

ECONOMICS & FINANCE



MANDATING THE MEASUREMENT OF PUBLIC SECTOR FRAUD

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The financial burden on the taxpayer through public sector fraud is a significant historical problem. The final Annual Fraud Indicator produced in 2013 by the now disbanded National Fraud Authority (NFA) suggests that hidden fraud losses experienced by the UK's public sector could amount to £19.9 billion.¹ Whilst this is a commendable estimate, it is only the tip of the iceberg because some of the component data are afforded confidence levels that suggest there is still room for improvement. For example, grant fraud data are assessed as poor, and the estimated losses to procurement fraud are only allocated an average level of confidence. When the aforementioned estimate is combined with detected fraud losses of £702 million this reveals that potentially, the public sector is a victim of fraud to the tune of a minimum of £20.6 billion per annum.

Returning to my contention that this figure is a gross underestimate, research conducted which applies an average percentage fraud loss figure based upon analysis of global fraud estimates, suggests that in the UK, potential losses to fraud for the financial year 2008-2009 could actually amount to more than £38 billion², which is substantially higher than the figure produced by the NFA in 2013. Accordingly, I suggest that we are still a long way off from developing a true picture of public sector fraud losses, (with the exception of the benefit fraud data produced by the Department for Work and Pensions), and until the full extent of the problem is known, it is not possible to apply the most appropriate solution. This paper therefore argues that there is an urgent need to develop a more accurate measure of public sector fraud as a means of tackling this phenomenon, thus ensuring that the maximum amount of taxpayer's money goes towards providing essential public services and ceases to fall into the hands of greedy calculating fraudsters. The arguments presented are supported by evidence from the US, and actually offer a transferable model with potential for global implementation.

I. WHAT IS FRAUD?

Before moving on to discuss fraud loss measurement, it is first worth exploring what constitutes fraud within both criminal and civil legislation. Under criminal law, fraud can be perpetrated in three clearly defined ways, these being:

- By false representation
- By abuse of position
- By failure to disclose

Other offences under the *Fraud Act 2006* include possession of articles intended for use in fraud, making or supplying articles for use in fraud and fraudulent business carried out as a sole trader. The burden of proof under criminal law is more stringent than in civil courts, the offences needing to be proved 'beyond reasonable doubt'.

What is significant however is that whilst the legislation defines how fraud may be committed, it fails to answer the definitional question of what actually constitutes fraud? This observation being evidenced by the continuing range of fraud definitions used for measurement purposes even after the invoking of this statute. For example, one definition of fraud offered is "obtaining...financial advantage or causing of loss by implicit or explicit deception; it is the mechanism through which the fraudster gains an unlawful advantage or causes unlawful loss".³ The Audit Commission suggests it is "any intentional false representation, including failure to declare information or abuse of position that is carried out to make gain, cause loss or expose another to the risk of loss".⁴ An examination of both definitions identifies important common themes of note relating to financial gain and causing loss.

Under the civil law, drawing upon *Derry v Peek (1889)*, fraud is considered to have been proved when it is demonstrated that a false representation has been made (a) knowingly, or (b) without belief in its truth, or (c) recklessly, careless whether it be true or false. I contend that because *Derry v Peek (1889)* utilises the balance of probabilities rather than 'beyond reasonable doubt', thus including cases where fraud is identified but with insufficient evidence for a criminal prosecution, it could be used as a standard fraud definition for the purpose of more accurate loss measurement within the public sector.

“There is an urgent need to develop a more accurate measure of public sector fraud.”

II. FRAUD TYPOLOGIES

There are a number of different frauds that may be committed against public sector organisations, some being external whilst others may be committed from within by employees either as individuals, or in certain circumstances, in collaboration with external contractors. The following are all types of fraud that may be committed against public sector organisations:

- Benefit fraud
- Tax Credit fraud
- Tax Fraud
- Vehicle excise fraud
- Procurement fraud
- Grant fraud
- Television licence fee evasion
- Payroll fraud
- Expenses fraud
- Accounting fraud
- Litigation fraud
- National Health Service patient charges fraud
- National Health Service dental charges fraud
- Student finance fraud
- Pension fraud
- National Savings and Investments fraud
- Housing tenancy fraud
- Council tax fraud
- Electoral fraud

It is worth emphasising that this list is not exhaustive because fraud is a dynamic crime, and fraudsters are constantly looking to identify new vulnerabilities within an organisation.

