure out of a thousand worth a total of £100,000 might be found to be fraudulent. This would produce an FFR of 10%. However, the particular one hundred items might have a value of £12,000 producing a PLR of 12%.

The items of expenditure where fraud is found to be present may be either greater or less than the average value of all of the items of expenditure. For example, it may be that fraud tends to affect items of expenditure that are higher than the average value – this will result in the PLR being higher than the FFR. Indeed, to some extent the findings of this research, in general, show just that.

An analysis of the figures has also been produced for where losses in the same area of expenditure have been measured and re-measured. This outlines:

- the level of losses when first measured and the level of losses when last measured after efforts to reduce them;

Finally, sector-based analysis shows:

- the level of losses in key sectors where the most data exists : healthcare and social security.

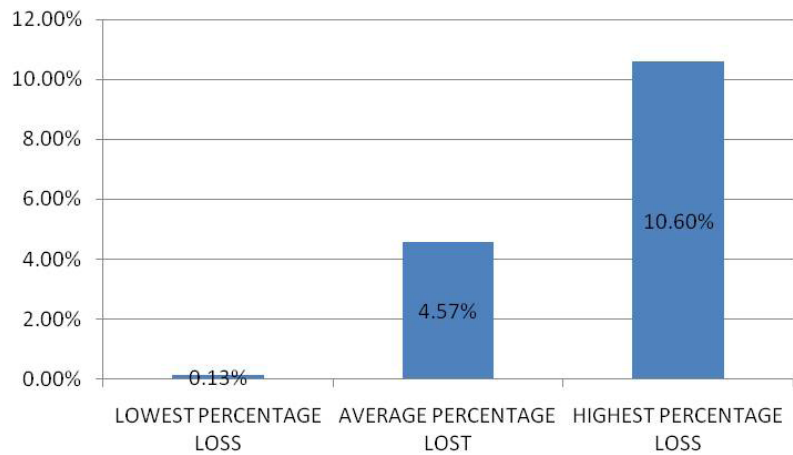
There is more research still to be done and it is intended that this Report will be updated on a regular basis.

² Appendix C to Office of Management and Budget Circular A-123

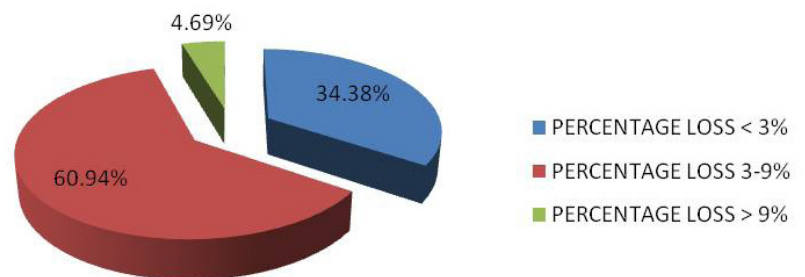
³ European Healthcare Fraud and Corruption Declaration 2004

Percentage losses

The percentage of expenditure lost to fraud (and error) ranged between 0.13% and 10.6% with an average loss of 4.57%.



66% of the exercises showed PLR figures of more than 3%.

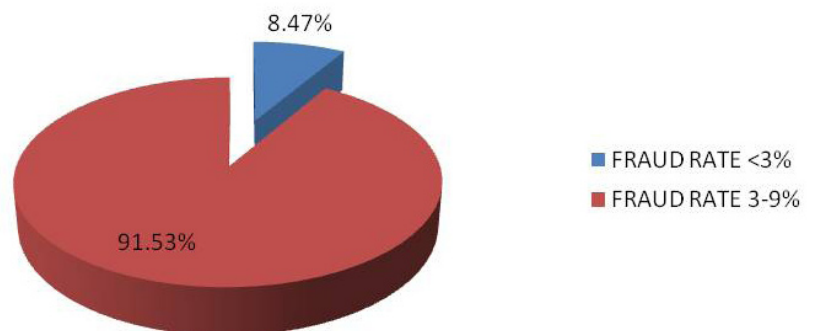


Fraud frequency

The range of fraud frequency rates (FFR) was found to be between 0.47 and 9.6% with an average FFR of 4.28%.



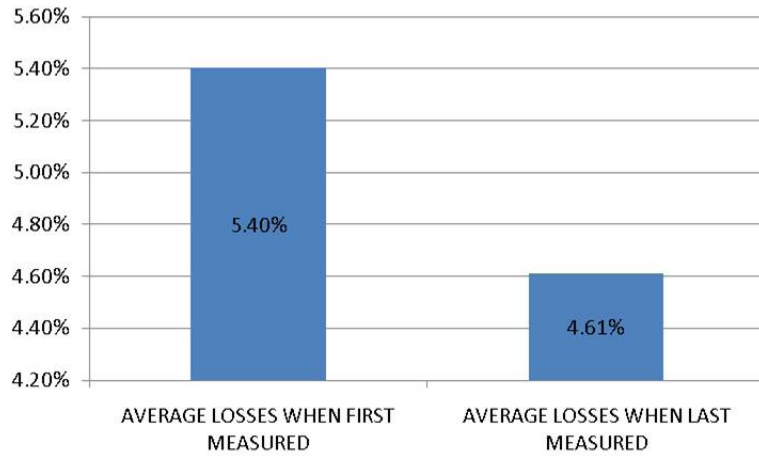
91% of the exercises showed FFR figures of more than 3%.



