Fraud Vulnerabilities, the Financial Crisis and the Business Cycle

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Michael Levi, Ph.D., D.Sc. (Econ.), Professor of Criminology, School of Social Sciences, Cardiff University.

Abstract
This paper examines the (in fact only partial) Global Financial Crisis (GFC) and its possible universal and differential direct impacts on frauds of various kinds, and on anti-fraud monitoring and responses which, as routine activities perspectives would suggest, should have an impact upon fraud. The paper examines the limited evidence about fraud reporting processes and argues that some frauds whose commission long preceded the crisis will be brought into victim and/or public consciousness as a result of the credit squeeze; some “organised criminals” may be drawn into greater confidence in making fraud participation offers to insiders or blackmailing them because of the latter’s inability to repay debts and because they believe that people are more corruptible at times of economic stress; some fraud opportunities linked to workplaces will be reduced because if people motivated to defraud have lost their jobs, they can no longer commit internal frauds; but in other cases, temptations are greater because of the desire not to lose lifestyle and social status. It describes what is known about commercial, public sector, and criminal justice reactions to frauds, and what impact this plausibly has upon them. Using a fraud typology (drawn from Levi, 2008) of pre-planned fraud, intermediate fraud (starts off honest and consciously turns to fraud), and slippery-slope fraud (tells lies to continue trading in unrealistic hope that things will turn around), the study examines these extra and reduced risks of motivation, opportunity, and capable guardianship. The net effect of these changes in guardianship, motivations and opportunities is difficult to determine, and most fraud data – other than plastic card fraud – are too dependent on changing probabilities of recognition, reporting, and recording to enable confident inferences about trends to be drawn. It seems plausible that more slippery-slope insolvency frauds occur in times of recession, as some company directors and professionals seek to preserve income and wealth from the economic consequences of the downturn. However, there is no evidence that the GFC has had or is likely to have a major impact on increasing the cost of fraud or levels of fraud overall in the areas about which we have the best knowledge: Australia, the United Kingdom, and the United States.
**Trends in Fraud**

“You only find out who is swimming naked when the tide goes out.” Buffet (2001)

A key aim of this paper is to examine what the evidence is that would enable us to judge what has happened and what is plausibly likely to happen to frauds in the context of what is often referred to as the Global Financial Crisis (GFC) – though as it transpired, it has not dramatically affected Australia, China, Singapore, or much of South America - whether as a result of that crisis or of other factors that coincide with it. The Australian banking system has been less hard hit than elsewhere, to the extent that it has overtaken the United States to take second spot after the United Kingdom as a financial services heavyweight, with the only net positive score among the leading countries in the Financial Development Index (World Economic Forum, 2009). The primary focus will be in areas where at least some fraud data are available which, unfortunately, are mostly volume rather than management frauds, and care should be taken about generalisation elsewhere. Other kinds of corporate crime data – for example, health and safety and/or pollution – might be interesting to correlate with economic trends, but that will be left to others.

Normally, we would look to statistical data on recorded/surveyed crime and/or cost of crime trends to enable us to judge whether a problem is getting better or worse. However as will be seen, even in the best countries, fraud data are quite poor, and this is an area that requires some redress if empirical criminology is not to continue to neglect white-collar crimes (see, more generally, Simpson & Weisburd, 2009). Despite planned activities to improve fraud statistics in the United Kingdom (Levi & Burrows, 2008; NFA, 2010) and in Australia, but apparently not in the United States, these cannot be applied retrospectively to past data (especially since the last serious recession in Australia was almost two decades ago and the last comparable global financial crisis that affected it was in the 1930s); and other than in the case of payment card frauds, where annual U.K. and Australian data are published. The latter category has the advantage that there is little time lag from crime to discovery, but in higher value management frauds – which arguably are far more serious – there typically is a much longer time before detection and even longer for criminal justice outcomes, if any. Thus, any given year’s data will be a mix of crimes occurring at very variable years. This is a particular problem for evaluating the impact of economic trends, and there has been no opportunity here for the individual case analysis that would be a desirable alternative to aggregate data. This paper could be seen as premature, but given the importance of the issues, and the wave of economic pain– intentionally criminal, recklessly criminal\(^1\) or neither – that has flooded around Europe and the United States, and by domino effect elsewhere, it seemed important to pursue the issues.

