





Annual Fraud Indicator 2017

Identifying the cost of fraud to the UK economy

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Introduction

In 2016, the UK Fraud Costs Measurement Committee (UKFCMC) published its first Annual Fraud Indicator (AFI). The 2016 AFI built on work undertaken by the National Fraud Authority (NFA), which had established the concept and experimented with a variety of methodologies. The NFA published four reports, the last of which was in 2013.

The NFA was abolished in 2014 leaving a gap in the measurement of the cost of fraud to the UK, a gap the partners in this project were keen to fill. The partners wanted to build upon the work of the NFA by offering the same detailed estimates of the cost of fraud to the UK, while also using a more developed and consistent methodology to allow dependable comparisons over time.

This 2017 report is the second undertaken by the UK Fraud Costs Measurement Committee and involved Crowe UK, Experian and the Centre for Counter Fraud Studies, University of Portsmouth. The same methodology was used in both 2016 and 2017, and is underpinned by a group of cross-sector fraud specialists who meet under a broad umbrella known as the UKFCMC. The Committee is chaired by Jim Gee (Crowe UK), with Nick Mothershaw (Experian) as Vice Chair and includes members from the UK's public, private and charitable sectors. All have specific expertise in fraud and it's their discussions, input and supporting research, that have helped make this report possible.

The research team for this year's AFI was led by Professor Mark Button and included David Shepherd and Dean Blackbourn (the Centre for Counter Fraud Studies). The methodology used has been developed in line with the ground-breaking work of the now defunct NFA.

"The Annual Fraud Indicator (AFI) has been developed to help create a benchmark by which year-on-year sector specific fraud analysis can be made."

AFI 2017 headline figures

The 2017 AFI highlights the colossal cost of fraud to the UK economy.



Annual UK fraud losses are indicated to cost £190 billion Private sector fraud losses are estimated to be £140 billion

Public sector fraud losses are estimated to be

£40.4 billion

Charities and charitable Trusts are believed to be losing £2.3 billion

Frauds committed directly against individuals are estimated at around £6.8 billion

Expert views



The 2017 Annual Fraud Indicator highlights the colossal cost of fraud to the UK economy. At £190 billion it would represent more than the UK government spends on health and defence combined or all welfare payments excluding pensions (HM Government, 2016). It would equate to around £10,000 per family in the UK. In the public sector alone, with fraud losses of £40 billion, this is equivalent to what we pay in national debt interest or spend on defence.

This report shows that there are clear differences in the strengths and risks of fraud in the different sectors of the UK economy. The thin resources of the state dedicated to fighting fraud means for most organisations and individuals the best they can do is protect themselves. Investing in the appropriate strategies to increase their resilience to fraud is the most effective way to reduce the risk of fraud.

It is hoped that this report will stimulate more action by government and law enforcement departments and agencies. Equally, it provides clarity and scope of the UK fraud problem, which can help organisations and individuals in their attempts to tackle the problem of fraud.

Professor Mark Button

Director of the Centre for Counter Fraud Studies, University of Portsmouth

Mark's experience

Mark Button is Director of the Centre for Counter Fraud Studies at the Institute of Criminal Justice Studies, University of Portsmouth. Mark has written extensively on counter fraud, cyber-fraud and private policing issues. He has published many articles, chapters and completed eight books. His latest book (co-authored with Dr Cassandra Cross) is titled *Cyber Frauds, Scams and their Victims* has just been published by Routledge.

Some of Mark's most significant research projects include leading the research on behalf of the National Fraud Authority and Association of Chief Police Officers (ACPO) on fraud victims; the Department for International Development on fraud measurement, Acromas (AA and Saga) on 'Cash-for-Crash fraudsters', the Midlands Fraud Forum, Eversheds and PKF on 'Sanctioning Fraudsters', and the Government's Annual Cyber Breaches Survey. Mark has also acted as a consultant for the United Nations Offices on Drugs and Crime to develop international standards for Civilian Private Security Services and has worked with the United Nations Development Programme/European Union on enhancing civilian oversight of the Turkish private security industry.

Mark holds the position of Head of Secretariat of the Counter Fraud Professional Accreditation Board. He is also a former Director of the Security Institute. Before joining the University of Portsmouth he was a Research Assistant to the Rt Hon Bruce George MP specialising in policing, security and home affairs issues. Mark 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.



Unless an organisation understands the nature and cost of the fraud affecting it, how can it apply the right, proportionately resourced solution? How can it track progress in reducing the prevalence and cost of fraud? How can it understand the value derived from its investment in countering fraud? These are important questions for individual organisations – whether they are companies, public sector organisations or charities – but also, equally importantly, they are questions for UK Plc. Unless our country is clear about the cost of fraud, how can it prioritise its response with a range of other problems also clamouring for resources?

