



## **Cost of Economic Crime Report**

**xxxx 2012**

**Draft report**

**An estimate by the Serious Fraud Office of  
the total scale of fraud in New Zealand**



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# Foreword

XXXX, UK National Fraud Authority



Fraud is a pernicious crime that affects us all. It is a global crime perpetrated by both 'home grown' fraudsters and international criminals who maliciously deceive their victims, often the most vulnerable in our society. As with other serious crime the harm from fraud is broad. Not only can the direct victim be personally devastated, but also their families and friends can feel the impact. Society as a whole loses out to less efficient services due to public sector losses and investors can lose confidence in the profitability of the market.

All these reasons highlight why it is vitally important for fraud to be taken seriously and the first step of this process is to understand the scale and scope of the crime. This year's National Fraud Indicator, produced by the Serious Fraud Office, estimates that fraud costs New Zealand \$7.3 billion each year. This is New Zealand's first attempt at quantifying the scale of this crime and follows in the footsteps of the UK's National Fraud Authority which has been looking at measuring the level of UK fraud, since 2007. This type of measurement is exceptionally difficult, particularly since fraud by nature is a hidden crime.

In 2007 the results of the UK's Fraud Review were published. One of the recommendations was to create a measurement unit which could identify the level of fraud in the UK. The unit was successfully set up and the first Annual Fraud Indicator was published in 2010 giving an estimate of £30 billion in annual losses from fraud to the UK economy. Improvements to the measurement methodology and better access to data each year, progressively improved this figure to £38 billion in 2011 and most recently £73 billion in March 2012. These increases represent a greater understanding of the problem rather than an increase in fraud.

It is important not to fixate on these initial 'big number' estimates but rather to provide an order of magnitude estimate of the scale of the issue and how it may be affecting different sectors.

We would therefore encourage New Zealand officials not divert their energies from the primary goals of better understanding the scale of the problem, and responding effectively to it. It has been the UK experience that debates over specific number, methodologies, and definitions do not materially change the overriding message that fraud is a significant problem to our economy and requires a united and coordinated response from all parts of the public, private and voluntary sectors.

A better understanding of the problem provides a basis for thinking more systematically about the following:

- How much resource should be ring-fenced to address this crime, especially in comparison to other 'popular' crime types that have historically attracted more funding, even though the hard figure is comparable or significantly less?
- Where are the significant areas of economic crime that resources should be deployed into? Which individual victims and particular sectors of the economy should be addressed and are there any gaps that need to be filled?
- What are the types and balance of interventions that are most likely to work, cost-effectively, to reduce losses by the largest extent, such as the development of preventative strategies aimed at eliminating or reducing the impact of identified enablers of economic crime?
- What is the level and location of agency and sector resource required to increase the reduction in economic crime over time?
- What opportunities exist to improve operational collaboration and co-ordination between agencies to improve reduction and disruption of fraudulent activities?
- Ultimately, how successful have counter fraud initiatives been?

Many of these considerations are being addressed in the UK and a ground swell of initiatives are taking shape under the banner of Fighting Fraud Together (FFT), the UK's national strategy to reduce fraud. FFT is a shared enterprise on behalf of all sectors; public, private, voluntary and law enforcement - to improve the UK's collective response to fraud and the damage it causes to individuals and the economy. FFT includes a comprehensive programme of activity which sets out, often cross-cutting work, going on across all sectors to reduce the damage caused.

By way of example

- a major government initiative to address public sector fraud has already resulted in £72 million of savings;
- private sector sponsorship of an insurance fraud unit within City of London Police has, in its first quarter of operation, made 80 arrests, resulting in 1 conviction so far and £12 million of insurance fraud under investigation;
- whilst cooperation and information sharing amongst mortgage lenders and Her Majesty's Revenue & Customs in the UK has resulted in £10's millions of pounds saved from mortgage fraud.

The role of the NFA's Annual Fraud Indicator has been pivotal in getting fraud on the agenda, and bringing stakeholders to the table to collectively take action. The SFO's National Fraud

Indicator is an important step in tackling fraud against the New Zealand economy, and we wish them every success in raising awareness of this serious crime.

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# The Cost of Economic Crime Report

## Introduction

*Adam Feeley, Chief Executive and Director, Serious Fraud Office*



In March 2012, the UK National Fraud Authority published its Annual Fraud Indicator which placed the annual cost of fraud in the UK at over NZ\$140 billion. The Authority made the observation that "It represents money that individuals, businesses and Government can ill afford to lose ..."

It would be alarmist to say that New Zealand faces a problem of the same scale. Equally, it would be complacent to assume we do not have a significant problem. Recent events in the financial services sector reinforce how important it is to have robust mechanisms in place to detect and discourage white collar crime, and preserving New Zealand's reputation as a safe place to invest and do business is a key part of the country's continuing economic development.

The SFO has recently reorganised itself to better respond to new trends in white collar crime, to restore and increase confidence in capital markets, and to protect the interests of consumers and investors. We are looking to collaborate more effectively across the public sector to combine our collective skills, powers and resources. We are also looking to work with our partner agencies to develop a better-informed perspective on the types and scale of serious financial crimes that are being committed in New Zealand.

New Zealand has not had the depth and breadth of research into the drivers and cost of financial crime that has occurred in many other countries. Without such research, we can only assume that the emerging issues and scale of fraud being experienced internationally is affecting the New Zealand economy in a broadly comparable way.

With improved data and intelligence, we can not only fight financial crime more effectively, we can identify future policy options that may reduce the incidences of fraud. The Cost of Economic Crime Report is our first attempt to estimate the total scale of annual fraud losses that have been suffered across the New Zealand economy – impacting individuals, companies and the government. It is an important step in helping us to understand the nature and scale of fraudulent activities occurring in New Zealand.

Developing the Cost of Economic Crime Report has required information and cooperation from a number of government departments and private sector businesses and I would like to take this opportunity to thank those people who have contributed to this report.

I would also like to thank the UK National Fraud Authority for providing guidance and support throughout our development of the Cost of Economic Crime Report, and for providing the

forward for this report, and NZIER for providing an independent peer review of the calculation methodology.

## Context

The Serious Fraud Office reports to the Minister of Police with the core purpose of addressing serious financial crime in New Zealand, including bribery and corruption. This is achieved through our key activities of:

- investigations
- prosecutions
- contribution to policy development
- advisory work on fraud prevention, awareness and education.

In carrying out our role, we have strong relationships with other Justice Sector agencies including the Police, Ministry of Justice and Crown Law Office, as well as other agencies such as the Office of the Auditor General, Ministry of Economic Development, Financial Markets Authority and the Commerce Commission. The work of the Serious Fraud Office focuses on cases that have a wide impact on the New Zealand public and economy. Other, less serious, dishonesty offences are usually a matter for the Police to investigate.

Unfortunately, a certain level of fraud will always exist. Fraudsters will seek to take advantage of opportunities during periods of weak economic performance as well as strong performance, but the way that this fraud manifests itself may be different. Overseas experience indicates that economic pressures resulting from the global financial crisis have impacted the profile of financial crime risks and this can<sup>1</sup>:

- influence otherwise honest individuals to carry out dishonest acts due to personal financial pressure
- divert resources away from vital anti-fraud controls inside organisations
- create opportunities for fraudsters to acquire business assets at low prices for use in fraud
- increase the number of potential targets for various scams or deceitful offers as more people struggle financially
- encourage fraudsters to change their behaviour. For example, as new credit becomes harder to obtain, fraudsters target existing credit facilities held by legitimate businesses and individuals.

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<sup>1</sup> SFO (2011), Briefing to Incoming Minister – December 2011

But, over time an economic upturn will also create new opportunities for fraudsters to exploit, such as:

- growth in innovative products and services
- increased consumer demands and needs
- false perceptions that fraud decreases as economic conditions improve.

## **Objectives of the Cost of Economic Crime Report**

The ultimate objectives of the project are to:

- reduce the incidence and effects of financial crime in New Zealand
- enhance New Zealand's reputation as a safe place to invest.

More specifically, the Cost of Economic Crime Report has been developed to inform judgements about:

- Significant areas of fraud and where best to apply resources for preventing, investigating and prosecuting fraud
- The types and the balance of interventions to combat fraud
- Opportunities to improve collaboration and co-ordination across government agencies and private sector organisations.

It is one of a number of outputs that support the Serious Fraud Office's ultimate objectives: to reduce the incidence and effects of financial crime; and to enhance New Zealand's reputation as a safe place to invest.

## **An important note on the calculations ...**

This first Cost of Economic Crime Report is essentially a stock-take of existing information about the level of detected and undetected fraud in New Zealand. We see it as the first 'stake in the ground' in our attempt to gauge the impact that economic crime is having across the New Zealand economy.