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\(^1\) Jurisdictions vary in their legislation, but broadly, criminal recklessness is seeing that there is a risk of harm to others and ignoring it.
In addition to numbers of frauds, another measure worth pursuing might be the impact of frauds—including both direct costs and indirect collateral damage. Reasonably comprehensive Australian cost of fraud data are currently available only for one year and for consumer frauds only (Smith and Budd, 2009) and therefore cannot be trended without unacceptable speculative leaps. In the United States, very little effort has been made to generate better fraud and cost of fraud data outside the populist consumer area of identity fraud (Baum, 2007), and even the latter has not been updated since the GFC began (see also ACFE, 2008; Barnett, 2000; and international accounting surveys). The U.K. National Fraud Authority is seeking to make costs of fraud data annual or biennial, in the light of its follow up to the report to the Association of Chief Police Officers (Levi et al., 2007; NFA, 2010). Currently, however, reliable time series cost data are available in the United Kingdom only for payment card and check frauds (U.K. Payments, 2009), some aspects of identity frauds (CIFAS), and for external frauds against government departments (U.K. Treasury, 2009). Intermittent or recent data only are available for other data such as social security fraud and error (Department of Work and Pensions, 2010) and fraud against local authorities and some national non-departmental bodies (Audit Commission, 2010), where serious statistical estimates have been made which are scrutinised by Parliament. No similar efforts have been conducted in other countries around the world, and fraud cost and incidence surveys carried out by accounting firms in many parts of the world are both intermittent and have been applied only to large corporate victims, who are their primary clients and target markets for awareness-raising (Levi et al., 2007; Levi & Burrows, 2008). Indirect costs have not been examined significantly in any of these studies. Finally, there are the usual problems of whether it is possible to place within the category of fraud acts and actors that have not yet been subject to any criminal justice verdict—the action for civil fraud against Goldman Sachs by the Securities and Exchange Commission in 2010 being a case in point. Such elite cases pose questions about the limitations of the relationship between crime and social harm and, if included as fraud, would have a dramatic effect on the composition of the dependent variable.

This may seem to be a rather roundabout way of stating that no reliable or valid data exist anywhere in the world that would enable us to tell with defensible confidence whether fraud or almost any subcomponent of it (other than plastic fraud) was being strongly affected by the GFC. However such warnings may be needed because otherwise opinions—however plausible—may be confused with evidence. If we take the effort to collect data as an indicator of what information the State considers important, as Jeremy Bentham intended criminal statistics to be in the 19th century, one inference is that fraud data are plainly considered unimportant by most governments most of the time, both to inform their

2 Though the Australian Bureau of Statistics has surveyed the cost of personal fraud to individuals, totalling almost A$1 billion in 2007 (ABS, 2008), it is not known how regularly this will be updated.
resource allocation decisions and for public information about levels of crime. 3

With these caveats, for the sake of completeness and for illustrative purposes, we include in Figure 1 the trend in recorded fraud data in Australia. Australia has enjoyed a lengthy period of growth, during which time fraud conviction statistics have risen modestly but unevenly, rising dramatically during the high unemployment era of the mid-1980s and then falling significantly after the recession of 1991 until 1995, when they began to rise again. Unfortunately, data more recent than 2007 are unavailable.

Figure 1. Rate of fraud offences recorded by Australian police, 1953-2007, per 100,000 population.

Source: Officially recorded fraud and dishonesty statistics derived from state and territory police services.

Quite apart from any confounding problems caused by statistical recording changes and resources/value changes that may affect the recording process itself (for example, in the United Kingdom), the criminal justice category of fraud is too broad to be helpful for examining the relationship between it and GFC. Criminal charges tell us little about the situational position or social background of offenders and (usually) almost nothing about who the victims are, and media reports are quite selective, focussing upon “widows and orphans” victims and celebrity offenders (Levi, 2006, 2008). The conventional wisdom attributes the rise of fraud to the impact of globalisation, but globalisation is insufficiently linear or specific to be useful as an explanatory variable.

3 Some skeptics may believe that this is a conspiracy to keep white-collar crimes out of the public eye, but there is no evidence for this proposition.
Typologies of fraud
In terms of offender-victim combinations, fraud includes, for example:

- **Crimes by élites against consumers, clients, or other lower status businesspeople**, e.g., the looting of a bank or building society; misrepresentation of the quality of goods beyond mere inflation of the quality of what one is selling; price-fixing cartels that generate overpayment for contracts or corruption of the tendering process so that the public get poor services.

- **Crimes by small businesspeople against consumers and employees**, e.g., selling counterfeit goods as genuine ones; pocketing the pension/health contributions paid by staff who then are left benefitless (which is theft but usually with long-delayed recognition of loss).

- **Crimes by professional criminals against élites/large corporations**, e.g., bankruptcy long firm fraud (Levi, 2008); major counterfeiting rings; mortgage frauds; some advance fee frauds such as fictitious prime banking scams targeted at high net worth (i.e., very rich) individuals.

- **Crimes by professional criminals against consumers/savers/people looking for work**, e.g., offering tickets for holiday and sports events that never materialise; lotteries and prize draws; offers of jobs in more prosperous countries or regions within their own country.

- **Crimes by blue-collar persistent offenders/opportunists against financial institutions**, e.g., using lost and stolen credit cards and (for e-commerce) card data; cheque frauds.