Research shows that detected or reported examples of fraud do not represent the total cost of fraud, because much remains undetected. It is also not good enough to survey opinion about the extent of fraud because perceptions of the extent of fraud will change according to the level of publicity which it receives.

The UKFCMC provides a public service to the UK in producing these very detailed estimates. The Centre for Counter Fraud Studies has worked very hard to complete the underpinning research. I recommend the information in this report to anyone who is interested in the real extent of a problem which has been shown to cost the UK a staggering £190 billion each year.

Jim Gee

Head of Forensic Services, Crowe UK

Jim's experience

Jim Gee is a Partner and Head of Forensic Services at Crowe U.K. LLP. He is Visiting Professor at the University of Portsmouth and Chair of the Centre for Counter Fraud Studies (Europe's leading centre for research into fraud and related issues), and Chair of the UK Fraud Costs Measurement Committee (a cross-sector body) which, each year, develops and publishes the UK Annual Fraud Indicator. During more than 25 years as a counter fraud specialist, Jim has advised Ministers, Parliamentary Select Committees and the Attorney-General, as well as national and multi-national companies, major public sector organisations and some of the most prominent charities. To date he has worked with clients from 39 countries. He specialises in helping organisations to reduce the cost and incidence of fraud through strengthening the resilience to fraud of relevant processes and systems.



This year's report highlights how the continued growth of procurement fraud remains a problem for many businesses. Most often it is the employees who are instrumental in procurement fraud and therefore vigilance and appropriately vetting staff should be a high priority for all businesses. Making sure you employ the right people and that your existing staff members, particularly those in positions of responsibility, are not under duress will help you avoid potentially costly losses.

Also interesting is that the report shows that Pension fraud is growing in the public sector, and while there are no published figures for the private sector, it's understood that fraudsters are targeting the Pensions Release (where pension holders, aged over 55, are allowed to withdraw up to 100% of their pension benefits as a cash lump sum, income or a combination of both). It's worth noting that while the volume of fraud is low, the value of fraud losses is high, suggesting fraudsters are focussing their attention on the biggest value areas.

Consumers need to be careful of investment opportunities that are potentially too good to be true. Pension companies need to ensure their ID verification tools are both best in class and cost effective to execute as the pensions release is predicted to continue to grow.

In the finance sector, plastic card and online banking fraud continues to increase. A new regulation in 2018, in the form of Payment Services Directive 2 (PSD2), will enforce more robust ID and fraud controls on online payments to address this. Essentially it will make it much harder for a fraudster to use a victim's payment card online unless they also get control of their online banking details too. The regulation should result in a significant decline in plastic card fraud, giving an increase in detected and prevented frauds a result.

Nick Mothershaw

Director of Fraud and Identity Solutions, Experian

Nick's experience

Nick is responsible for the strategic development of Experian's fraud and identity solutions for both the public and private sectors. The Identity Solutions portfolio includes traditional ID verification, challenge questions and document verification. Experian now also offer a full Identity as a Service solution, including ID proofing and strong credential management, and is an identity provider within the GOV.UK/Verify scheme. Fraud solutions in the portfolio include both real time Device and Application Fraud. Ease of integration and change is key in today's fast moving ID and fraud battleground: Experian's CrossCore platform allows Experian and third party solutions to be joined together to achieve a consolidated decision with one-stop referral review. In addition, Experian provides a number of public sector specific products to assist in council tax fraud, benefit fraud and social housing fraud.

Key to the role is to ensure clients gain maximum value from Experian solutions by offering highly skilled consultancy services, expert analytics, trend analysis and insight around ever evolving fraud attack vectors.

Nick has been with Experian for over 15 years. Previously Nick was a director of a company providing global solutions within the broader Criminal Justice arena. Here he architected the Scottish Intelligence Database: the only cross force intelligence sharing and matching solution in the UK. He also exported best of breed UK crime management systems to Australia and the US. Nick has worked for IBM in the healthcare and utilities sector, and began his career as a mainframe systems analyst with a large UK brewer and pub company. He has a degree in Computer Science.



Methodology and analysis

The report's methodology was overseen and reviewed by an independent panel of fraud experts drawn from a broad cross-section of private and public sectors. A wide range of sources were reviewed to identify the cost of fraud figures.

Each estimate is categorised as either gold, silver or bronze depending on the confidence of the estimate.

This categorisation is referenced throughout the report for clarity in understanding the data that relates to each calculation.

When specific fraud cost estimates were unavailable, the most appropriate percentage fraud loss rate was applied depending on the expenditure category. The appendices provides a detailed summary of how fraud costs were categorised.