Significant data about detected fraud has been provided by the public and private sector participants who were approached to contribute to the Cost of Economic Crime Report. However, it has been necessary to rely on international benchmarks for most of the undetected fraud estimates in this report as very little data is currently formally calculated in New Zealand about this difficult and complex area.

The quality and reliability of the fraud estimates in this first Cost of Economic Crime Report varies, so the estimates should be considered to be an indication of likely fraud loss only. Caution must be taken when using and interpreting the figures, particularly when drawing comparisons between the different sectors that have been reported.

It is also important not to make judgements about the comparative levels of detected and total fraud at the sector and sub-sector level. The detected fraud figures are presented simply as a targeted snapshot of available data, specific to the New Zealand economy. Their benefit is that they primarily show that the overall level of detected fraud is significantly lower than total fraud (undetected and detected) – and this is common across the public, private and third sectors of the economy.

Over time we expect the estimates of total and detected fraud to change as more data becomes available and as the evidence underpinning it improves. We also hope that following release of this, the first Cost of Economic Crime Report for New Zealand, organisations will become more comfortable discussing and estimating undetected fraud.

And finally, to reflect the significant difficulties in estimating the level of overall fraud across New Zealand, the key results have been principally presented as a range. However, in the tables and detailed analysis sections, point estimates have also been provided - primarily for presentational purposes and to allow easier comparison of results across sectors and against external comparators.

## Overall findings

The Cost of Economic Crime Report has focused on the measurement of fraud. In developing the Report, fraud has been defined as any deceptive and unlawful activity that results in financial loss. The cost of fraud represents the losses suffered by its victims, but it does not include the cost of prevention or response. On this basis, the total annual cost of fraud to the New Zealand economy is estimated to be in the range of \$6.1 billion to \$9.4 billion, with a point estimate of \$7.8 billion<sup>2</sup>. This is a very significant sum, being equal to approximately 3% to 5% of New Zealand's total GDP. To put this in perspective, the point estimate cost of fraud is:

- Over twice the combined yearly budget assigned to Police, Corrections and the Courts (\$3.7 billion)<sup>3</sup>
- Over half of New Zealand's total health budget (\$14 billion)<sup>4</sup>
- More than the total net profit after tax of New Zealand's top 200 companies and top 30 financial institutions<sup>5</sup> (\$6.6 billion)
- The equivalent of more than \$2,000 for every adult living in New Zealand.<sup>6</sup>

However you look at it, \$6.1 billion to \$9.4 billion of fraud is a substantial sum and a loss that New Zealand cannot afford.

<sup>2</sup> The point estimate does not fall in the middle of the range. Depending on the nature of the estimates in the sub-sectors, some point estimate amounts are at the lower end and others are at the higher end of the range.

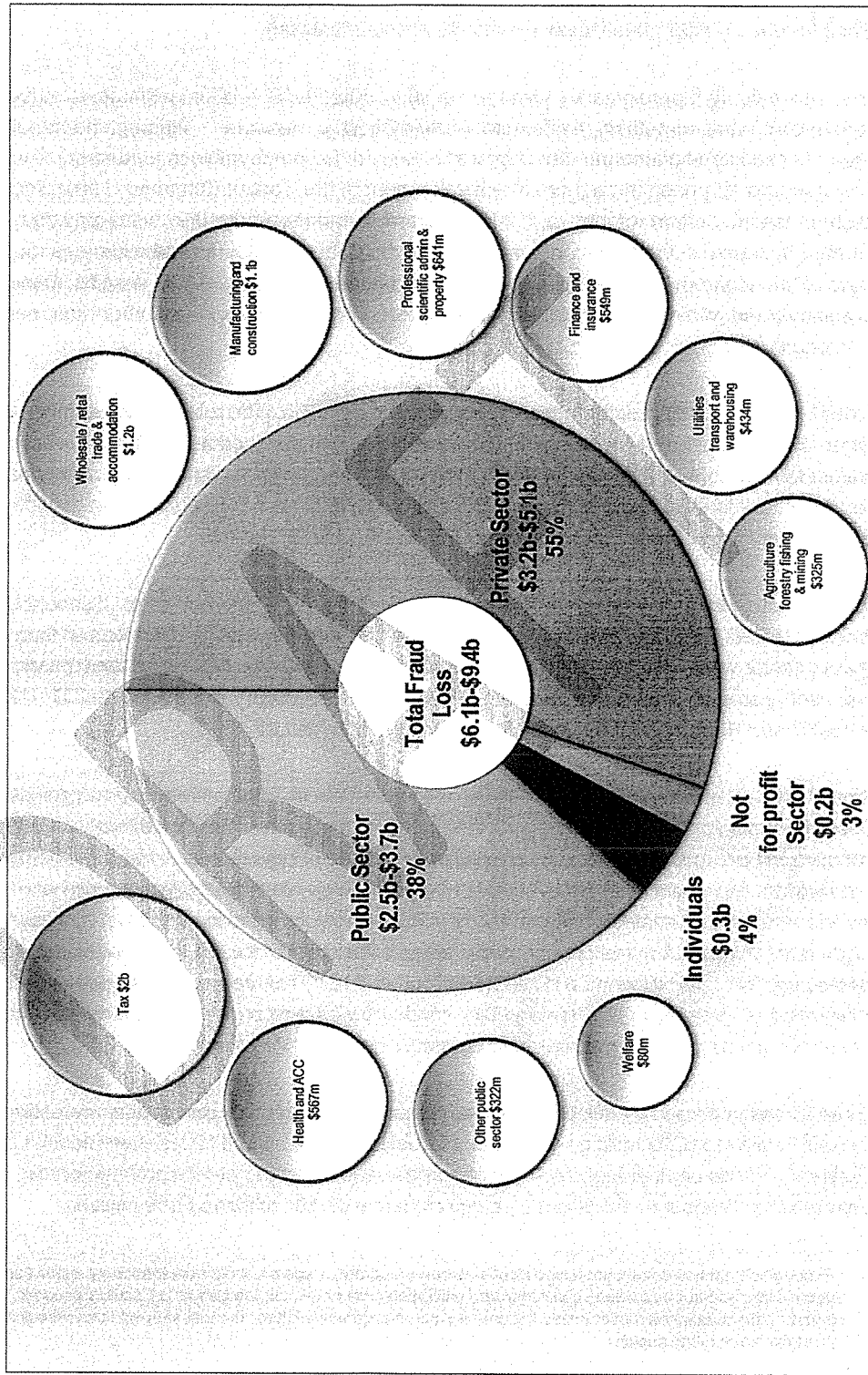
<sup>3</sup> Based on total 2011/12 Vote Appropriations for: Police (\$1,609 m), Corrections (\$1,361 m), Courts (\$719 m).

<sup>4</sup> Based on total 2011/12 Vote Appropriation for Health.

<sup>5</sup> Net profit after tax from the 2011 Deloitte Management Magazine Top 200 report (sum of all profits and losses).

<sup>6</sup> Based on a Statistics New Zealand population estimate, 2011.

Figure 1: Cost of Economic Crime Report – Total fraud loss range and point estimates



[Final format of and/or detail shown in the chart to be finalised]

The vast majority (approximately 96%) of the \$6.1 billion to \$9.4 billion estimate is attributed to undetected fraud, something that is notoriously difficult to measure<sup>7</sup>. Although the headline figure is a substantial amount, the estimate is likely to be conservative in a number of areas. The standard approach throughout the development of the Cost of Economic Crime Report has been to use the bottom (or low) end of fraud estimate ranges where they were provided. Further, because of limitations on available data the total does not include estimates for some parts of the economy, for example, undetected customs and excise fraud, specific finance company fraud within the financial services sector, or fraud on individuals other than mass marketing fraud.

Fraud within the public sector makes up approximately 38% of the total fraud estimate, with just under 26% of total fraud occurring in the tax system, comprising criminal attacks, evasion and the hidden economy. The Cost of Economic Crime Report has assumed that only a small portion of tax fraud is detected and that the total cost of taxation fraud is consistent with similar international tax regimes in Australia, the UK and the United States.

Private sector fraud makes up approximately 56% of the total fraud estimate. It should be noted that a detected fraud figure was only collected for the banking sector. Undetected fraud in the private sector was almost entirely estimated using a percentage-of-turnover benchmark approach, using an illustrative fraud rate of 0.7% to 1.1% – taking account of the 2011/12 Kroll Global Fraud Report and data developed by the NFA in the UK.

Fraud in the private sector is very difficult to estimate and the indicative amounts provided in the Cost of Economic Crime Report should be treated with caution. It is hoped that, as better information becomes available, a more reliable estimate of private sector fraud will be possible. To illustrate the impact that improvements in methodology and data collection can have on the reporting of fraud, the latest research by the National Fraud Authority in the UK has seen a significant increase from the previous estimates of the cost of fraud in the private sector, increasing from £12 billion in 2011 to £46 billion in 2012. This measure was updated following completion of a survey of UK firms in 2011 and is now based on an assumption that fraud losses for private sector firms are approximately equal to 1.4% of turnover.