- **Crimes by individuals of various status against government**, e.g., tax evasion; social security frauds by landlords and claimants; frauds against foreign governments.

There are offenses that can occupy multiple categories. An example is mortgage frauds, which principally defraud grantors of credit such as banks; but they can also devastate mortgagees who – reasonably or not – have pinned their suburban dreams of home ownership and rising asset values onto “affordable” loans that they cannot repay, and then suffer long term credit blight when they are dispossessed or walk away from their devalued homes. The offenders can be professional fraudsters/racketeers or can be criminal professionals such as financial intermediaries/mortgage brokers.

We may also be interested in the broader category of financial crimes. Money laundering can include not just the proceeds of any or all of the above crimes, but also – now in most
jurisdictions around the world – the proceeds of any other crime (Levi & Reuter, 2009). Clarity of terminology is important. The term consumer fraud – which might appear to encompass frauds in the consumption process, such as unknowing purchase of counterfeit goods, contamination of food and medicines – has been judged to include (Smith, 2007):

1. Advanced fee schemes
   • pretending to sell something you do not have while taking money in advance
2. Non-delivery and defective products and services
   • supplying goods or services of a lower quality than the goods or services paid for, or failing to supply the goods and services at all
3. Unsolicited and unwanted goods and services
   • persuading consumers to buy something they do not really want through oppressive or deceptive marketing techniques
4. Identity fraud.

**Estimating financial crime costs**

Many estimates of fraud and money laundering are based on very limited evidence, derive from institutional profile-raising, and take on a life of their own as “facts by repetition,” seldom critiqued either by media always hungry for sensational headlines (Levi, 2006) or by pressure groups. On the other hand, if we rely on cases brought to conviction, the data may be absurdly low in both harm caused and case complexity, the most subtle cases of fraud and money laundering being hardest to prove beyond a reasonable doubt in the minds of juries or judges. We must be careful to avoid throwing the baby out with the bathwater by using only very low figures from convictions and treating them as “the figures” rather than just as validated minimum figures (see Levi & Burrows, 2008; Levi & Reuter, 2009).

The elapsed time from fraud to discovery and then from discovery to criminal justice action (if any) means that many of the larger frauds coming to light in 2008-10 will have been committed some years before. One classic notable example is the Madoff long-running Ponzi scheme (van de Bunt, 2010) though this was atypically long for this type of investment fraud. Although such schemes all come to an end eventually when incoming funds are insufficient to meet current payments, the link with the economy is that drops in confidence and increases in need for funds derail the criminal business model. In some other cases where fraud is alleged, for example, the near-collapse of insurers AIG, only careful case-by-case examination can enable us to understand when the fraud began in relation to the business cycle, but one might expect the frauds to result from a combination of ambitious expansion plans with unexpected reductions in business opportunities and/or cash flow. This time attrition for frauds differs from volume crimes such as credit and debit card fraud,

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4 Though in May 2010, it was disclosed that the U.S. authorities had notified principal senior executive suspects at AIG that they would not be prosecuted.
which usually come to light promptly (though seldom as promptly as burglaries and vehicle thefts).

Payment card and allied credit frauds
In the United Kingdom, data collected by the nonprofit fraud prevention service CIFAS (2009a, 2009b) indicate a rise in identity takeover frauds, as new credit becomes harder to get, generating displacement to impersonating existing account-holders. Such frauds emerge quite quickly. At the end of the third quarter of 2009, CIFAS data show an 11 percent increase in the level of fraudulent activity, and a 38 percent upturn in misuse of facility fraud (where an account, policy, or other facility is used fraudulently) when compared with the same period in 2008. No equivalent data are available for Australia or the United States, because no equivalent organisations exist there to integrate credit application data.

Since 2006, U.K. payment card fraud data have displayed a broad downwards trend in fraud on lost or stolen cards, due to the introduction of Chip and PIN in Europe; a more recent (2009) drop in counterfeit frauds on skimmed and cloned cards, which previously had risen substantially, mainly being used overseas to sidestep Chip and PIN controls; a slower, modest rise in cards obtained by identity theft; and a less obviously explained very recent drop in card-not-present frauds over the phone and internet (U.K. Payments, 2009). In concert with the fall in cheque usage, cheque fraud losses have fallen significantly, while online banking fraud losses rose 55 percent to £39 million in the first half of 2009 – perhaps due to improved awareness and reporting, but also reflecting increased phishing for passwords and sophisticated bank site-cloning.