Category	Definition
Gold (G)	Gold standard analysis is met when a statistically valid sample of expenditure/income has been examined, with a clear and legally-anchored concept of fraud applied. Estimates produced offer a 90% minimum level of statistical confidence, with an accuracy level of $+$ or -2.5% , or better. Results have also been independently validated. Included in the Gold standard were statistically valid assessments of the levels of victimisation of individuals, conducted by reputable organisations.
Silver (S)	The silver standard is met when detected cost levels of fraud have been identified and underpinned by a credible estimate of undetected fraud to offer a credible total fraud cost.
Bronze (B)	The bronze standard is met when an attempt at identifying the cost of fraud has been made, but there may be limited confidence in its credibility.

Classification of confidence

UK fraud by estimate confidence

The AFI results can be presented in terms of the confidence of the estimates used.



UK fraud estimate by sector





Private sector fraud

It is estimated that private sector fraud could cost the UK economy just over £140 billion in 2017, compared to \pounds 143.6 billion in 2016.

The reason for the change is largely related to a significant reduction in general procurement expenditure by large companies. This reduced by £158 billion compared to the previous report and as a consequence, the value of fraud has also reduced (The Office of National Statistics [ONS], 2016a).

However, the private sector is still the economic sector losing the largest amount to fraud. It may also be a conservative figure, given the general sentiment among our biggest businesses against releasing commercially sensitive, or potentially damaging, financial fraud data.

The value of private sector expenditure and income generated from sales is huge. During 2015 to 2016, the private sector – even without including banking and finance – spent nearly £2.6 trillion on procurement (ONS, 2016a), while generating £3.9 trillion in sales (BEIS, 2016).

By comparison, Gross Domestic Product (GDP) for the same period was £1.85 trillion (ONS, 2016b). In the past fraud losses have been directly linked to GDP. However GDP is a blunt measure simply based on a proportion of the value added to the economy – rather than as a proportion of actual expenditure or income.

Financial sector estimates also exclude investment activities, which generate revenue but are not strictly customer facing sales activities. Any related frauds, which are generally committed by employees, can result in significant losses.

There are no precise estimates for losses to delinquent corporations, rogue governments or state-sponsored cybercrime.

"This is still the sector losing the most to fraud. Private sector fraud is estimated to cost the UK economy just over £140 billion in 2017."

Procurement and payroll fraud

Clearly, procurement expenditure of nearly $\pounds 2.6$ trillion and sales income of $\pounds 3.9$ trillion in the non-financial private sector mean that even a low rate of fraud will result in very sizeable losses.

Procurement estimates include expenditure on everything from goods, materials and services, to spending on large-scale capital projects. They also include expenses. However, the total value of procurement expenditure data excludes the financial sector and, as a result, its coverage only really relates to around two-thirds of the UK economy (ONS, 2016a). The total value of payroll expenditure includes income tax, employees' national insurance and employers' national insurance.

The cost of fraud in this area has been calculated by assuming an average salary of £26,156 per year (ONS, 2014d). For ease of calculation, given the available data,

we have accepted that the 13.8% contribution rate for employers' national insurance is the same for all staff across all business categories. Other forms of business taxation, such as corporation tax, are outside the scope of our analysis.

In order to maintain consistency, a procurement expenditure fraud loss rate of 4.76% and a payroll fraud loss rate of 1.7%, applied elsewhere to public sector expenditure, have been adopted to gauge the losses.

Procurement fraud is estimated to cost £121.4 billion (4.76%) of the £2.5 trillion of total expenditure. Total losses from payroll expenditure are estimated to be £12.7 billion (1.7%) from an expenditure of £748 billion. The combined loss is just over nearly £134 billion.



What is procurement fraud?

A significant proportion of the costs of fraud in this report have been attributed to procurement fraud. The procurement of goods and services often accounts for a significant proportion of an organisation's expenditure and is open to a wide range of potential fraud risks. This is because there are usually multiple individuals involved in a process who often do not work closely together; i.e. the person who wants something purchased does not always work directly with the people who initiate orders and with those responsible for paying. There are often multiple opportunities for fraud in procurement and some of the most common include:

- · legitimate suppliers adding unauthorised additional costs to an invoice
- · legitimate suppliers conspiring with staff to add additional costs to an invoice
- fraudulent suppliers/staff submitting false invoices for payment
- fraudulent suppliers/staff diverting legitimate payments for legitimate suppliers to themselves
- under provision of goods and services in terms of quality or quantity.

Case study

An interesting version of this type of fraud which has gained prominence is the 'CEO' fraud. Under this type of fraud, a person impersonates the chief executive either by e-mail, or over the phone or by a combination of both and seeks to request that payments for goods and services are fraudulently diverted to a new bank account.

What is payroll fraud?