III. MEASURING THE COST OF PUBLIC SECTOR FRAUD

Public sector fraud first came to prominence with the publication of the HM Treasury report *Government Accounting*.⁵ Fraud subsequently became a significant issue following the publication of *Managing the Risk of Fraud: A Guide for Managers*⁶, which required government departments to identify levels of fraud committed against them. The subsequent report *Managing the Risk of Fraud: Assurance Control and Risk* contains further guidance, including advice on “evaluating the scale of fraud risks”.⁷ This review contends that these directives explain why certain public sector organisations have developed surveys with sound methodologies. It is apparent however, that not all central government departments have embraced these instructions, resulting in significant gaps in fraud loss data.

The Department of Work and Pensions is one central government department that produces statistically valid fraud loss data. The DWP began uninterrupted rolling measurement of Income Support and Jobseekers Allowance in 1997. Nevertheless, it was not until 2004–05, that changes in measurement methodology improved the accuracy of data.⁸

The DWP provides estimates for all means tested benefits based on analysis of random samples drawn from the benefit caseloads. These data are subject to some statistical uncertainty, which is quantified in the form of 95 percent confidence intervals. A lack of sta-

tistical robustness of certain measures is acknowledged, for example, assumptions being made about benefits which have not been reviewed on a regular basis. This trend has continued, with data being subject to statistical sampling uncertainties and an element of continuously measured benefit expenditure that cannot be captured by the sampling process. Even taking into account these limitations, through the use of continuous rolling measurement exercises, DWP data are far more statistically reliable than any other government department.

HMRC employ different methodologies to measure fraud because they have a large number of inputs and outputs to measure. To measure indirect taxation, actual tax receipts are compared against a potential yield informed by external statistics on consumption. Regrettably, these estimates include generous confidence intervals because consumption estimates are uncertain. The principle issue with HMRC's fraud loss data is the reliance upon third party statistics, many of which have limited confidence levels, which may skew the resulting statistical outputs. Arguably, this lack of a robust data collection methodology by such an important public sector department further evidences a pressing requirement to mandate fraud measurement to a prescribed level of accuracy.

Fraud loss data covering local government functions has historically been produced by the Audit Commission. The annual publication *Protecting the Public Purse*⁹ provides a limited picture of fraud losses because the survey only captures data covering detected fraud committed against councils. The difficulty in providing an accurate estimate is acknowledged in this report, which advises that 'the scale of fraud against local government is large, but difficult to quantify with precision'.¹⁰ However, as argued by this paper, regular fraud loss measurement exercises conducted to a prescribed level of accuracy thus ensuring a satisfactory level of statistical confidence will enable a clearer picture of public sector fraud to be produced. The responsibility for producing this fraud data output will transfer to the Counter Fraud Centre run by the Chartered Institute of Public Finance and Accountancy once the Audit Commission closes which opens up the potential to develop a more accurate measure of fraud in local government.

IV. GLOBAL ISSUES

As previously mentioned, this paper offers a transferable model that may be adopted by the government in any country who are seeking to reduce losses within their public sector. Public sector fraud is a global phenomenon, and research suggests that some of the key developed countries across all continents are vulnerable to the same types of public sector fraud as the UK. Table one documents the most prevalent public sector fraud typologies within the countries surveyed.

| | Benefit Fraud | Tax Evasion | Healthcare Fraud | Customs Fraud | Electoral Fraud | Travel Card Fraud |
|------------------|----------------------|--------------------|-------------------------|----------------------|------------------------|--------------------------|
| Australia | √ | √ | √ | | | |
| Canada | √ | | √ | | | |
| France | √ | √ | | √ | √ | |
| Germany | | | √ | | | |
| Ireland | √ | | | | | √ |
| U.S. | √ | | √ | | | |

Table 1: Global Public Sector Fraud Typologies¹¹

V. WHAT IS FRAUD LOSS MEASUREMENT?

Because fraud is a recurring problem, it requires ‘continuous monitoring and assessment’¹²; however there is minimal guidance on how to accurately measure fraud losses, resulting in limited empirical evaluation of the true cost.

To illuminate, a fraud loss measurement exercise consists of the following stages:

- 1) A statistically valid selection of activity is taken from one or more budgetary areas, the premise being that within a certain number of transactions there will be a number of fraudulent cases which have not been discovered.
- 2) Each case within the sample is then examined and using comparator data a decision is made and the transaction is classed as fraudulent, an error or acceptable. This decision is made using the organisation’s definition of fraud.
- 3) All cases are subjected to rigorous, independent statistical analysis which allows the production of loss figures with a high degree of accuracy for each budgetary area.
- 4) The loss figure is then extrapolated to give an overall fraud loss estimate for that budgetary area.

The important difference in this type of measurement is that by assessing a range of transactions in greater detail, those undertaking the review are able to discover a sample of cases of fraud and error which otherwise would not have been discovered. The level of precision can vary, and this can be anything from 1 percent to 5 percent with a level of statistical confidence that is normally 95 percent, although in some exercises this may reduce to 90 percent. The more accuracy required then the higher level of confidence is needed which in turn requires a larger sample size which in turn does have cost implications.