In Australia, after falling to a low of 5.9 cents per $1,000 over the 12 months to June 2007, total payment card fraud increased to 8.2 cents per $1,000 in June 2009, driven largely by credit card fraud. The following trends are evident for financial institutions:

- Cheques – the fraud rate per $1,000 dollars fell to a low in mid-2008. By mid-2009, it had risen but remains at a low level of 0.88 cents per $1,000. The number of cheques written continues to fall.
- Debit card fraud shows a fall to 6.6 cents per $1,000 in mid-2009, and was then at a series low.
- Credit and charge cards showed a small decrease over the calendar year 2006. Since then, the rate of fraud per $1,000 has increased to 53 cents per $1000.

None of these Australian or U.K. changes has any obvious relationship to the GFC.

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CIFAS (2009b) data reveal that over 59,000 victims of impersonation were recorded by them in the first 9 months of 2009 - a 36 percent increase from the same period in 2008. The overall number of identity frauds has increased by one-third in the first 9 months of 2009 from 2008. Account takeovers have risen by 23 percent in 2009 when compared with the same period in 2008; and by 238 percent in the last 24 months. More than 1 in 2 account takeovers have targeted victims’ plastic card (i.e., credit card) accounts. Mobile phone account takeovers have already more than doubled in 2009, from 2008 levels.
Canadian data for debit card fraud are set out in Table 1. These data show that debit card frauds have risen since the recession, though no breakdown is available beyond the total and, by deduction, the mean values, which fell somewhat in 2008-09.

Table 1. Canadian debit card fraud 2004-2009.

<table>
<thead>
<tr>
<th>Year</th>
<th>Dollars Lost to Debit Card Fraud</th>
<th>Cardholders Reimbursed</th>
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<tr>
<td>2004</td>
<td>$60 million</td>
<td>49,000</td>
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<tr>
<td>2005</td>
<td>$70.4 million</td>
<td>72,000</td>
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<tr>
<td>2006</td>
<td>$94.6 million</td>
<td>119,000</td>
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<tr>
<td>2007</td>
<td>$106.8 million</td>
<td>159,300</td>
</tr>
<tr>
<td>2008</td>
<td>$104.5 million</td>
<td>148,000</td>
</tr>
<tr>
<td>2009</td>
<td>$142.3 million</td>
<td>238,000</td>
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</tbody>
</table>

Source: Data retrieved June 1, 2010, from [http://www.interac.ca/media/stats.php](http://www.interac.ca/media/stats.php)

Unfortunately, comparable U.S. data are unavailable, but there are some trend data in the report of the Federal Trade Commission (FTC) (2010), showing a continuing rise since 2007 (see Figure 2).

Figure 2. Consumer Sentinel Network complaint count, calendar years 2000-2009.
Insurance Frauds

No comparable data are available for Australia or the United States, but a study by the ABI (2009) estimated that in 2006, £2.1 billion of fraud was committed and the insurance industry detected £0.5 billion (23 percent) of this (so £1.6 billion was undetected). In 2008, they estimated that £2.7 billion of fraud was committed and the insurance industry detected £0.7 billion (27 percent). So, between 2006 and 2008, while total fraud increased, the proportion of total fraud that the U.K. insurance industry detected increased by 16 percent. The ABI (2009, p. 7) argues:

“To date (July 2009), our research finds that there are clear indications that the recession, which began in the third quarter of 2008, is leading to an increase in general insurance fraud. While these indications are clear, they are not conclusive. They include:

- An increase in ‘walk-aways’ where the claimant drops the claim in response to enquiries from the insurer.7

6 The improved detection performance is plausible in the light of changes in the forensic analysis of insurance claims by voice stress and data linkage software.

7 Though some or all of this may be the result of enquiries by more risk-aware insurers.
• Significant increases in the proportion of ‘suspect’ claims and in applications for insurance where underwriting fraud to reduce the level of premiums is suspected.

• An increase in the proportion of claims referred for investigation that are proven to be fraudulent. This is in part due to improved processes for ‘flagging’ suspect claims. It is also thought this reflects an increase in the level of fraud. Estimates of the increase in fraud – in particular opportunistic fraud – are not available from all the insurers we interviewed but have been put in the range of a 15-25% increase in Q1 2009 compared to Q1 2008.

• An increase in very amateur attempts at claims fraud indicating that otherwise honest customers are attempting to make fraudulent claims for the first time.

• Interviews with loss adjustors indicating that detected fraud, while on an upward trend anyway, dramatically increased in 2008 suggesting an increase in the underlying level of total fraud. One loss adjustor had detected 41% more fraud in 2008 compared to 2007, another estimates a fraud increase of between 15% and 21%, varying by line of business. However, these estimates are likely to also pickup on improved flagging of suspect claims for passing to loss adjustors by insurers which would increase the success-rate of loss-adjustors.

• Research by RSA showing that the number of people in Britain who think insurance fraud is acceptable increased dramatically (from 3.6 to 4.6 million people) between March 2008 and January 2009.