Another significant area of fraud in this report is accounted for by payroll fraud. This covers a wide range of areas such as:

- ghost employees on the payroll
- · diversion of payments into fraudulent accounts
- employees set up to receive higher salaries than they are entitled to by either grade or hours worked
- false overtime claims.

Procurement and payroll by company size

As noted earlier, the cost of procurement fraud among large enterprises declined compared to the 2016 report due to a significant decrease in procurement expenditure. Consequently, among large enterprises the losses are estimated at \pounds 69.1 billion in 2017, compared to \pounds 77 billion in 2016. However, for small enterprises the losses increased from \pounds 30.8 billion last year to \pounds 32.3 billion. For medium sized enterprises it went from \pounds 19.4 billion to \pounds 20 billion due to increased procurement amongst these enterprises.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
Expenditure	38.358	Procurement fraud	B#	UK	2013 to 2016	678,876	32,289	4.76
small enterprises	00,000	Payroll fraud	B#	UK	2013 to 2016	356,993	6,069	1.70
Expenditure	21,612	Procurement fraud	B#	UK	2013 to 2016	421,173	20,032	4.76
medium enterprises	21,012 -	Payroll fraud	B#	UK	2013 to 2016	92,930	1,580	1.70
Expenditure large enterprises	7/ 180	Procurement fraud	B#	UK	2013 to 2016	1,452,959	69,106	4.76
	74,189	Payroll fraud	B#	UK	2013 to 2016	298,948	5,082	1.70



Financial sector sales fraud

Financial sector sales fraud includes all bronze rated data and amounts to \pounds 5.2 billion in this report. Which, compared to \pounds 3.2 billion for the 2016 report is a \pounds 2 billion increase.

The main reason for the increase is the decision not to use the Association of British Insurers (ABI, 2016) figure of \pounds 1.3 billion. This concerns frauds that have been detected and prevented and the losses which would otherwise have occurred. Clearly there are frauds which are detected that cause a loss to insurers and many other frauds which go undetected.

The decision of the UKFCMC therefore was to apply the average loss rate of 3.99% giving a loss of £2.9 billion – a £1.6 billion increase on the 2016 figure of £1.3 billion.

Given the high risk of fraud to the insurance sector, the authors believe a more accurate fraud loss measurement would expose a much higher figure.

The increase in the value of mortgage and plastic card fraud in 2016 compared to the previous year reflects the increase in lending in both areas. Although the total amount of fraud increased, the proportion (%) remained the same. This demonstrates that fraud controls for both types of fraud remain effective.

The amount of reported fraud losses for Online Banking and Telephone Banking fraud grew by a significant percentage in 2016. Online banking fraud saw a significant increase of 226% and telephone banking fraud by 178% in 2016, when compared to 2015.

Fraudsters continue to target online and telephone banking. With the introduction of the Payment Services Directive 2 (PSD2), tougher controls will be placed on payment instruments, such as a credit and debit cards. This will likely mean that fraudsters will continue to move their attention towards channels such as online banking and telephone banking because they are not governed by strong customer authentication.

With new counter fraud tools such as device monitoring (tracking and monitoring a device, such as a smart phone or tablet), and behavioural biometric analysis (such as monitoring how a person uses a device or a website to identify anything which is indicative of fraud), lenders can use controls that detect and then prevent fraud occurring on these channels.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
		General insurance fraud	В	UK	2015	72,619	2,896	3.99
		Mortgage fraud	B#	UK	2010 to 2016	247,300	1,583	0.64
		Plastic card fraud	В	UK	2016	856,000	568	0.07
Financial sector sales	5,242	Online banking fraud	В	UK	2016	-	134	-
		Cheque fraud	В	UK	2016	400,158	19	0.00
		Telephone banking fraud	В	UK	2016	-	32	-
		Motor finance fraud	B#	UK	2013 to 2014	-	11	-

Data updated to the most recent costs based on the Bank of England's inflation calculator

Non-financial sector sales fraud

The cost of fraud in the non-financial sales sector has decreased in total from almost \pounds 1.4 billion in 2016 to an estimated just under \pounds 1.3 billion in 2017. The three types of fraud are estimated from silver quality data. Retail fraud fell from \pounds 223 million to \pounds 183 million, telecoms fraud from

£926 million to £900 million and rail transport fare evasion (avoiding paying for a ticket) from £214 million to £175 million. The latter estimate took account of a 1.8% loss rate calculated by Transport for London and provided to the researchers.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
		Retail	S	UK	2016	360,107	183	0.05
Non-financial sector sales	1,258	Telecoms fraud	S#	UK	2013 to 2016	37,500	900	2.40
		Rail transport fare evasion	S#	UK	2014 to 2015	9,728	175	1.80

Public sector fraud

The public sector has some of the best quality fraud measurements – particularly relating to taxes, benefits and the NHS – where gold standard data exists.