Fraud losses suffered by individuals through mass marketing and other scams are estimated to be \$260 million to \$395 million – equivalent to between \$74 and \$112 for every adult in New Zealand. Frauds against and by charitable organisations in the not-for-profit sector are estimated to be about half that level, at approximately \$130 million to \$159 million.

<sup>7</sup> Although both detected and undetected fraud has been reported, readers should note that only a small sample of overall detected fraud has been collected from participants who have contributed to the Cost of Economic Crime Report. The actual amount of detected fraud would be considerably higher than that shown in this report, particularly for fraud in the private sector.

## Results by sector

The tables below provide fraud estimates for the sub-sectors of the economy where information was collected for the Cost of Economic Crime Report. The first table provides the estimated range and point estimates for the total fraud cost for each of the sectors. The second table presents the point estimates of total fraud losses as well as detected fraud amounts provided by agencies.

To provide readers with some context when interpreting the scale of fraud in New Zealand, the second table also shows a comparison between New Zealand's fraud losses as a percentage of gross domestic product and the equivalent fraud losses for the UK economy.

**Table 1: Total fraud by sector**

Sector	Total Fraud Loss - Range	Total Fraud Loss - Point Estimate
Public Sector	From \$2.5 billion to \$3.7 billion	\$3.0 billion
Private Sector	From \$3.2 billion to \$5.1 billion	\$4.3 billion
Not-for-Profit Sector	From \$0.1 billion to \$0.2 billion	\$0.2 billion
Individuals	From \$0.3 billion to \$0.4 billion	\$0.3 billion
<b>Total Fraud</b>	<b>From \$6.1 billion to \$9.4 billion</b>	<b>\$7.8 billion</b>

**Table 2: Detected fraud and total fraud by sub-sector**

Point Estimate Sector / Total Fraud Loss	Sub-sector	Detected Fraud	Total Fraud Loss	Total Fraud Loss % of NZ GDP	Equivalent UK AFI % of UK GDP
Public Sector \$2.5 billion	Taxation	\$109 million	\$2.0 billion	NZ Public Sector 1.5%	UK Public Sector 1.3%
	Social Welfare	\$23 million	\$80 million		
	ACC	\$3 million	\$207 million		
	Customs	\$1 million	n/o		
	Health	\$4 million	\$359 million		
	Housing	\$7 million	\$25 million		
	Student Loans	n/o	\$8 million		
	Procurement & Other	\$6 million	\$289 million		
Private Sector \$4.3 billion	Agriculture, forestry, fishing & mining	n/o	\$325 million	NZ Private Sector 2.2%	UK Private Sector 3.0%
	Manufacturing and construction	n/o	\$1.1 billion		
	Wholesale/retail trade & accommodation	n/o	\$1.2 billion		
	Professional, scientific, admin & property	n/o	\$641 million		
	Utilities, transport and warehousing	n/o	\$434 million		
	Finance and insurance	\$128 million	\$549 million		
Individuals/Non-profit Sector \$475 million	Mass Marketing	\$5 million	\$321 million	NZ Other Sectors 0.2%	UK Other Sectors 0.5%
	Charities	\$15 million	\$154 million		
<b>Total Fraud \$7.8 billion</b>		<b>\$300 million</b>	<b>\$7.8 billion</b>	<b>NZ Total 3.9%</b>	<b>UK Total 4.8%</b>

n/o = not obtained

As previously described, the largest sub-sector contribution to total fraud is taxation fraud, representing just over 24% of the total. Details of the methodology and calculations for taxation and all other sub-sector fraud are included in the Fraud Sub-sector section later in this report.

As shown in the table, amounts for detected fraud were not available for student loans, insurance and other private sector industry groups. The total detected fraud balance should be interpreted taking this limitation in the data into account.

Caution should also be exercised when considering the relative levels of detected and total fraud. As previously noted, the detected fraud figures are presented simply as a targeted snapshot of available data. Their benefit is that they primarily show that the overall level of detected fraud is significantly lower than the level of total fraud (undetected and detected) – and this is consistent across all sectors of the economy. Given the nature of the data available for this report, no judgements or conclusions should be made about the comparative levels of detected and total fraud at the sector or sub-sector level.

The second table above shows "Procurement and other" fraud as a part of Public Sector fraud. This is an estimate of internal fraud committed, at least in part, by parties within the public sector organisations. It is primarily fraud committed by employees either alone or in conjunction with an outside party. The detected and total fraud estimates relate to all public sector entities in both central and local government, not just the sub-sectors shown separately in the table.

## Observations

The following observations result from the engagement with agencies during the collection of the underlying data and from the development of the calculations based around the international benchmarks. They help to demonstrate the difficulty in estimating fraud and also point to some areas where future work would be helpful:

- Very few participants could provide a figure for undetected fraud. Given it represents such a significant proportion of estimated total fraud, it is hoped that the Cost of Economic Crime Report acts as a catalyst for organisations to think about how to estimate the amount of fraud they may not yet be detecting. The SFO recognises, nonetheless, that this is notoriously difficult to do - but believes the benefits of developing a range of industry and agency estimates outweigh the challenges.
- The difficulty in using international benchmarks is that there are inevitably different environmental factors that underpin the results. For example, public sector programmes differ between countries (for example, ACC, student loans, and health and benefit systems) and may present greater or lesser opportunities for fraud to be committed. It is important that, over time, New Zealand-specific methodologies can be developed.
- Existing New Zealand evidence tends to be focused on fraud committed within organisations, not fraud committed against organisations. As internal fraud only makes up a small portion of the total fraud figure, more emphasis could be placed on collecting data on external fraud.
- In some sectors it is very difficult to estimate the value of fraud because there are myriad ways for it to be committed, and/or it can be committed on a very low scale. Fraud against local government, in particular, was difficult to estimate.

- Although there are regular surveys that collect information about private sector fraud in New Zealand, these rarely attract sufficient respondents to give a true insight into the level of the problem. Furthermore, information on the total level of private sector fraud is limited compared with public sector fraud – generally because of the disparate nature and confidentiality constraints associated with private sector operations. Private sector components also act in competition with each other, whereas in the public sector there is a single obligation to safeguard public funds, and reporting on fraud is part of that.
- During the interview process for developing the Cost of Economic Crime Report, it was clear that in some areas of the New Zealand public sector there is a measure of collaboration and sharing of data across agencies. This is certainly to be encouraged and in some way it is hoped that the Cost of Economic Crime Report will contribute to, or be a catalyst for, further inter-agency collaboration.

# Methodology

## Scope of fraud

The Cost of Economic Crime Report estimates the cost of losses suffered by victims of fraud. It does not attempt to account for the costs of fraud prevention (such as internal audit or internal control costs) or response costs (such as the cost of Police, the Serious Fraud Office or the wider justice system).

For the Cost of Economic Crime Report, the two key components of fraud are deception and unlawfulness. For example, this definition of fraud does not include theft (shoplifting, for example, is excluded where there is no deception) and it does not include poor investment advice, where such advice was not given unlawfully.

## The approach

The broad approach has been to interview key stakeholders regarding their current methods of identifying, preventing and measuring fraud. The methodology was to seek any information collected by these stakeholders on the value of detected and undetected fraud for the most recent year that data was available. As this first Cost of Economic Crime Report is essentially a stock-take of existing information, no new data collection activities or surveys were undertaken.

There was a very good response regarding the level of detected fraud and most agencies and private sector organisations were helpful, positive and forthcoming with available data. However, apart from estimates from ACC and the Insurance Council, no other agencies or groups were able to provide an estimate of the value or proportion of undetected fraud in their sector or industry as this figure had not been calculated.

Where a figure for detected or undetected fraud was provided by a participating organisation, it has been used without adjustment. In areas where no information was currently available the gap was filled using the best internationally-based fraud ratios/benchmarks that could be found.

Total fraud (detected and undetected) is therefore almost entirely based on international benchmarks, primarily using the results of the UK's 2012 Annual Fraud Indicator and its underlying data sources, but also using other international benchmarks in a number of areas.

In filtering and selecting the benchmarks to be applied to create the New Zealand fraud estimates for each sub-sector, data was sourced from the UK, Australia and, to a lesser extent, from the US. This was because data was available from these countries, but also because they have similar political and legal systems, tax practices, public sectors organisations, charitable activities, internet usage and language to New Zealand. These three countries are also in the

top 25 of 178 countries, along with New Zealand, on Transparency International's Corruption Perceptions Index<sup>8</sup>.

It is acknowledged that there will be differences between countries in the way that fraud is captured and that different systems will present different opportunities for fraud to occur. However, wherever possible, data was checked against more than one benchmark in order to gain greater comfort over the estimate.