The following transactions are suited to fraud loss measurement exercises¹³:

- Payroll
- Procurement
- Housing
- Education grant payments
- Social security payments
- Healthcare payments (patients and doctors)
- Tax credit payments
- Pensions
- Agriculture subsidy payments
- Compensation claims

Adopting a policy of regularly measuring and re-measuring fraud losses to an improved standard of accuracy, and using the resultant data to reduce vulnerability through informed prevention policies can lead to a reduction in fraudulent criminal activity. Empirical evidence that this is achievable is provided by the NHS, who between 1998 and 2006 conducted regular statistically valid fraud loss measurement exercises, with the resultant data informing fraud reduction strategies. As a consequence of this strategy, fraud losses were reduced by up to 60 percent.¹⁴ If this large and sometimes fragmented organization can develop and implement such a process, then it is not beyond the capabilities of central and local government.

Business Benefits of Fraud Loss Measurement

Conducting regular statistically valid fraud loss measurement exercises can be a cost effective process with associated business benefits; these being:

- A potential 12:1 return in investment.¹⁵
- Regular measurement exercises reduce loss by up to 40 percent within the first year.¹⁶

- “Taken as a proportion of the measured losses, this equates to two percent being added to the ‘bottom line’ within a year”.¹⁷
- Empirical evidence suggests that regular measurement can potentially result in an average increase in profitability of “almost 36 percent”.¹⁸

The financial value of re-measurement is also worthy of consideration. A review of statistically valid fraud loss measurement exercises identified that organizations repeating fraud loss measurement exercises tended to show a reduction in the percentage loss rate, equating to an average of just below 15 percent, which in many organizations ‘would amount to a significant sum of money’.¹⁹

VI. MANDATING THE MEASUREMENT OF FRAUD: THE US MODEL

The increased prevalence of fraud and error in the United States (US) led to government intervention mandating its measurement in certain public bodies through the Improper Payments Information Act (IPIA) of 2002.²⁰ This legislation requires all Federal agencies to ‘annually review programs and activities they administer, identify those that may be susceptible to improper payments, and submit a report on actions taken to reduce improper payments’.²¹ Each agency is also required to report on the capability of their current information systems and infrastructure to support the effort to reduce improper payments. Improper payments are defined as ‘any payments that should not have been made or that were made in an incorrect amount under statutory, contractual, administrative, or other legally applicable requirement’.²²

Agencies must also estimate annual losses by conducting a random sample large enough to yield an estimate with a 90 percent confidence interval within 5 percent precision, develop and implement plans to reduce these erroneous payments and report these figures to the president through the Office of Management and Budget and Congress.²³ Compliance with the IPIA is policed using each individual agency’s Inspectors General, who are politically independent individuals appointed under the Inspector General Act 1978, and responsible for ensuring agency compliance with legislation by conducting financial audits of the agency’s IPIA reporting.

To supplement the IPIA, on 22nd July 2010 the Improper Payments Elimination and Recovery Act of 2010 (IPERA) became public law. The statute redefines ‘significant’ in terms of dollar levels, and from fiscal year 2013 onwards, requires improper payments which amount to 1.5 percent or more of total outlays of \$100 million or more to be reported. This supplementary legislation has led to an increase in measurement, resulting in a more accurate picture of the extent of losses. The statute also requires agency heads to conduct recovery audits for all programs that spend \$1 million or more annually, and permits agencies to retain up to 25 percent of funds recovered, thus incentivizing increased fraud loss measurement activity.

Published results also indicate a positive impact in recovering the debt resulting from improper payments. This is evidenced by the fact that, by the end of fiscal year 2012 the US government recovered \$4.4 billion worth of improper payments made to contractors. These results demonstrate the positive impact of mandating fraud loss measurement and setting recovery targets through the creation of legislation. Accordingly, the continued determination of the US government to reduce fraud is creditable, and a policy the UK government should embrace with similar tangible actions rather than just rhetoric.

VII. THE PERSISTENT PROBLEM OF PUBLIC SECTOR FRAUD

Standard definition of fraud for measurement purposes

To achieve a more accurate fraud measure, a standard definition of fraud for this specific purpose is necessary. This will restrict individual interpretation and provide all departments with a common starting point. This definition should be legally based to prevent any inconsistency in measures, thus removing any doubts on the reliability of data outputs. When developing such a classification, the civil definition *Derry V Peek* (1889) is worthy of consideration because it is based upon the balance of probabilities, which offers a less stringent test than criminal law and will therefore capture frauds that simply fail the evidentiary test of the criminal route. This concept of civil fraud occurs where *someone knowingly or recklessly obtains resources to which they are not entitled*, thus offering a conceptual definition, rather than focusing on enforcement and therefore facilitating the calculation of a more realistic loss figure. I have previously argued against fraud measurement being based upon detected cases, because lack of evidence to support a criminal sanction would result in these being discounted, even though there may be a strong suspicion of fraud. Furthermore, from inception, 'fraud takes 3.4 years to detect'²⁴, therefore solely relying on detected fraud would further increase the inaccuracy of any loss data.