It is therefore particularly interesting to note that public sector fraud is estimated to be $\pounds40.4$ billion for 2017, which compared to $\pounds37.5$ billion in the 2016 report, means a $\pounds2.8$ billion increase (+7.5%) in one year.

The increase in the cost of fraud is largely due to increased procurement fraud (+ \pounds 1.7 billion) – as the government spent more than the previous year – and increased tax fraud losses (+ \pounds 800 million). There were some significant reductions too, such as grant fraud which was \pounds 541 million lower than the previous year.

Central government tax fraud

Central government taxation is subject to high quality measurement. The cost of tax fraud for this report is \pounds 16.2 billion, which compares to \pounds 15.4 billion in the last report, a \pounds 800 million increase (HMRC, 2016).

Vehicle excise fraud has also increased from £35 million to £80 million (DVLA, 2015). Vehicle excise duty, also known as 'vehicle tax' and 'car tax', is levied on most types of vehicles used on public roads. Vehicle excise fraud relates to the fraudulent non-payment of vehicle excise duty.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
Central taxation	16.280 —	Tax fraud	G	UK	2015 to 2016	518,000	16,200	3.13
	10,200 -	Vehicle excise fraud	G#	UK	2015	5,800	80	1.38

Data updated to the most recent costs based on the Bank of England's inflation calculator

TV licence fee income

There was very little change in the level of fraud relating to income from the TV licence fee. It increased by £1 million from £205 to £206 million (BBC, 2016).

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
Central government other income	206	Television licence fee evasion	S#	UK	2015 to 2016	3,743	206	5.50

Central government excluding benefits

The same procurement and payroll rates used for the private sector were applied to the public sector.

Overall this section showed a modest increase compared to 2016 from just over $\pounds10$ billion to $\pounds10.2$ billion. There was a significant decrease in National Savings and Investment (NSI) fraud from $\pounds69$ million (or 3.43% to 0.02%).

The reason for this was a decision by the UKFCMC to apply the NSI detected fraud levels instead of an estimate based upon evidence that fraud risks and therefore fraud levels are very low (NSI, 2016). Grant fraud also fell from £2.7 billion to just over £2 billion and this was due to a fall in the percentage rate applied.

Student finance fraud rose from an estimated £409 million to £481 million.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income £ million	Fraud £ million	Fraud %
		Procurement fraud	B#	UK	2013 to 2016	117,277	5,578	4.76
		Payroll fraud B# UK		UK	2013 to 2016	60,805	1,034	1.70
Central government	10,217	Grant fraud	В	UK	2015 to 2016	67,958	2,054	3.02
excluding benefits	}	Student finance fraud	В	England, Wales, Northern Ireland	2015 to 2016	15,910	481	3.02
		Pension fraud	В	UK	2015 to 2016	35,430	1,071	3.02
		National Savings and Investments fraud	S	UK	2015 to 2016	2,067	0	0.02

Data updated to the most recent costs based on the Bank of England's inflation calculator

NHS England fraud

The NHS fraud losses estimate is based on high quality fraud loss measurement data, which has been updated for inflation. This shows an increase in fraud from $\pounds 2.5$ billion in the previous report to an estimated $\pounds 3.4$ billion.

The biggest increase concerned general procurement fraud, which rose from just over $\pounds1$ billion in the 2016 report to an estimated just over $\pounds1.7$ billion in 2017.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
		Dental charge fraud	G#	England	2007 to 2016	765	29	3.80
		Optical charge fraud	G#	England	2007 to 2016	458	14	3.00
		Prescription charge fraud	G#	England	2014 to 2016	9,199	284	3.09
		Dental contractor fraud	G#	England	2013 to 2016	3,313	116	3.49
NHS	3,423	Pharmaceutical contractor fraud	G#	England	2013 to 2016	2,106	84	3.97
		Optical contractor fraud	G#	England	2013 to 2016	542	13	2.47
		General practice contractor fraud	B#	England	2013 to 2016	7,798	356	4.57
		Other procurement fraud	B#	England	2015 to 2016	36,301	1,727	4.76
		Payroll fraud	В	UK	2015 to 2016	47,084	800	1.70

Local government fraud

Fraud in local government (excluding benefits) also increased from an estimated £7.3 billion in the last report to £7.8 billion in this one. Every £1 local authorities lose to fraud is £1 not spent on supporting local communities, and in the context of shrinking funding from central government it is more important than ever that local authorities reduce their fraud losses. Some local authorities have made significant savings by reducing their financial cost of fraud.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
		Blue Badge scheme misuse	S#	England	2013 to 2016	1,165	46	3.96
		Housing tenancy fraud	B#	England	2013 to 2016	-	1,827	-
Local government	7,805	Procurement fraud	B#	UK	2013 to 2016	93,258	4,436	4.76
excluding benefits	7,605	Payroll fraud	B#	UK	2013 to 2016	63,255	1,075	1.70
		Grant fraud	В	UK	2015 to 2016	3,121	94	3.02
		Pension fraud	В	UK	2015 to 2016	10,785	326	3.02