Whenever judgement needed to be exercised about the respective reliability of conflicting estimates, a conservative approach was adopted. This was in part to recognise that New Zealand is rated as having the least corrupt public sector in the 2011 Corruption Perceptions Index. The Corruption Perceptions Index ranks countries according to their perceived levels of public-sector corruption.

The surveys and assessments used to compile the index include questions relating to the bribery of public officials, kickbacks in public procurement, embezzlement of public funds, and questions that probe the strength and effectiveness of public-sector anti-corruption efforts. Although it only covers perceptions of public sector corruption, it provides a useful international comparison. The chart on page [15] shows the ranking of the top 25 countries in the index.

### **Next steps / looking forward**

- [Outstanding]

<sup>8</sup> Transparency International (2011), Corruption Perceptions Index 2011. Available at: [http://www.transparency.org/publications/publications/other/corruption\\_perceptions\\_index\\_2011](http://www.transparency.org/publications/publications/other/corruption_perceptions_index_2011).

## **Fraud sub-sectors – description and calculation methodologies**

## Taxation fraud

Point estimate total fraud	\$2.0b
Detected fraud	\$109m
Detected fraud percentage of total	5%
Tax fraud percentage of all NZ fraud	26%
Tax fraud percentage of public sector fraud	67%

<b>Description</b>	<p>Taxation fraud is the deliberate, dishonest evasion of tax. For the purposes of the Cost of Economic Crime Report, it includes the estimated cost to the New Zealand tax base of tax evasion, criminal attacks and the cost of tax evaded through the "hidden economy". It does not include the cost of errors, failure to take care, non-payments, interpretation issues or tax avoidance.</p> <p>The most prevalent fraud perpetrated on New Zealand's Inland Revenue is tax evasion, where income is deliberately understated or expenditure is deliberately overstated when filing income tax or GST returns, or where returns are deliberately not filed when they are required.</p>
<b>Detected Fraud</b>	<p>Inland Revenue estimate total detected fraud for the year to June 2011 of approximately \$109m. This includes frauds where individuals seek to obtain monies from Inland Revenue by fraudulent means as well as frauds where taxpayers deliberately evade taxes by providing false information, including false tax returns.</p>
<b>Total fraud including undetected fraud</b>	<p>There are very real difficulties in estimating the total cost of tax evasion to a country's economy. The hidden economy is just that – hidden – and therefore it is not an easy thing to measure. Nevertheless, several overseas tax departments have made attempts to calculate the total size of their tax gap, and research and estimates of tax gaps have been performed by academics and international organisations.</p> <p>To date, Inland Revenue has not found a methodology for measuring the New Zealand tax gap that it believes would provide a high enough level of accuracy for making policy decisions. It "has not attempted to quantify the scale of undetected fraud (including tax evasion) and does not publicly comment on or endorse the academic studies published in various media on the potential size of the "hidden economy" or "cash economy".<sup>9</sup></p> <p>In developing the Cost of Economic Crime Report, it was observed that all parties attempting to measure the tax gap appear to have fully recognised the potential inaccuracies inherent in their measurements but they also believe the exercise is worthwhile and that it can provide an approximate indicator of the magnitude of the issue.</p>

<sup>9</sup> IRD response to SFO Cost of Economic Crime Report questionnaire, December 2011.

The estimate of total tax fraud developed for the Cost of Economic Crime Report is no exception. It is based on using an international benchmark to determine the New Zealand tax gap, and a further benchmark to estimate how much of that tax gap is related to fraudulent activities. Although there are several studies and reports that provide a level of corroboration to the estimate of the total tax gap, there is little evidence around how much of that tax gap is fraud. For this, only one source (the UK's HM Revenue and Customs) was available.

For these reasons, great care should be taken in interpreting and using these results.

The point estimate total cost of taxation fraud is \$2 billion.

This is based on the following methodology:

- Using data published by the UK's HM Customs and Excise for 2009/10<sup>10</sup>, the tax gap as a percentage of tax paid was calculated for VAT, individual, corporate and other tax. These were, respectively, 16%, 6%, 13% and 7%.
- These percentages were applied to New Zealand's tax paid for 2011 for the same categories: GST (\$14m), individual (\$23m) corporate (\$7m) and other (\$7m)<sup>11</sup>. This provided a total tax gap of \$5 billion, which is approximately 10% of total tax paid and 2.5% of GDP.
- Based on the HM Customs and Excise 2007/08 estimate of the behaviours driving fraud (evasion, criminal attacks, and the hidden economy) it is assumed that 40% of this tax gap is related to fraud. This equates to \$2 billion.

New Zealand's total tax gap as a percentage of GDP and as a percentage of total tax paid were compared to data from the US<sup>12</sup>, Sweden<sup>13</sup>, the UK (for 2008/09 and 2009/10)<sup>14</sup> and a 1999 study on the NZ tax gap by the University of Victoria, Canada, funded by Inland Revenue<sup>15</sup>. The rates calculated for New Zealand for the Cost of Economic Crime Report were at or below the equivalent rates for all the observed comparators.

No official data was available from Australia; however, in 2006 the Australian Bureau of Statistics estimated the underground economy to be 2% of GDP<sup>16</sup>.

In November 2011 the Tax Justice Network released the Cost of Tax Abuse report<sup>17</sup>, a briefing paper on the cost of tax evasion worldwide. The estimated result for New Zealand was a total tax gap of \$7 billion. The Tax Justice Network's estimate is significantly higher than the \$5 billion calculated for the Cost of Economic Crime Report - which indicates that the latter is likely to be based on more conservative assumptions.

The following chart shows how New Zealand compares to the key countries reported in the Cost of Tax Abuse report. It presents the 25 least corrupt countries from Transparency International's 2010

<sup>10</sup> [www.hmrc.gov.uk/stats/mtg-2011.pdf](http://www.hmrc.gov.uk/stats/mtg-2011.pdf)

<sup>11</sup> [www.treasury.govt.nz/government/financialstatements/yearend/jun11/25.htm](http://www.treasury.govt.nz/government/financialstatements/yearend/jun11/25.htm)

<sup>12</sup> Update on Reducing the Federal Tax Gap and Improving Voluntary Compliance, U.S. Department of the Treasury, July 8, 2009.

<sup>13</sup> Swedish National Tax Agency, Feb 2008:

[www.skatteverket.se/otherlanguages/inenglish/other.4.70ac421612e2a997f85800096363.html](http://www.skatteverket.se/otherlanguages/inenglish/other.4.70ac421612e2a997f85800096363.html)

<sup>14</sup> UK National Fraud Authority Annual Fraud Indicator 2010 and 2011.

<sup>15</sup> Modelling the hidden economy and the tax-gap in New Zealand, David E. A. Giles, Revised, February 1999, Department of Economics, University of Victoria, B.C. Canada.

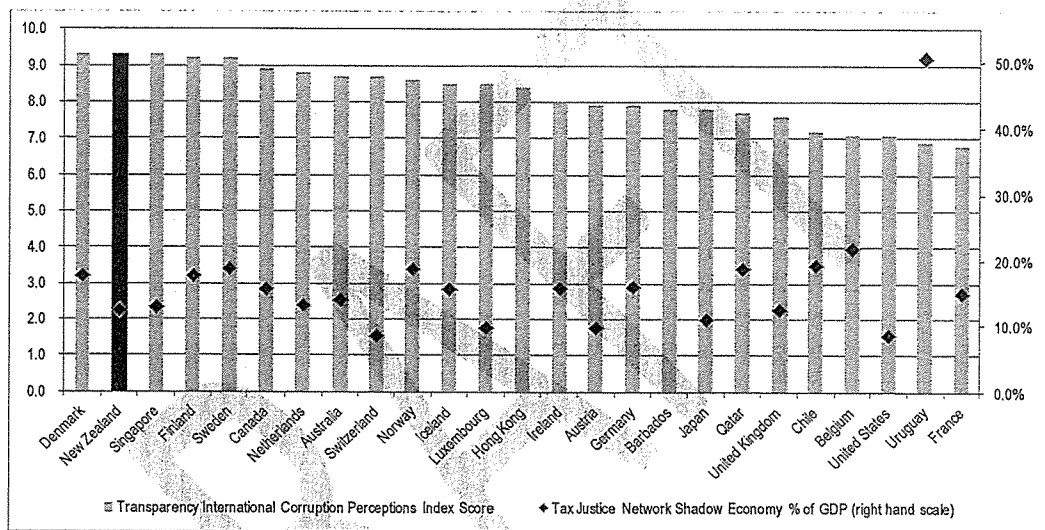
<sup>16</sup> eJournal of Tax Research 2006, Volume 4 No. 1. (pg 70). Atax, Faculty of Law, University of New South Wales.