Measure to manage

Where organisations have undertaken repeated exercises to measure their losses in the same areas of expenditure, then the evidence shows that this has helped to reduce them.

The average Percentage Loss Rate (PLR) when first measured was 5.4% and when last measured was 4.61%. This represents an average reduction of just under 15% in the measured percentage losses.



Sector data

There is considerable data available from two areas of public expenditure – healthcare and social security.

In respect of healthcare, the average PLR is 5.59% and the average FFR is 4.23%. As discussed above this does tend to show that healthcare fraud involves higher than average value items of expenditure.

In respect of social security, the average PLR is 5.57% and the average FFR is 2.1%. Like healthcare, this does tend to show that social security fraud also involves higher than average value items of expenditure.

Separate reports with detailed analysis of healthcare and social security fraud data will be published subsequently.

In other areas the data is less extensive but consideration will be given to a further report with more detailed analyses.

Losses expected to be 3 – 9%

On the basis of the evidence, it is clear that fraud and error losses in any organisation should currently be expected to be at least 3%, probably more than 4% and possibly as much as 9%.

However, it would be wrong to go too much further in terms of predicting where in this range, losses for each type of expenditure measured, will be.

This is because, other than in respect of healthcare and social security, the volume of data does not warrant this. Also, each organisation will have either relatively stronger or relatively weaker counter fraud arrangements. This factor will affect where within the range of expected losses, a particular organisation will find itself. Separate research, analysing 28 key aspects of counter fraud arrangements in many organisations continues.

Predict the likely scale of losses

By combining the data which underpins this report and organisation-specific information about counter fraud arrangements, MacIntyre Hudson is able, for the first time, to predict the likely scale of losses, the key improvements which would reduce them and the related cost, for client organisations.

You can do this on line by visiting

www.macintyreHUDSON.co.uk/services/counter_fraud.html

Conclusion and recommendations

This is the first Report in an area where, for too long, the accurate measurement of losses has been considered either impossible or too difficult. The Report proves that it is possible. Losses to fraud and error can now be treated as a business cost like any other – to be tracked and reduced.

It is also the case that work to measure losses can be highly cost-effective. The extent to which efforts to reduce losses are helped by greater knowledge about the problem is shown by the significantly lower (15%) average level of losses where they have been re-measured over a period of time.

Where losses have been measured, and the organisations concerned have accurate information about their nature and extent, there are examples, especially in the UK and U.S. where losses have been substantially reduced. These include:

- the UK's National Health Service (the second largest organisation in the world) where losses were reduced by up to 60% between 1998 and 2006 and by up to 40% over a shorter period⁴;
- the U.S. Department for Education, which reduced its losses across a \$12 billion dollar grant program by 35% between 2001 and 2005⁵;
- the U.S. Department of Agriculture, which reduced its losses across a \$12 billion dollar program by 28% between 2002 and 2004⁶;
- the UK's Department of Work and Pensions which has successfully reduced its losses in Income Support and Job Seekers Allowance by 50% between 1997/98 and 2005/06⁷.

Three things are clear:

- Losses to fraud and error can be measured – and cost effectively;
- On the basis of the evidence it is likely that losses in any organisation and any area of expenditure will be at least 3%, probably more than 4% and possibly as much as 9%;
- And with the benefit of accurate information about their nature and extent, losses can be reduced significantly.

In a troubled economic climate, not to consider the financial benefits of making relatively painless reductions in losses to fraud and error seems rather foolhardy.

⁴ UK NHS Counter Fraud and Security Management Service – 1999 – 2006 Performance Statistics

⁵ U.S. Department of Education Performance and Accountability Reports 2001 – 2005

⁶ U.S. Department of Agriculture Performance and Accountability Reports 2002 - 2004

⁷ UK Department of Work and Pensions - Fraud and Error in the Benefit System April 2005 to March 2006

About the Report authors

Jim Gee is Director of Counter Fraud Services at MacIntyre Hudson LLP and Chair of the Centre for Counter Fraud Studies

Jim Gee is one of the leading counter fraud specialists in the UK. His accomplishments include leading the team which cleaned up London Borough of Lambeth in the mid to late 1990s; advising Right Honourable Frank Field M.P. during his periods as Chair of the House of Commons Social Security Select Committee and Minister for Welfare Reform; and being Director-General of the European Healthcare Fraud and Corruption Network between 2004 and 2006.