• An increase in calls to the IFB’s ‘Cheatline’….Over the course of 2008 alone, the volume of calls more than doubled. This increase is in part due to higher public awareness of the Cheatline and the new facility allowing online reporting. It also appears that the public attitude towards fraudsters has hardened: many callers cite the fact that they are motivated to call as they have to pay increased premiums as a result of the activity of fraudsters. Subject to these caveats, the large increase in calls to Cheatline may be indicative of an increase in opportunistic claims fraud.”

Insurers also reported that claims on LCD TVs, high-end watches and laptops had increased by as much as 35 percent between 2007 and 2008, though it is possible that much of this was the result of a rise in genuine crime rates for those items, which are attractive because of the resale opportunities and values. On the other hand, though overtime opportunities fell earlier, the U.K. unemployment rate did not begin to start increasing rapidly until the first quarter of 2009, and there is normally a lagged effect between unemployment and serious deprivation, depending on levels of savings and the capacity to defer obligations to repay.8 Savings ratios have been declining as people shift to a credit mindset, and tightening of credit due to the LIBOR market and the liquidity capital ratios imposed under Basel II, so

8 Home Office statistical model predictions of general crime rises in the United Kingdom have not hitherto been realized.
this lagged effect may diminish, subject to the willingness of people to walk away from their homes in negative equity and of mortgage holders to push for forced sales of properties in a poor market.

**Figure 7 – Unemployment rate vs fraud and forgery offences (1971 – 2007)**

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<tr>
<td>0.00</td>
<td>0.05</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
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Note: Fraud and Forgery offences are for England and Wales only. Various definition changes occur throughout.


The ABI study also (2009: 15) generated its Figure 7 above, though changes in fraud recording procedures that might have affected this graph and might have driven recent recorded data upwards artificially are not discussed.

This suggests a slight inverse but lagged relationship between changes in the unemployment rate and recorded fraud and forgery statistics. However this evidence is not strong, since payment card and social security frauds constitute a large proportion of recorded fraud and forgery cases.

**Mortgage frauds**

The Key Findings in a report by the FBI (2009) state that:

“A decrease in loan originations and an increase in defaults and foreclosures continued to dominate the downward trend in the housing market in 2008. While the amount of mortgage fraud cannot be precisely determined, industry experts agree that there is a direct correlation between fraud and distressed real estate markets.... The downward trend in the housing market during 2008 provided a favorable climate for mortgage fraud schemes to proliferate. Several of these schemes have the potential to spread if the current economic downward trend, as expected, continues into 2009 and beyond. Increases in foreclosures, declining housing prices, and decreased demand place pressure on lenders, builders, and
home sellers. These and other market participants are perpetuating and modifying old schemes, including property flipping, builder-bailouts, short sales, and foreclosure rescues. Additionally, they are facilitating new schemes, including reverse mortgage fraud, credit enhancements, condo conversion, loan modifications, and pump and pay in response to tighter lending practices.”

However, whether this is a correct interpretation is open to question. It seems likely that it has failed to take sufficient account of the lagged effect of the fraud identification process, and that the frauds began typically before the financial crisis, though the general report usefully outlines the precipitating factors behind the mortgage fraud crisis and suggests that the rate of deception accelerated as brokers sought to retain their commission bonuses in a falling market. (Though the latter is plausible, the data are not available to demonstrate it.) Many of the situational opportunities to defraud are fairly widespread over time, so variation is likely to be accounted for in terms of the spread of techniques among the wider population, expectations of the corruptibility of others, and changes in motivation, including the fear of downward economic mobility.

A contrasting example of much longer elapsed time from fraudulent to business-detected awareness is “rogue trading” in the form of illicit (and – perhaps more importantly - unsuccessful!) betting on market trends, for example by Nick Leeson at Barings in 1995 (http://www.nickleeson.com) and, allegedly, by Jérôme Kerviel at Société Générale in 2007–08 (Kerviel, 2010). In both cases the primary accused alleged that more senior managers turned a blind eye to the risk taking, because they were incompetent (Barings) or because they stood to gain if the risks paid off (both Barings and Société Générale). The popular explanation for this (and other excrescences of the financial sector) is that it is caused by greed. However, unless it is a tautology, greed is not a helpful discriminator between those who both see and take fraud opportunities and those who do not.9 Nor is it obvious that the recession – local or global – had any impact at all on these sorts of alleged frauds, except indirectly, inasmuch as credit and controls tend to be tighter in recessionary times. In essence, they were cases in which ill-supervised traders found ways of breaching their dealing limits without detection and, having lost significant sums in early trading, carried on trading in the hope that they would be able to recoup those losses. Whether others behaved similarly but were more fortunate in their later dealings (or gambling) and remained forever undetected is unknown.

Finally, a typology of frauds based on victim categories developed by Levi et al. (2007) is set out in Table 2.