<sup>17</sup> The Cost of Tax Abuse, November 2011: [www.taxjustice.net/](http://www.taxjustice.net/)

Corruption Perception's Index, overlaid with the estimated size of each country's shadow economy, measured as a percentage of GDP, as reported by the Tax Justice Network.

The chart shows that New Zealand is one of the least corrupt countries in the world, and has one of the smallest shadow economies as a percentage of GDP. It also provides some comfort (together with the other benchmark data) that the estimate of total taxation fraud for the Cost of Economic Crime Report is not unrealistic.

### 25 least corrupt countries from Transparency International Corruption Perceptions Index



According to the Corruption Perceptions Index, the three least corrupt countries out of the 178 that are measured are Denmark, New Zealand and Singapore, scoring 9.3 out of a maximum score of 10. The most corrupt country is Somalia, with a score of 1.1, followed by Afghanistan and Myanmar with scores of 1.4.

## Social Welfare fraud

Point estimate total fraud	\$80m
Detected fraud	\$23m
Detected fraud percentage of total	29%
Welfare fraud percentage of all NZ fraud	1%
Welfare fraud percentage of public sector fraud	3%

<b>Description</b>	<p>Benefit payments represent a significant portion of overall government expenditure. Total benefit payments in 2010/11 were \$16.7 billion, of which 53% (\$8.8 billion) was for New Zealand Superannuation. The next highest benefit payments were for the Domestic Purposes Benefit (\$1.8 billion), Invalids Benefit (\$1.3 billion) and Unemployment and Emergency Benefits (\$0.9 billion)<sup>18</sup>.</p> <p>The primary type of fraud committed against the Crown in relation to benefits is where an applicant or beneficiary provides false information to the Ministry of Social Development (MSD), thereby obtaining a benefit payment to which they are not entitled. Examples include where a person is living in a relationship equivalent to marriage, but is receiving assistance at a level appropriate for a single person; and cases where a client is working but is receiving assistance at a level that is not appropriate for a working person.</p>
<b>Detected fraud</b>	<p>MSD records, analyses and reports instances of fraud as part of its annual Statistical Report. This publication records detected fraud only – with fraud established only when a client has been prosecuted.</p> <p>The latest Statistical Report shows 2009/10 fraud of \$16 million. A New Zealand Herald report of 13 January 2012 supports this amount, and also includes a total for 2010/11 fraud of \$23 million (obtained under an Official Information Act request). In addition to benefit fraud, staff fraud of just under \$100,000 was also disclosed for the 2010/11 year. A total of \$23 million (rounded) has been included in the Cost of Economic Crime Report for detected fraud.</p>
<b>Total fraud including undetected fraud</b>	<p>No current statistics for undetected fraud are available from MSD. However, in 2008 an estimate of fraud on the benefit system was provided as part of a performance audit report prepared by the Controller and Auditor-General<sup>19</sup>. In this report the measurement of benefit fraud included cases of "substantiated overpayments". Normally this refers to cases of benefit overpayment where a decision has been made to take some form of enforcement action other than prosecution. However, the Auditor-General's report used the term "benefit fraud" more widely, to include cases</p>

<sup>18</sup> MSD Annual Report 2011. [www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/corporate/annual-report/2011/annual-report-2010-11.pdf](http://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/corporate/annual-report/2011/annual-report-2010-11.pdf) (Page 111).

<sup>19</sup> Ministry of Social Development: Preventing, detecting, and investigating benefit fraud. A report by the Controller and Auditor-General, June 2008.

of substantiated overpayments, regardless of whether criminal prosecution resulted from investigation.

Total social welfare fraud for the Cost of Economic Crime Report of \$80 million is based on calculating fraud identified by the Auditor-General in 2008 as a percentage of total benefits in the 2007/08 year (0.48% of total benefits) then applying this percentage to the level of total benefits reported by MSD in the 2010/11 year (\$16.7 billion).

The estimated fraud of 0.48% of total benefits is lower than the equivalent percentage derived from the UK Annual Fraud Indicator of 0.7%. This could be because only detected substantiated overpayments have been included in the New Zealand Auditor-General's report, although to some extent this would be offset by any substantiated overpayments that were errors rather than deliberate frauds.

On balance, the results from the Auditor-General report were considered to provide a reasonable estimate of total fraud, but one that could be improved in future editions of the Cost of Economic Crime Report.

## ACC fraud

Point estimate total fraud	\$207m
Detected fraud	\$3m
Detected fraud percentage of total	1.5%
ACC fraud percentage of all NZ fraud	3%
ACC fraud percentage of public sector fraud	7%

<b>Description</b>	<p>Fraud in the Accident Compensation Corporation (ACC) system is perpetrated by two different groups of offenders:</p> <ul style="list-style-type: none"> <li>• Fraud by providers – which includes over-servicing and phantom billing</li> <li>• Fraud by clients – which includes home help (attendant care) claims, over-claiming, false claiming and accidental death claims.</li> </ul> <p>The most prevalent fraud occurs where claimants return to work and fail to advise ACC, or claimants misrepresent their incapacity so that they may stay in receipt of compensation.</p>
<b>Detected fraud</b>	ACC maintains a record of all detected fraud committed by providers and clients. For the year to June 2011, this totalled \$3 million.
<b>Total fraud including undetected fraud</b>	<p>Total fraud is estimated by ACC to be somewhere between 8-11% of total entitlements paid. This estimate does not take into account the value of savings made by ACC from ceased future payments as a result of detected fraud.</p> <p>The lower end of the ACC estimate (8%) has been applied to calculate the total fraud point estimate for the Cost of Economic Crime Report. An estimate of 8% is within the range of healthcare fraud estimates of between 3% and 10% provided in an international study of fraud in the health sector.<sup>20</sup></p> <p>In 2010/11, ACC paid out \$2,588 million in claims.<sup>21</sup> Applying the benchmark of 8% to the \$2.6 billion of claims paid provides the total fraud point estimate for ACC of \$207 million.</p>

<sup>20</sup> The Financial Cost of Healthcare Fraud: [www.macintyreHUDSON.co.uk/publications/490/9091](http://www.macintyreHUDSON.co.uk/publications/490/9091)

<sup>21</sup> ACC Annual Report 2011.

## Customs fraud

Estimated total fraud	n/a
Detected fraud	\$1m

<b>Description</b>	Fraudulent activity in the customs sector includes undervaluing goods, mis-declaration of goods, and not declaring goods being imported into or manufactured in NZ in order to evade duty, excise and/or GST.
<b>Detected fraud</b>	<p>In the 23 months between January 2010 and November 2011, New Zealand Customs detected \$7 million worth of tax evasion activities. Annualising this amount provides just under \$4 million detected fraud including underpayments of duty, excise and GST. To avoid double counting, this amount has been reduced by 66% to remove the estimated impact of GST, using the New Zealand Customs Service ratio of GST collected to total tax, duty and excise collected for the 2010/11 year. GST is removed as this is already counted in Taxation fraud.</p> <p>This results in an annual estimate of detected fraud for the Cost of Economic Crime Report of approximately \$1m.</p>
<b>Total fraud including undetected fraud</b>	For this version of the Cost of Economic Crime Report, only detected fraud has been reported for Customs activities. At this stage, a reliable benchmark has not been available with which to estimate undetected Customs fraud in New Zealand <sup>22</sup> . It is expected that further work will be performed in this area for the next Cost of Economic Crime Report.

<sup>22</sup> Some fraud data was made available relating to the cost of illicit tobacco growing, manufacture and distribution in the New Zealand market. However, there was some doubt as to the reliability of this data and it has not been included in the Cost of Economic Crime Report.

## Health fraud

Point estimate total fraud	\$359m
Detected fraud	\$4m
Detected fraud percentage of total	1%
Health fraud percentage of all NZ fraud	5%
Health fraud percentage of public sector fraud	12%

### Description

The Ministry of Health manages \$14 billion<sup>23</sup> of public funds received through government health funding. More than three-quarters of this is allocated to district health boards that use this funding to plan, purchase and provide health services within their areas, including public hospitals and the majority of public health services. Most of the remaining public funding provided to the Ministry (approximately 20 %) is used to fund national services such as disability support, public health, specific screening programmes, mental health, elective, maternity and other services.

This section only measures fraud losses from the Ministry of Health budget. It does not include fraud against the Accident Compensation Corporation (covered earlier in this report) or fraud occurring in private sector healthcare (where data is not readily available).

Fraud in the health sector can be perpetrated by patients, healthcare professionals, staff, managers or contractors. The result of fraud losses is a serious and significant undermining of the quality and extent of patient care that can be provided by the public health system.

Examples of health fraud include: prescription fraud by pharmacists, claiming payment for dispensing prescriptions that were either expired, not requested by patients or not authorised by the prescriber; doctors inflating the size of patient registers to obtain higher medical subsidies; and members of the public obtaining treatment they are not legally entitled to receive.