Data updated to the most recent costs based on the Bank of England's inflation calculator

Benefits and tax credits fraud

The other area with significant gold standard data is benefits and tax credits fraud, and most of the estimates are based upon gold standard data. This shows a modest increase of 2.2% from the £2.37 billion estimated in 2016 to £2.42 billion.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
		Housing benefit fraud	G	UK	2016	24,771	1,000	4.04
		Income support	G	UK	2014 to 2016	2,879	61	2.12
		Jobseekers allowance	G	UK	2015 to 2016	2,434	78	3.20
		Employment and support allowance	G	UK	2015 to 2016	14,979	280	1.87
Benefit and		Universal credit	G	UK	2015 to 2016	490	13	2.65
tax credits	2,423	Pension credit	G	UK	2015 to 2016	6,484	165	2.54
		Incapacity benefit	G#	UK	2010 to 2016	1,455	0	0.00
		Disability living allowance	G#	UK	2005 to 2016	13,300	60	0.45
		Carer's allowance	G#	UK	1997 to 2016	2,600	102	3.92
		State pension	G#	UK	2005 to 2016	89,400	0	0.00
		Council tax reduction fraud	S#	UK	2012 to 2013	4,900	60	1.22
		Unreviewed	S	UK	2015 to 2016	16,712	120	0.72
		Tax credits fraud	G#	UK	2015 to 2016	28,482	484	1.70

Charities

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
		Procurement fraud	B#	UK	2015 to 2016	24,443	1,163	4.76
Registered charities	2,314	Payroll fraud	B#	UK	2013 to 2014	58,217	990	1.70
		Grant fraud	В	UK	2015 to 2016	5,344	161	3.02

Data updated to the most recent costs based on the Bank of England's inflation calculator

In the 2016 report, fraud in registered charities was estimated at just under \pounds 1.9 billion and this has risen to an estimated \pounds 2.3 billion. Much of this increase was due to an increased expenditure on procurement, leading to an

increase in estimated fraud of almost $\pounds400$ million. Payroll fraud rose by $\pounds4$ million and grant fraud fell by $\pounds35$ million compared to the previous year.



Fraud against individuals

The calculation of estimated fraud against individuals has undergone the most significant change this year. This is due to the new data from the ONS Crime Survey for England and Wales, which now seeks information on fraud victimisation (ONS, 2017). This provides very accurate data on the number of individual fraud victims.

As a result of having this more accurate data, there is greater confidence in the estimates for losses to mass marketing fraud and identity fraud. Mass marketing fraud is when someone receives an uninvited contact by email, letter, phone or adverts, making false promises to con them out of money. Mass marketing fraudsters try to lure victims with false promises of large cash prizes, goods or services in exchange for upfront fees, or what they call taxes or donations.

As a whole, fraud against the adult population has declined from an estimated £9.7 billion in 2016 to £6.8 billion as shown in this report. Mass marketing fraud is calculated to be costing £4.5 billion and identity fraud is £1.3 billion. The cost of private rental property fraud is estimated at £918 million, an increase compared to £769 million in the last report. The cost of prepayment meter scams is estimated to be the same as the previous year.

Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
UK adult population	6,785	Mass marketing fraud	G	UK	2015 to 2016	857,376	4,520	0.53
		Identity fraud	S#	UK	2015 to 2016		1,344	0.16
		Private rental property fraud	S#	UK	2010 to 2016	46,907	918	1.96
		Prepayment meter scams	S#	UK	2013 to 2014	-	3	-



Conclusion

The reduction in the total cost of fraud in the UK from an estimate of \pounds 193 billion in 2016, to around \pounds 190 billion in this report, might be seen as a success. However, the reality is the extent of fraud has mostly remained the same or risen slightly. The reduction in the total cost is mostly due to reduced levels of expenditure in key areas such as procurement.

Greater focus should be given to the higher quality data available for this report, specifically the gold standard data. This shows an increase in fraud of around £2.1 billion. From £21.5 billion in the 2016 AFI report to £23.6 billion in 2017, it is an almost 10% increase. Given the much greater use of gold standard measurement methodologies, it is important to note the 7.5% increase in the cost of public sector fraud to £40.3 billion from £37.5 billion. The reduced expenditure of large private sector enterprises obscure upward trends in fraud losses that are still occurring. The fraud total is likely to rise in line with increases in private sector expenditure.