British Standard of measurement

To ensure consistent fraud measurement to a prescribed level of accuracy, a further recommendation is the creation of a British Standard of fraud measurement. There are already British and International standards for auditing and accounting. For example, BS 6001-5:2002/ISO 2859-4 provides guidance on sampling procedures appropriate for reviews or audits.²⁵ Similarly, BS 600:2000 provides guidance on statistical methods 'applicable to administrative areas and to all sectors including commerce and public service'.²⁶ Additionally, the Auditing Practices Board produces an international standard outlining an auditor's responsibilities relating to fraud when auditing financial statements, however this only advocates that an auditor should consider the possibility of fraud and offers no guidance on measurement.²⁷ These documents do however offer a useful starting point to inform the development of a British Standard of fraud loss measurement, and subsequently an international standard of measurement.

Mandating measurement

According to Braithwaite 'law enforcers should be responsive to how effectively...corporations are regulating themselves before deciding whether to escalate intervention'.²⁸ I have therefore explored whether persuasive tactics could be used to encourage the development of a more accurate measure of fraud. This has already been attempted by HM Treasury within central government, but with very limited success. A more recent development has been the creation of the Cabinet Office's Fraud, Error and Debt (FED) Taskforce which aims to 'reduce the impact of fraud and error' within the entire public sector.²⁹ Whilst the Cabinet Office may have some authority, they have not been given sufficient power to compel the public sector to conduct fraud loss measurement exercises across all areas of expenditure, and are only able to offer incentives to measure. Consequently, even persuasive directives may not fully address the limited activity within central and local government. Furthermore, when attempting to influence the public sector to measure fraud, the FED Taskforce are still advocating the measurement of fraud by examining detected cases rather than compelling central government departments to undertake proactive fraud loss risk measurement exercises.³⁰

Finally, I return to the empirical evidence offered by the US example, whereby failed attempts at persuasion the US government necessitated the creation of the Improper Payments Information Act of 2002 which requires public agencies to publish statistically valid

estimates of the levels of fraud within their activities. I therefore suggest that persuasion is not an option for the UK public sector, and regulation through intervention and the creation of a statute mandating fraud loss measurement is the only viable option to obtain consistently accurate data.

Regulating the public sector

Regulating the public sector poses little problem because the core executive which includes that Treasury and the Cabinet Office has a range of regulatory powers to facilitate implementation and seek compliance. Furthermore, the IPIA provides a working model which can be used to inform the development of the regulatory process of the proposed statute. The implementation of IPIA by public sector bodies relies upon independent regulation from within.

Consequently, the regulatory model proposed for ensuring public sector compliance with the proposed UK statute is drawn from the US. Each public sector body will be made responsible for conducting fraud loss measurement exercises and reporting findings direct to the Cabinet Office. The auditing of central government fraud loss measurement reporting is allocated to the National Audit Office, and that of local government and other public sector bodies such as NHS trusts conducted by the Audit Commission and transferred to the National Audit Office following implementation of the proposed closure of the former.

To supplement this process, consideration has been given to the imposition of sanctions for non-compliance. The first stage therefore is a letter to the departmental head advocating implementation of the required measurement programme within six months. Failure to comply will result in a referral to the Committee of Public Accounts who will seek an explanation from the head of department, with the resultant penalty for consistent failure to comply being public disclosure of this material fact. By allowing public scrutiny, organizations may be persuaded to comply rather than risk the possibility of adverse publicity, ministerial embarrassment and backlash from taxpayers. The sanction for a second offence would be linked to budgets. Failure to comply would result in a funding freeze until the department has demonstrated compliance. The potential threat of funding being capped at existing levels should be sufficient motivation for organizational heads to comply.

VIII. TOWARD A GLOBAL MODEL OF MEASUREMENT

This paper has identified the existing shortcomings in attempting to calculate an accurate measure of the extent of public sector fraud losses. A workable, and internationally transferable model underpinned by empirical evidence from the US has been offered as a solution. Improving the quality and accuracy of public sector fraud loss data can be achieved by mandating the measurement of fraud supported by a standard definition of fraud and the creation of a British Standard of fraud loss measurement. Once more accurate data is available, resources can be allocated to address the problem in the form of better informed prevention and deterrence strategies.



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