He was also a senior advisor to the Attorney-General concerning the Government's Fraud Review which has started to professionalise this country's approach to fraud. Gee's work in the NHS reduced fraud-related losses by up to 60 per cent, delivering financial benefits to the tune of more than £800 million and achieving a 12:1 return on the costs of the work.

Mark Button is a Reader at University of Portsmouth and Director of the Centre for Counter Fraud Studies

Mark Button is a Reader in Criminology and Associate Head Curriculum at the Institute of Criminal Justice Studies, University of Portsmouth. He has also recently founded the Centre for Counter Fraud Studies of which he is Director.

He has written extensively on counter fraud and private policing issues, publishing many articles, chapters and completing four books with one forthcoming: *Private Security* (published by Perpetuity Press and co-authored with the Rt. Hon. Bruce George MP), *Private Policing* (published by Willan), *Security Officers and Policing* (Published by Ashgate), *Doing Security* (Published by Palgrave), and *Understanding Fraud: Issues in White Collar Crime* (to be published by Palgrave in early 2010 and co-authored). He is also a Director of the Security Institute, and Chairs its Academic Board, and a member of the editorial advisory board of 'Security Journal'.

Mark founded the BSc (Hons) in Risk and Security Management, the BSc (Hons) in Counter Fraud and Criminal Justice Studies and the MSc in Counter Fraud and Counter Corruption Studies at Portsmouth University and is Head of Secretariat of the Counter Fraud Professional Accreditation Board (CFPAB). Before joining the University of Portsmouth he worked as a Research Assistant to the Rt. Hon. Bruce George MP specialising in policing, security and home affairs issues.

He completed his undergraduate studies at the University of Exeter, his Masters at the University of Warwick and his Doctorate at the London School of Economics. Mark is currently working on a research project funded by the National Fraud Strategic Authority and ACPO looking at victims of fraud.

Graham Brooks is a Course Leader at University of Portsmouth

Graham Brooks is Course Leader for the Counter Fraud and Corruption MSc. at the University of Portsmouth. He was previously the Course Leader for the Counter Fraud and Criminal Justice Studies BA from June 2007 to March 2009, and Head of Secretariat for the Counter Fraud Professional Accreditation Board from September 2007 to March 2009. He is also a member of the Centre for Counter Fraud Studies at the University of Portsmouth.

Right Honourable Frank Field M.P.

Campaigning against poverty and low pay

From 1969-79, Frank Field worked as Director of the Child Poverty Action Group, during which time it became one of the premier pressure groups in the country.

In 1974 he also became Director of the Low Pay Unit until 1980. The Unit was established to make sure wages councils properly protected the rights of workers in certain industries. It was the first to campaign for a national minimum wage, along with Rodney Bickerstaffe, the former general secretary of the National Union of Public Employees, now Unison; a goal that was eventually achieved in 1998.

Parliamentary experience

In 1979, he was elected Member of Parliament for Birkenhead and has since displayed a unique attachment to his constituency. During the 1980s he led the campaign to make the Labour Party electable, which not only involved the very public countering of Trotskyites in Birkenhead, but also the development of policies which appealed beyond the ghettos. To this end, he led the transformation of the debate on welfare from one that believed in a process of pure altruism, to one which had a more sane view of human nature.

Between 1980 and 1981 he served as Shadow Education and Social Security spokesman under the leadership of Michael Foot. In 1990 he took up the chairmanship of the Social Security Select Committee and continued in this role up to 1997. From 1997-1998 he accepted the position of Minister for Welfare Reform in Tony Blair's first cabinet. Since then, he has served as a member of the Public Accounts Committee between 2002 and 2005.

Other commitments

Outside of Parliament, he is equally busy and committed. In 1999 he helped set up the Pension Reform Group which he chairs. The group has acted as an important independent think tank for the cause of a long-term, investment led reform to the pension system. Between 2001 and 2007 he chaired the Church Conservation Trust helping develop the trust from being one primarily concerned with conserving the best architectural gems of the Church to one which tries to open up such places for alternative use. Since 2005, he has been chairman of the Cathedral Fabrics Commission for England which is the planning authority for English cathedrals. In 2007 he took on the chairmanship of the 2011 Trust which has been established to celebrate the 400th anniversary of the Authorised Version (King James Version) of the Bible.

The Centre for Counter Fraud Studies

The University of Portsmouth's Centre for Counter Fraud Studies (CCFS) was founded in June 2009 and is one of the specialist research centres in the University's Institute of Criminal Justice Studies. It was founded to establish better understanding of fraud and how to combat it through rigorous research. The Institute of Criminal Justice Studies is home to researchers from a wide cross-section of disciplines and provides a clear focus for research, knowledge transfer and educational provision to the counter fraud community. The Centre for Counter Fraud Studies makes its independent research findings available to support those working in counter fraud by providing the latest and best information on the effectiveness of counter fraud strategies.

www.port.ac.uk/departments/academic/icjs/CentreforCounterFraudStudies/

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