"Organisations that take the threat of fraud seriously and invest in the appropriate strategies to counter it will avoid increased fraud losses."



Appendices

The complete costs of fraud table

Where a confidence category is followed with a # symbol, data has been updated to the most recent costs based on the Bank of England's inflation calculator. Central to the bronze level estimates is the application of the fraud loss rate derived from the Gee and Button (2017) report The Financial Cost of Fraud 2017 (weighted for pure fraud) which is based upon an assessment of worldwide organisations using the most accurate fraud loss measurement.



Sector	Fraud loss by victim sector £ million	Victim	Total fraud loss £ million	Fraud type	Confidence	Coverage	Year	Income/ expenditure £ million	Fraud £ million	Fraud %
		Central taxation		Tax fraud	G	UK	2015 to 2016	518,000	16,200	3.13
			16,280	Vehicle excise fraud	G#	UK	2015	5,800	80	1.38
		Central government	206	Television licence fee evasion	S#	UK	2015 to 2016	3,743	206	5.50
		other income		Procurement fraud	B#	UK	2013 to 2016	117,277	5,578	4.76
			10,217	Payroll fraud	B#	UK	2013 to 2016	60,805	1,034	1.70
		Central government excluding benefits		Grant fraud	В	UK	2015 to 2016	67,958	2,054	3.02
				Student finance fraud	в	England, Wales, Northern Ireland	2015 to 2016	15,910	481	3.02
				Pension fraud	В	UK	2015 to 2016	35,430	1,071	3.02
				National Savings and Investments fraud	S	UK	2015 to 2016	2,067	0	0.02
				Dental charge fraud	G#	England	2007 to 2016	765	29	3.80
				Optical charge fraud	G#	England	2007 to 2016	458	14	3.00
				Prescription charge fraud	G#	England	2014 to 2016	9,199	284	3.09
				Dental contractor fraud	G#	England	2013 to 2016	3,313	116	3.49
Public sector	40,354	NHS	3,423	Pharmaceutical contractor fraud	G#	England	2013 to 2016	2,106	84	3.97
				Optical contractor fraud	G#	England	2013 to 2016	542	13	2.47
				General practice contractor fraud	B#	England	2013 to 2016	7,798	356	4.57
				Other procurement fraud	B#	England	2015 to 2016	36,301	1,727	4.76
				Payroll fraud	В	UK	2015 to 2016	47,084	800	1.70
			7,805	Blue Badge scheme misuse	S#	England	2013 to 2016	1,165	46	3.96
		Local		Housing tenancy fraud	B#	England	2013 to 2016	-	1,827	-
		government excluding benefits		Procurement fraud	B#	UK	2013 to 2016	93,258	4,436	4.76
				Payroll fraud	B#	UK	2013 to 2016	63,255	1,075	1.70
				Grant fraud	B	UK	2015 to 2016	3,121	94	3.02
				Pension fraud	B	UK	2015 to 2016	10,785	326	3.02
			2,423	Housing benefit fraud	G	UK	2016	24,771	1,000	4.04
				Income support	G	UK	2014 to 2016	2,879	61	2.12
				Jobseekers allowance	G	UK	2015 to 2016	2,434	78	3.20
				Employment and support allowance Universal credit	G	UK	2015 to 2016 2015 to 2016	14,979 490	280	1.87 2.65
				Pension credit	G	UK				2.03
		Benefit and tax credits			G#	UK	2015 to 2016	6,484	165 0	0.00
			2,420	Incapacity benefit		UK	2010 to 2016	1,455	60	0.00
				Disability living allowance Carer's allowance	G# G#	UK	2005 to 2016 1997 to 2016	13,300 2,600	102	3.92
				State pension	G#	UK	2005 to 2016	89,400	0	0.00
				Council tax	S#	UK	2012 to 2013	4,900	60	1.22
				reduction fraud						
				Unreviewed	S OI	UK	2015 to 2016	16,712	120	0.72
				Tax credits fraud	G#	UK	2015 to 2016	28,482	484	1.70
			5,242	General insurance fraud Mortgage fraud	B B#	UK UK	2015 2010 to 2016	72,619 247,300	2,896 1,583	3.99 0.64
		Financial sector sales		Plastic card fraud	B	UK	2010 10 2010	856,000	568	0.04
				Online banking fraud	B	UK	2016	-	134	-
				Cheque fraud	В	UK	2016	400,158	19	0.00
				Telephone banking fraud	B	UK	2010	-	32	0.00
				Motor finance fraud	B#	UK	2016 2013 to 2014	-	11	
Driverte	140,658			Retail	S	UK	2013 10 2014	360,107	183	0.05
Private sector		Non-financial sector sales	1,258	Telecoms fraud	S#	UK	2013 to 2016	37,500	900	2.40
				Rail transport fare evasior		UK	2013 to 2015	9,728	175	1.80
		Expenditure		Procurement fraud	B#	UK	2013 to 2016	678,876	32,289	4.76
		small enterprises	38,358	Payroll fraud	B#	UK	2013 to 2016	356,993	6,069	1.70
		Expenditure medium enterprises	21,612	Procurement fraud	B#	UK	2013 to 2016	421,173	20,032	4.76
				Payroll fraud	B#	UK	2013 to 2016	92,930	1,580	1.70
		Expenditure	74,189	Procurement fraud	B#	UK	2013 to 2016	1,452,959	69,106	4.76
		large enterprises	74,109	Payroll fraud	B#	UK	2013 to 2016	298,948	5,082	1.70
Charity sector	2,314	Registered charities	2,314	Procurement fraud	B#	UK	2015 to 2016	24,443	1,163	4.76
				Payroll fraud	B#	UK	2013 to 2014	58,217	990	1.70
				Grant fraud	В	UK	2015 to 2016	5,344	161	3.02
Adult		UK adult population	6,785	Mass marketing fraud	G	UK	2015 to 2016	857,376	4,520	0.53
	6,785			Identity fraud	S#	UK	2015 to 2016		1,344	0.16
individuals	0,703			Private rental property fraud	S#	UK	2010 to 2016	46,907	918	1.96
				Prepayment meter scams	S#	UK	2013 to 2014	-	3	-