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9 Some might argue that offenders and non-offenders are equally greedy but that the latter are more risk-averse by temperament/social training/testosterone levels (Levi, 1994, Coates & Herbert, 2008). This is too big a question for this paper and, arguably, for our existing knowledge.
Table 2. A typology of fraud by victim category and form of activity.

<table>
<thead>
<tr>
<th>Victim sector</th>
<th>Victim sub-sector</th>
<th>Examples of fraud</th>
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<tbody>
<tr>
<td><strong>Private</strong></td>
<td>Financial Services</td>
<td>Cheque fraud</td>
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<td></td>
<td></td>
<td>Counterfeit intellectual property and products sold as genuine</td>
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<td></td>
<td></td>
<td>Counterfeit money</td>
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<td></td>
<td></td>
<td>Data-compromise fraud</td>
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<td></td>
<td></td>
<td>Embezzlement</td>
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<td></td>
<td></td>
<td>Insider dealing/market abuse</td>
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<td></td>
<td></td>
<td>Insurance fraud</td>
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<td></td>
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<td>Lending fraud</td>
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<td>Payment card fraud</td>
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<td>Procurement fraud</td>
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<tr>
<td></td>
<td>Non-financial services</td>
<td>Cheque fraud</td>
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<td>Counterfeit intellectual property and products sold as genuine</td>
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<td>Data-compromise fraud</td>
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<td>Embezzlement</td>
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<td>Gaming fraud</td>
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<td>Lending fraud</td>
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<td>Payment card fraud</td>
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<td>Procurement fraud</td>
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<td></td>
<td>Individuals</td>
<td>Charity fraud</td>
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<td>Consumer fraud</td>
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<td></td>
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<td>Counterfeit intellectual property and products sold as genuine</td>
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<td>Counterfeit money</td>
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<td></td>
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<td>Investment fraud</td>
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<td>Pension-type fraud</td>
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<tr>
<td><strong>Public</strong></td>
<td>National bodies</td>
<td>Benefit fraud</td>
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<td>Embezzlement</td>
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<td>Procurement fraud</td>
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<td>Local bodies</td>
<td>Embezzlement</td>
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<td></td>
<td></td>
<td>Frauds on municipal and state taxes</td>
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<td></td>
<td>International (but affecting public)</td>
<td>Procurement fraud [by national against other – mainly but not always foreign - companies to obtain foreign contracts]</td>
</tr>
</tbody>
</table>

Note: See Levi & Burrows, 2008, Box 1 for a glossary of common fraud types. The counterfeiting of intellectual property counts as fraud only if the vendor represents it as being the genuine manufacturer’s product (or, arguably, if the purchaser believes it to be genuine). Otherwise, it may be a loss of the manufacturer’s property rights, but no one is defrauded. The manufacturer loses principally if the purchaser would have bought the legitimate product at the price offered for it, but also if there is collateral damage to the product’s reputation.
The GFC and its economic and social impact

Australia was less affected by the GFC than were many other OECD countries such as the United Kingdom and the United States. Before looking at the implications for fraud, it might be helpful to see what the general financial crime-relevant effects might be expected to be. One plain effect (and cause) of the GFC is uncertainty in economic markets. A standard measure of uncertainty – the implied volatility of the S&P 100 of the U.S. stock market, commonly known as the index of financial fear – increased six-fold between the first emergence of the U.S. subprime crisis in August 2007 and October 2008, not long after the collapse of Lehman Brothers and at the height of the financial crisis. Indeed, the index reached levels far higher than after the 9/11 terrorist attacks, the Gulf wars, the Asian crisis of 1997, and the Russian default of 1998 (Vaitilingam, 2009). The lack of credit strangles firms’ abilities to make investments, hire workers, and start new innovation projects. Second, even firms with access to credit postpone making investment and hiring decisions (Bloom, 2009): since many of Australia’s and the United Kingdom’s markets are international – a factor that is less important to the United States – this affects the rate of growth. As for consumers, when uncertainty is high, people avoid buying consumer durables. Uncertainty makes people cautious about buying a bigger house, and negative equity (price minus borrowings) in houses freezes geographic mobility. In the early stages of the recession, some commentators suggested that it might be a middle-class or white-collar recession, unlike anything seen in the past. Because the recession started in the financial sector (which also saw the first mass lay-offs), it was argued that university-educated workers would suffer more than their semi-skilled and manufacturing counterparts – in stark contrast to previous recessions, in which low-skilled, low-educated workers were hardest hit.

Institute for Fiscal Studies research indicates that these predictions are not borne out by the U.K. data (Muriel & Sibieta, 2009). Low-skilled elementary occupations have suffered most since 2008, followed by skilled trades and sales. In contrast, managers and senior officials have seen their unemployment increase by only one percent, and white-collar professional unemployment has increased by just 0.7 percent, about one-sixth of the increase in the other groups. This does not mean that the white-collar workers are not fearful, but the impact of these fears on their propensity to defraud or launder money remains unresolved. The rise in unemployment among those with housing commitments and negative equity constitutes a serious economic trap, and could lead to increased personal bankruptcies and/or crime to support living standards. However, social security fraud and payment card fraud are the two types most readily open to such persons.