### Detected fraud

Of the total Ministry of Health government funding of \$14 billion, approximately \$6 billion is overseen by the Audit and Compliance section of the National Health Board. For the Cost of Economic Crime Report, the National Health Board provided an amount for detected fraud of \$4 million. This is criminal fraud for the most recent 12 month period and most of this amount is, or is about to be, prosecuted.

For this edition of the Cost of Economic Crime Report, no data has been collected for detected fraud relating to the remaining \$8 billion of healthcare spending. Methods for collecting and collating this information will be investigated for the next version of the report.

<sup>23</sup> [www.health.govt.nz/new-zealand-health-system/funding](http://www.health.govt.nz/new-zealand-health-system/funding)

**Total fraud  
including  
undetected  
fraud**

The Audit and Compliance section of the National Health Board also provided an estimate for fraud of 2% of the national healthcare costs of \$6b. This estimate is based on the wider civil standard of fraud, in contrast to the criminal standard of fraud that was reported for detected fraud.

The 2009 Ministerial Review Group (Health) stated "On the basis of international evidence, the expected cost of error and fraud is estimated to be about 5% of payments, which would translate into about \$285 million per annum. The Ministry cites this 5% figure but also indicates that ongoing sampling and data matching exercises suggest error rates under 1% by volume"<sup>24</sup>.

The National Health Board estimate of 2% has taken account of the 2009 Ministerial Review Group estimate, but it believes that the prevalence of fraud has decreased since 2009 as result of its audit and investigation activities, particularly through an increase in health provider prosecutions. The estimate of 2% is based on the annual funds that were claimed to have been paid non compliantly.

The estimate by the National Health Board falls between two international benchmarks – one from Australia and a second from the UK. An estimate of healthcare fraud was made in 2004 by Australia's Health Insurance Commission (HIC). According to HIC, random audits conducted each year to estimate levels and identify areas of non-compliance have "consistently shown non-compliance levels to be less than 1%"<sup>25</sup>.

This 2004 Australian estimate of healthcare fraud is considerably less than that estimated in a 2009 study by MacIntyre Hudson and the University of Portsmouth Centre for Counter Fraud Studies. Their report "The Financial Cost of Healthcare Fraud" concludes that, internationally, healthcare fraud and error losses should currently be expected to be at least 3%, probably more than 5% and possibly as much as 10%<sup>26</sup>. This study was based on work performed in the UK, the United States, France, Belgium, the Netherlands and New Zealand.

For the Cost of Economic Crime Report, greater reliance has been placed on the more recent University of Portsmouth estimates, given their wider coverage and that they were undertaken more recently. In the New Zealand context, an estimate at the low end of the University of Portsmouth's scale would also seem appropriate, taking into account the comments made by the National Health Board and New Zealand's relative position on the international corruption perceptions index (see chart on page [15]).

To calculate a fraud point estimate applicable to the entire health sector spend of \$14 billion, the Cost of Economic Crime Report has used the National Health Board estimate of 2%, applied against the national healthcare costs of \$6 billion, and the University of Portsmouth estimate of 3%, applied against the remaining healthcare costs of \$8 billion. On this basis, total health fraud (detected and undetected) is estimated to be \$359 million.

This "combined" calculation approach recognises the estimate provided by the National Health Board for its part of the sector. However, it also recognises that, based on the University of Portsmouth international benchmark, the National Health Board estimate appears to quite conservative – and for the remainder of the sector a higher percentage estimate could be more appropriate.

<sup>24</sup> [www.beehive.govt.nz/sites/all/files/Annex4%20Value%20for%20Money.pdf](http://www.beehive.govt.nz/sites/all/files/Annex4%20Value%20for%20Money.pdf) (Annex 4, Page 10)

<sup>25</sup> [www.medicareaustralia.gov.au/about/media/media-releases/archived/2004/040906\\_dealing\\_with\\_fraud.jsp](http://www.medicareaustralia.gov.au/about/media/media-releases/archived/2004/040906_dealing_with_fraud.jsp)

<sup>26</sup> The Financial Cost of Healthcare Fraud: [www.macintyreHUDSON.co.uk/publications/490/9091](http://www.macintyreHUDSON.co.uk/publications/490/9091)

## Housing tenancy fraud<sup>27</sup>

Point estimate total fraud	\$25m
Detected fraud	\$7m
Detected fraud percentage of total	26%
Housing fraud percentage of all NZ fraud	0.3%
Housing fraud percentage of public sector fraud	1%

**Description** Housing New Zealand Corporation (HNZC) is the main agency responsible for providing subsidised rental homes to people in New Zealand. As at June 2011 it managed 69,717 homes<sup>28</sup>. HNZC sets an income-related rent for the majority of its tenants and the Crown pays HNZC the difference between the amount paid by the tenant and the market rent of the dwelling.

Local councils and community groups also provide social housing, but their housing stocks have not been included in this estimate of fraud because up-to-date housing stock information was not available for this report. In 2006, local councils were estimated to have 11,000 social housing units, and there were estimated to be between 2,100 and 5,400 Community Housing units.<sup>29</sup> This equates to between 18% and 24% of HCNZ's stock, so it is likely that the total costs of housing fraud is higher than that reported in this Cost of Economic Crime Report.

Housing tenancy fraud is the use of social housing by someone who is not entitled to occupy it. Examples include falsely declaring income or using assumed names or false identities in support of tenancy applications.

**Detected fraud** In 2010/11, HNZC uncovered 241 cases in which tenants provided false or misleading information about their circumstances<sup>30</sup> and \$7 million in Crown debts were established for overpaid subsidies.<sup>31</sup>

**Total fraud including undetected fraud** Total housing tenancy fraud for the Cost of Economic Crime Report is based on the methodology and benchmarks provided by the UK AFI. This calculates housing tenancy fraud based on UK Audit Commission estimates of the number of properties unlawfully occupied in England and the average cost (£18,000) to house a family or individual in temporary housing per year. The average cost includes administration costs.

<sup>27</sup> Tenants of Housing New Zealand Corporation (HNZC) properties receive a rental subsidy from HNZC and are not eligible for an Accommodation Supplement (delivered through MSD). Accommodation Supplement fraud is captured in the Social Welfare fraud section.

<sup>28</sup> Housing New Zealand Corporation (2011), Housing New Zealand Corporation Annual Report 2010/11.

<sup>29</sup> CHРАНZ (2007), Affordable Housing: The Community Housing Sector in New Zealand.

<sup>30</sup> Housing New Zealand Corporation (2011), Housing New Zealand Corporation Annual Report 2010/11.

<sup>31</sup> Investigations' Outcomes 2010/11 - PowerPoint presentation provided by Housing New Zealand Corporation.

It is estimated that 50,000 of the 3.8 million social housing properties in England are unlawfully occupied – 1.3% of the social housing stock. As at 30 June 2011, HNZN managed 69,717 houses.<sup>32</sup> Assuming that the same proportion of HNZN's housing stock is unlawfully occupied, this equates to 917 houses in New Zealand.

Based on 2010/11 HNZN figures for the number of cases of providing false or misleading information that were uncovered, and the value of Crown debts established over the same period, the average overpayment per case was \$27,386.

Multiplying the estimated number of unlawfully occupied properties (917) by the average overpayment results in a total fraud estimate for the Cost of Economic Crime Report of approximately \$25 million.

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<sup>32</sup> Housing New Zealand Corporation (2011), Housing New Zealand Corporation Annual Report 2010/11.

## Student Loan fraud

Point estimate total fraud	\$8m
Detected fraud	n/a
Detected fraud percentage of total	n/a
Student loan fraud percentage of all NZ fraud	0.1%
Student loan fraud percentage of public sector fraud	0.3%

### Description

Student loans are made up of three components – compulsory fees, course-related costs and living costs. StudyLink, a service of the Ministry of Social Development, is responsible for the administration and delivery of student loans to students during the year of study. At the end of the academic year the loans are transferred to Inland Revenue for collection.

This section estimates fraudulent activity in relation to applying for and receiving a student loan. It does not estimate fraud associated with:

- Loan repayments, which are handled by Inland Revenue
- Student Allowances, which are administered by the Ministry of Social Development.

Student loan fraud arises when applicants provide false or misleading information when applying for student loans (for example, use of a false identity) or where they deliberately fail to report changes in their circumstances (for example, the person is no longer studying, has a change of living arrangements, or has a change to their income).

### Detected fraud

No New Zealand data was collected on the prevalence of fraud in relation to student loans.

### Total fraud including undetected fraud

The estimate for New Zealand student loan fraud is based on benchmark data obtained from the UK. In the UK, the Student Loans Company is responsible for administering government-funded loans. If students are studying NHS courses then funding is administered by the NHS Business Services Authority.