Calculating procurement fraud

Private sector procurement fraud represents a very significant proportion of the UK's annual total cost of fraud with losses at £121 billion, from total annual expenditure of £2,553 billion. The estimate was calculated by using the lowest fraud and error rate of 7.8% derived from several confidential loss measurement exercises. The cost of error was then removed by applying the mean fraud/error adjustment factor (AF) of 61% to produce a subsequent fraud loss rate (FLR) of 4.76%.

Fraud losses were then calculated by applying the FLR to government revenue and capital procurement expenditure as reported in PESA (HM Treasury, 2016) and the Annual Business Survey records (ONS, 2016a) for all sectors bar the financial sector. There is no precise data for the financial sector. This figure also excludes dental contractor fraud. There is also no official procurement expenditure data for the charity sector. However, the charity sector's purchasing levels can be estimated by subtracting its £58,217 million payroll costs and £5,344 million of grants from the £88,004 million total turnover figure (BEIS, 2016; NCVO, 2016). Procurement fraud estimates are based on the methodology shown in the yellow box to the right.

Procurement expenditure in each sector was multiplied by the fraud loss rate of 4.76% to produce the cost of procurement fraud for each sector.

Private sector

Expenditure = $\pounds2,661,863$ million \times

Fraud loss rate = 4.76%The cost of fraud = £121,428 million

Charity sector

Expenditure = $\pounds24,443$ million \times

Fraud loss rate = 4.76%

The cost of fraud = \pounds 1,163 million

Central government

Expenditure = $\pounds153,579$ million × Fraud loss rate = 4.76% The cost of fraud = $\pounds7,305$ million (excluding NHS contractor fraud)

Local government

Expenditure = \$93,258 million X Fraud loss rate = 4.76%The cost of fraud = \$4,436 million

Calculating payroll fraud

Payroll fraud is estimated to cost the UK nearly £17 billion every year. It was calculated using a 1.7% fraud only loss rate, which was derived from confidential public sector analysis. It is the largest such exercise ever undertaken.

Central and local government payroll expenditure is recorded in PESA (HM Treasury, 2016). There is no centrally provided figure for payroll expenditure for the private and charity sectors. On the basis of using the best available information, the figures were derived by multiplying the average annual salary cost by the number of staff employed in each sector (BEIS, 2016; ONS, 2016a). In 2016, the average salary cost across both the public and private sectors was £28,594. This figure includes £26,156 gross salary plus £2,438 employers' national insurance.

The calculation of the cost of fraud in this area was based on this formula.

Central government

(excluding NHS England) Expenditure = $\pounds 60,805$ million X Fraud loss rate = 1.7% The cost of fraud = $\pounds 1,034$ million

NHS England

Expenditure = $\pounds47,084$ million X Fraud loss rate = 1.7%

The cost of fraud = £800 million

Local government

Expenditure = £63,255 million X Fraud loss rate = 1.7%

The cost of fraud = £1,075 million

Private sector

Expenditure = £28,594 x 26,190,000 = £748,870 million

Fraud loss rate = 1.7%The cost of fraud = £12,731 million

Charity sector

Expenditure = £28,594 x 2,036,000 = £58,217 million

Fraud loss rate = 1.7%The cost of fraud = £990 million

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Start the conversation

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