A demonstration that increased unemployment – whether generally or in a particular sector from which fraudsters came – always tended to be followed by increased crime rates would provide more compelling evidence of a causal relationship than would mere cross-sectional data for a particular point in time. Most criminology is concerned with juvenile and young adult crime, and it is hardly surprising that fraud was not discussed in traditional studies of the relationship between economic factors and crime (e.g., Chiricos, 1987). Even if they had done so, they would not have been able to overcome unreported and unrecorded fraud data problems, some but not all of which are being resolved in the United Kingdom by the Action Fraud Reporting Centre, currently (May 2010) being trialled, which is based partly on the US and Canadian NWC3/RECOL reporting centres, though these latter are more web than telephone-based.
In a review of the evidence that was conducted in the wake of the previous Australian recession, Weatherburn (1992, p. 8) concluded that:

“[T]here would appear to be no reason to expect the criminogenic effects of sustained economic deprivation to be any quicker to dissipate than they were to arrive.... In the final analysis, the effect of passing economic crises, even severe ones such as the current recession, would seem less important to the future course of crime trends, than the overall pattern of economic development. Uncontrolled and rapid economic development, chronically high levels of unemployment in certain sectors of the economy, and the existence of a marginalised under-class of individuals and families living in poverty are all conditions which can just as easily be found in booming as in contracting economies.... Nothing could be more inimical to law and order than an economy which generates rapidly rising living standards for some and an abundance of criminal opportunities for the remainder.”

The GFC and models of fraud explanation

There has never been a simple link between recession, poverty, and crime. Barbara Wootton (1959) observed that if there were, then widows and elderly people would have the highest offending rates. **Gary** Becker’s valuable contribution to the economic explanation of crime has been eroded over time by the understanding from behavioural economists that his individualistic focus on crime and rational choice is mistaken, since our beliefs about what other people are doing and will find acceptable significantly mediate our behaviour and even our desires. The reaction of people to often dramatic changes in their financial circumstances and their social prestige (and in their expectations of unbroken progress towards ‘the good [consumer] life’) is a good test of the adequacy of criminological theories. In the particular case of white-collar crimes (see Simpson & Weisburd, 2009), the anxieties among well-paid (and often highly wealth-oriented) professionals about the personal and corporate impact of the GFC gives plausible grounds for concern about what extra crime risks will be generated. These might take the form of greater willingness to trade off the risk of money-laundering prosecution against doing extra business. There is also the possibility that lower paid white-collar workers – for example in call centres and banks – may be tempted to engage in fraud and money-laundering on behalf of organised crime groups. These phenomena are not new. What is being proposed is that there may be a significant escalation in take-up of such opportunities.

Clarity is important here. To the extent that crimes are *occupational*, one must have an occupation in order to commit them. To illustrate this, we might examine the extent to which fraudulent chief executives such as Lord Conrad Black, Alan Bond, Kenneth Lay (Enron), and dot.com bubble chiefs were able to allocate to the company expenditures that, in fact, were largely or wholly personal. (This also applies to kleptocratic dictators in developing countries, whose coffers may become larger because of the increased desperation of sales divisions of international corporations; though this may be counteracted by the increased activism of prosecutors noted recently in the United Kingdom as well as the United States). Accountants, bankers and lawyers cannot readily manipulate clients’ accounts or set up trust and other corporate secrecy vehicles if they no longer work, though they...

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10 Though a wider range of professionals are subject to money-laundering regulations in Europe than in Australia or the United States, which have resisted the encroachment of suspicious transaction reporting of their clients as part of the “responsibilization” process (see Levi, 2007, 2010).
(and anyone else) can make up imaginary firms and may have a pretext for corporate instructions to firms (“Starting a new phase in my life – wonderful opportunities for new investments in country or product x”). If others have confidence in them, such entrepreneurs can develop new businesses that may generate new manipulative possibilities, but this would usually take longer at times of recession. At a lower level, staff in call centres (whether physically located in the Western jurisdiction or in India/Bangladesh) cannot so easily copy and extract personal data of account-holders if they are no longer employed in the call centres. If still employed, they may be more tempted to defraud if they consider that they may shortly become unemployed and/or that the company will show no loyalty towards them. (Though their ability to offend may be reduced by physical opportunity controls such as the absence of USB and CD drives on computers and rapid integrity checks.) Under such circumstances, voluntary compliance via procedural legitimacy (Tyler, 2009) becomes much harder to achieve. (Financial and social pressures to offend may also be affected positively or negatively by fear of redundancy and peer group pressures, though threats from organised crime groups may not be GFC-related.)