Both organisations have developed a fraud measurement methodology to take account of the likelihood of undetected fraud and they estimate that total student finance-related fraud costs approximately £31 million a year. This represents 0.5% of the total value of new student loans in the UK for the 2010/11 year (£6,278 million).<sup>33</sup>

<sup>33</sup> UK estimate based on Student Loans Company data for England, Wales, Scotland and Northern Ireland  
<http://www.slc.co.uk/statistics/national-statistics/newnationalstatistics2.aspx>

The total amount borrowed under the New Zealand student loan scheme in the 2010/11 year was \$1,564 million.<sup>34</sup> Using a fraud estimate of 0.5% of new borrowings provides total fraud point estimate of \$8 million for the Cost of Economic Crime Report.

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<sup>34</sup> Ministry of Education (2011), Student Loan Scheme Annual Report – October 2011.

## Procurement and other public sector fraud

Point estimate total fraud	\$289m
Detected fraud	\$6m
Detected fraud percentage of total	2%
Procurement & other fraud percentage of all NZ fraud	4%
Procurement & other fraud percentage of public sector fraud	10%

### Description

The estimated total fraud balances reported in the other public sector categories of this report do not include procurement fraud or other fraud committed by employees. This section estimates the total level of procurement and other internal fraud for the entire public sector including fraud that occurs in both central and local government organisations.

Procurement fraud is any fraud that relates to the purchasing of goods and services, including the commissioning of construction projects from 3<sup>rd</sup> parties. It may be driven by an employee or an outside party, or it may include collusion between several parties. This type of fraud can occur at any time in the procurement life cycle, from rigging of initial bids, to false or duplicate invoicing.

Other public sector fraud relates to any fraud other than procurement fraud committed by an employee, including theft of cash, equipment and inventory, fraudulent expense claims, misuse of credit and fuel cards and payroll fraud.

### Detected fraud

In November 2011 the Office of the Auditor General (OAG) released a report "The Cleanest Public Sector in the World"<sup>35</sup>. This report summarised the results of a survey of fraud in the New Zealand public sector, based on responses from almost 1,500 people - representing a very high response rate of 74%.

The survey focused only on frauds committed against the internal resources of the organisations. It did not include fraud by parties attacking the tax, welfare or health systems, but it did include theft of cash and other assets and fraudulent expense claims. Such frauds were committed by employees and/or external parties.

Similar to other fraud surveys of New Zealand organisations, the OAG survey did not explicitly ask for the total annual cost of fraud experienced by the respondents. To derive this from the report it has been necessary to make some assumptions about the level of fraud within the reported cost bands. This approach can only provide an indicative estimate because the average costs within bands may not accurately reflect the actual cost incurred.

On this basis, the total detected internal fraud cost in the public sector was approximately \$6

<sup>35</sup> [www.oag.govt.nz/2011/public-sector-fraud/docs/overview-report.pdf](http://www.oag.govt.nz/2011/public-sector-fraud/docs/overview-report.pdf)

million.

**Total fraud  
including  
undetected  
fraud**

The Ministry of Economic Development's Government Procurement Development Group estimates the size of state sector procurement to be approximately \$30 billion each year, including spending on infrastructure<sup>36</sup>. The New Zealand Business Council for Sustainable Development estimates local government procurement to be \$5.6 billion<sup>37</sup> per year. Therefore, total public sector spending on goods and services each year is close to \$36 billion.

Internationally, there is limited information on the prevalence of procurement fraud in the public sector. The best indicative estimate that is available is from the UK's Annual Fraud Indicator, which uses a benchmark of 1% to be applied against total procurement spend. For the Cost of Economic Crime Report, this percentage has been applied to both central and local government procurement cost estimates (excluding the health sector, which is covered separately above). On this basis, the point estimate for total procurement fraud cost in the public sector is \$289 million.

The 1% estimate reflects procurement fraud committed by employees and by outside parties, as well as all other internal fraud committed by employees. It should also be noted that this is only an indicative estimate at best. It is based on an "at risk" figure derived by the Ministry for Defence Police in the UK to estimate procurement fraud within their defence budget.

<sup>36</sup> [www.business.govt.nz/procurement/pdf-library/suppliers/How%20to%20Supply%20NZ%20Government.pdf](http://www.business.govt.nz/procurement/pdf-library/suppliers/How%20to%20Supply%20NZ%20Government.pdf)

<sup>37</sup> [www.nzbcscd.org.nz/\\_attachments/Procurement-guide.pdf](http://www.nzbcscd.org.nz/_attachments/Procurement-guide.pdf)

## Insurance fraud

Point estimate total fraud	\$382m
Detected fraud	n/a
Detected fraud percentage of total	n/a
Insurance fraud percentage of all NZ fraud	5%
Insurance fraud percentage of private sector fraud	9%

### Description

Insurance fraud is often seen as a victimless crime where nobody personally suffers a loss. However, the reality is that insurance fraud is ultimately paid for by policy holders in the form of higher premiums.<sup>38</sup>

Most insurance fraud occurs at claim time<sup>39</sup>, where a claimant knowingly submits false, multiple or exaggerated insurance claims in order to receive insurance payouts to which they are not entitled. In some cases it may involve the deliberate destruction of items or property in order to make a claim.

For the Cost of Economic Crime Report, the estimate of the cost of insurance fraud covers the following insurance sub-classes: dwelling, contents, motor, pleasure craft, comprehensive medical and disability, travel, health and personal accident, commercial and business interruption, liability, marine commercial and cargo, earthquake and other.

### Detected fraud

No consolidated data was available for detected fraud in the insurance sector.

### Total fraud including undetected fraud

The New Zealand Insurance Council Fraud Survey (2003) estimated fraud as a proportion of gross written premiums for different insurance sub-classes. For the Cost of Economic Crime Report, this estimate was updated by applying the same 2003 proportions to 2011 gross written premiums. This implicitly assumes that the rate of fraudulent activity in each of the insurance sub-sectors remained unchanged over the period.

The gross written premium data for 2011 included five insurance sub-classes that were not included in the 2003 survey. To estimate the proportion of fraud in these sub-sectors, the Cost of Economic Crime Report used either: the estimated proportion of fraud occurring in a similar

<sup>38</sup> <http://icnz.org.nz/fraud/>

<sup>39</sup> <http://icnz.org.nz/fraud/>

insurance sub-class; or the average proportion of fraud across the 2003 sub-classes.

The total insurance fraud point estimate using this approach is \$382 million, representing 10.2% of total gross written premiums. This is consistent with international studies that suggest that insurance fraud is likely to equate to approximately 10% of gross written premiums.<sup>40</sup>

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<sup>40</sup> <http://www.icnz.org.nz/fraud/news/>

## Banking/Finance fraud

Point estimate total fraud	\$167m
Detected fraud	\$128m
Detected fraud percentage of total	77%
Banking fraud percentage of all NZ fraud	2%
Banking fraud percentage of private sector fraud	4%

<b>Description</b>	Types of fraudulent banking activity are as varied as the range of banking tools and products that are available. Common examples include malware and phishing scams, card skimming and credit card scams, phoney requests for bank details to access accounts and use of stolen credit cards.
<b>Detected fraud</b>	The New Zealand Bankers' Association provided a figure for detected fraud against banks by external parties of \$128 million for the year to September 2011. This was based on an aggregation of data from seven of New Zealand's largest trading banks, and included fraud discovered across a range of categories, including: paper, debit card, scheme debit card, electronic, credit card, and international banking fraud.
<b>Total fraud including undetected fraud</b>	<p>Total fraud for the banking/finance sector was calculated based on a benchmark sourced from the UK's Annual Fraud Indicator, which was primarily based on data from Financial Fraud Action UK<sup>41</sup>. Separate fraud estimates were provided for mortgage, plastic card, online banking, cheques, motor finance, and telephone banking categories. Total fraud for these categories represented 0.09% of total GDP in the UK, or 0.29% of the Business Services and Finance sector GDP.</p> <p>The estimate for total banking fraud (detected and undetected) for the Cost of Economic Crime Report is based on applying the 0.29% to New Zealand's 2011 Finance, Insurance and Business Services GDP of \$57 million<sup>42</sup>. This results in a total fraud point estimate of \$167 million.</p>

<sup>41</sup> Financial Fraud Action UK is the organisation through which the UK financial services industry co-ordinates its activity on fraud prevention <http://www.financialfraudaction.org.uk/consumer-about-ffa.asp>

<sup>42</sup> Statistics New Zealand: [www.stats.govt.nz/browse\\_for\\_stats/economic\\_indicators/GDP.aspx](http://www.stats.govt.nz/browse_for_stats/economic_indicators/GDP.aspx)

## Other private sector fraud

Point estimate total fraud	\$3.7b
Detected fraud	n/a
Detected fraud percentage of total	n/a
Other private sector fraud percentage of all NZ fraud	48%
Other fraud percentage of private sector fraud	87%

<b>Description</b>	<p>Fraud against companies operating in the private sector can include theft of cash and other physical assets, procurement fraud, conflicts of interest and payroll and expenses fraud.</p> <p>According to the Kroll Global Fraud Report 2011/12, the majority of fraud is committed by insiders. Where the perpetrator of fraud is known, 60% is committed by senior managers, junior employees, or third party agents or intermediaries.<sup>43</sup></p>
<b>Detected fraud</b>	<p>In preparing the Cost of Economic Crime Report, a small selection of indicative detected fraud data was collected from private sector companies. However, in order to preserve individual firm confidentiality, data for these companies has not been disclosed.</p> <p>A number of surveys of private sector fraud are regularly undertaken by chartered accounting firms in New Zealand. These surveys were reviewed for the Cost of Economic Crime Report, but the survey questions and summarised results were not structured in a way that could provide a reliable annual estimate of the cost of detected fraud. This was because results were either not provided on a sector basis, or were provided in a way that could not be presented as an annual figure.</p> <p>Consequently, no estimate for detected fraud for other private sector companies has been included in the Cost of Economic Crime Report.</p>
<b>Total fraud including undetected fraud</b>	<p>Total private sector fraud is estimated to be \$4.3 billion. Insurance and banking fraud of \$549 million has been described in the previous sections. The remaining point estimate for fraud of \$3.7 billion is covered in this section.</p> <p>Industry sub-sectors for which total fraud has been calculated are shown in the table below. Of these sub-sectors, telecommunications fraud has been calculated independently, but all other industries have been calculated using an approach similar to that reported in the UK Annual Fraud Indicator. This approach estimates fraud losses based on a percentage of private sector revenues.</p> <p>The calculation for telecommunications fraud was based on benchmark data from the Communications Fraud Control Association, 2011 Global Fraud Loss Survey. That survey</p>

<sup>43</sup> Kroll (2012), Global Fraud Report 2011/12.

estimates that 1.88% of global industry revenues are lost through fraud.

New Zealand telecommunications industry revenues were provided in the Annual Telecommunications Monitoring Report.<sup>44</sup> Total revenue for 2009/10 for retail and wholesale operations was \$5.9 billion. Applying the Global Fraud Loss Survey proportion of fraud to New Zealand telecommunications industry revenues provides an estimate of total fraud of \$110 million.

As noted above, the approach for calculating the remaining total private sector fraud is based on using an estimated fraud loss percentage applied to company revenues. The UK's Annual Fraud Indicator has recently updated their calculations for private sector fraud and applies a loss estimate of 1.4% of revenues. This estimate was based on research carried out by the National Fraud Authority in 2011, also taking into account the results of the Kroll Global Fraud Report 2011/12.

The findings of the Kroll report show a range of fraud loss estimates, ranging from 0.9% in Canada to 3.1% in Africa. Europe averaged 2% and the global average was 2.1%. For New Zealand, the Cost of Economic Crime Report has used an estimate of 0.9%, taking into account the country's position on the Corruption Perceptions Index relative to Canada, and the UK.

The estimated fraud loss of 0.9% was multiplied by total income<sup>45</sup> for each industry sector in the New Zealand economy. Fraud calculated on this basis (for industries other than telecommunications) is \$3.6 billion.

Including telecommunications, total other private sector fraud for the Cost of Economic Crime Report is \$3.7 billion, made up as follows:

Agriculture, fishing, forestry	\$260m
Mining	\$66m
Manufacturing	\$797m
Electricity, gas, water and waste services	\$153m
Construction	\$301m
Wholesale trade	\$667m
Retail trade and accommodation	\$561m
Transport, postal and warehousing	\$171m
Telecommunications	\$110m
Rental, hiring, and real estate services	\$189m
Professional, scientific, technical, admin & support services	\$320m
Arts, recreation, and other services	\$132m

Fraud calculated for the Banking/Finance and Insurance sectors has been included separately in this report.

<sup>44</sup> Commerce Commission (2011), Annual Telecommunications Monitoring Report.

<sup>45</sup> Statistics New Zealand. [www.stats.govt.nz/browse\\_for\\_stats/businesses/business\\_finance/Annual-Enterprise-Survey\\_HOTP10.aspx](http://www.stats.govt.nz/browse_for_stats/businesses/business_finance/Annual-Enterprise-Survey_HOTP10.aspx)

## Individual (mass marketing) fraud

Point estimate total fraud	\$321m
Estimated detected fraud	\$5m
Detected fraud percentage of total	1.4%
Fraud on individuals percentage of all NZ fraud	4%

### Description

Fraud on individuals, or mass marketing fraud, is a wide ranging category that captures a variety of fraudulent activities. Examples include:

**Cold calling computer virus fraud:** where members of the public are called by the fraudster posing as a computer technician or as a representative from a bank. Claiming that the victim's computer is at risk from a computer virus, the fraudster elicits sensitive information such as bank account details and passwords, or identifies information to use for other fraudulent activity.

**Romance or dating fraud:** where the fraudster targets users of internet dating and social networking sites, the fraudster gains the trust of the victim and solicits money directly from them to allegedly pay for travel, medical assistance or other costs, or to get the victim to carry out fraudulent or other illegal acts on their behalf.

**Lottery and competition fraud:** where victims are asked for a deposit or down-payment in order to receive a much larger sum of money. Fraudsters often produce realistic documentation to build the credibility of the scheme.

**Online auction fraud:** where goods are paid for but never received; or false websites or emails are used to perpetrate fraud against members of bona fide sites.

**Investment fraud:** where victims are offered the chance to invest in high value or rare items with a promise of very high returns. Either the item does not exist, or its actual value is significantly lower than the marketing suggested.

**Phishing fraud:** where a fraudster attempts to acquire information such as usernames, passwords, and credit card details by masquerading as a trustworthy person or entity in an email to the victim.

Due to a significant number of victims feeling highly embarrassed or shamed as a result of their experience, mass marketing fraud often goes unreported, making it a difficult task to estimate the total economic impact across the country.

#### Detected Fraud

Estimates of mass marketing fraud for the Cost of Economic Crime Report were provided by the Ministry of Consumer Affairs (through analysis of the ScamWatch web-site), NetSafe (through analysis of their incident reports), the Commerce Commission (fair trading rather than Commerce Act cases) and one commercial operator. Due to the self-reporting structure of the ScamWatch and NetSafe web-sites, it is likely that some incidents were reported in more than one place. However, as the detected fraud data collected from the organisations listed above provides only a small sample of total fraud in this area, no adjustment has been made for any potential double counting.

On this basis, total detected fraud from the above sources amounts to \$5 million.

#### Total fraud including undetected fraud

Total mass marketing fraud was based on an Australian Bureau of Statistics (ABS) 2007 Personal Fraud Survey<sup>46</sup>. The Personal Fraud Survey was run as a module of the ABS Multi-Purpose Household Survey and achieved an 89% response rate, totalling 14,320 people.

Based on the survey, 2.9% of the Australian population (453,000 people) were estimated to have suffered losses from fraud over the prior 12 month period, with average losses per person of A\$2,156.

Converting this result to a New Zealand equivalent on a population weighted basis (for individuals 15 years and over) and inflating the average cost from 2007 to 2011 at the consumer price index, results in a point estimate of the total fraud cost for New Zealand of \$321 million. This comprises 103,000 people and an average loss per person of NZ\$3,117.

Comparing this result to the losses from mass marketing fraud estimated for the UK's Annual Fraud Indicator suggests that the New Zealand calculation could represent a conservative estimate of the total cost of such fraud. The UK's 2011 Annual Fraud Indicator uses research from the Office of Fair Trading<sup>47</sup> to develop the result for mass marketing fraud. This is based on 6.5% of the adult population being victims of fraud and a current annual loss per person of NZ\$2,600.

A simple calculation based on these parameters results in estimated fraud for New Zealand of \$589 million. However, the UK data includes a very high level of fraud related to holiday club scams (33% of the total). While these scams also occur in New Zealand and Australia, they do not occur to anywhere near the same extent as they do in the UK. Adjusting the UK data to remove holiday scams still provides an estimate considerably higher than the Australian data. However, given the greater similarity between the Australian and New Zealand economies and the types of fraud in each country, the lower Australian-based calculation has been used for the Cost of Economic Crime Report.

<sup>46</sup> [www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4528.0Main+Features12007?OpenDocument](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4528.0Main+Features12007?OpenDocument)

<sup>47</sup> [www.ofc.gov.uk/shared\\_ofc/reports/consumer\\_protection/ofc883.pdf](http://www.ofc.gov.uk/shared_ofc/reports/consumer_protection/ofc883.pdf)