Knowledge of criminal techniques should be differentiated from opportunity and motivation to offend, though offending may be inhibited if people do not believe that they have enough knowledge to commit any particular sort of fraud that they contemplate. It is the expectation or fear that one may become unemployed, not post-employment status, that presents the extra risk here. There may be some crimes – computer hacking for example – where employment status may be unimportant, though the importance of social engineering in getting passwords or other elements of crime (see Grabosky, 2006; Wozniak, Mitnick, & Simon, 2003, http://news.cnet.com/8301-1009_3-9995253-83.html, http://www.zdnet.co.uk/tsearch/kevin+mitnick+social+engineering.htm) may suggest that having a job in which one knows these current gateways is useful. (Past gateways may still be current if controls are not changed immediately when people are let go.) Impacts of the GFC on professionals elsewhere may impact any country (even those like Australia that have suffered less) because, given international finance and trade – both for business and individuals – Americans, Australians, or British people may be the victims of frauds originating elsewhere, and expatriate professionals who lose their jobs may return home and exercise their skills illicitly. On the other hand, there are significant segments of technologically sophisticated people in Eastern Europe who have never had sufficient economic opportunities to meet their wants, so, except in reducing their future expectations, the downwards shift in economic status implied by the term GFC has not happened for them. The greater time available to the unemployed can give greater room for experimentation, and criminal attempts seldom are punished or even logged by targets or financial intermediaries.

The crime triangle of motivation, opportunity, and capable guardians can be applied to fraud, and it is here in human and technological changes to these parameters that one may search for an explanatory framework. A priori, it would appear that different skill sets, commercial/personal background and formal qualifications will be needed for different fraud offences, and the barriers to entry depend on the starting point of any given individual or network in relation to the practical opportunity and criminal justice obstacles that confront them. The longer and more intensive an investigation, the more likely it is that surveillance will generate an accurate model of interactions between players in the network. In most countries of the world, a distinction is made between laisser-faire opportunities to set up and work in commerce and some restrictions applied to people who want to open or work in the financial services sector, largely on the grounds that the latter can
directly steal funds from the public. It is important to understand such restrictions in a global context rather than the traditional nation-state perspective of regulation and criminal justice.

Sometimes what is needed for the accomplishment of fraud is compliant colleagues – both inferiors and superiors – who do not ask critical questions. This was the case with Nick Leeson and Barings Bank, where as a leading trader, Leeson was surrounded with Singaporean subordinates and colleagues who were passive, and with British superiors who understood little about trading and were content to take the results he fed them that inflated their own large bonuses (Leeson, 1997).

Many of the larger cases in which corporate vehicles are used as a vehicle for fraud begin in good economic times, when there is an atmosphere of optimism among lenders, and large bonuses for corporate takeover activity (though recent bonuses have been much larger than in earlier eras). Some corporate fraudsters – such as the chiefs of Enron, Alan Bond and other Australian entrepreneurs of the 1980s, and the late British pension fund fraudster Robert Maxwell – appointed staff on much higher than normal market salaries to ensure their loyalty or wilful blindness when facing alternative employment on much lower salaries. Alternatively, as in the recent U.S.-regulated Madoff and Stanford scandals, they may employ small firms of accountants who are dependent on them, whether or not they were active participants in the frauds. Such alleged scams are facilitated by trust combined with pressure on investors to get higher than average returns (and by greed). By contrast with credit card skimmers who may need to be helped by an army of people to use the card numbers they have skimmed before the breach of identity is realised and reported, there may be no need for conscious co-conspirators in other frauds, depending on the chain of authority within large corporate or governmental settings and their competence. What some offenders are able to do is simply to deploy the range of global corporate mechanisms available in a free enterprise society where there are insufficient capable guardians to stop them misusing the disguises offered by the corporate form or the authority and power of a corporate role. Barry (2001) highlights the role played by Bond’s ingenuity and the (skilfully manipulated) delays of law in enabling him to exploit the rule whereby gifts “not for value” could be set aside only if they preceded bankruptcy by two years. The lawyers who enabled that delay were paid by generous international benefactor friends and by a Swiss who was alleged to have acted as a nominee for Bond, using a variety of foreign trust companies. Enron offered a dazzling array of Special Purpose Vehicles to hide transactions. This was long before the GFC, and it is moot whether the impact on fraud of the crisis was affected by the Sarbanes-Oxley and other supervision measures introduced in the aftermath (see Tillman, 2009, for some insights).

Levels of indebtedness and regulation
Corporate indebtedness is a major trigger for the revelation of fraud, as it becomes impossible to hide large-scale fraud (or at least to hide great loss, since it may be possible to misrepresent fraud as legitimate commercial failure amongst all the other corporate collapses, especially if creditors can be strung out long enough to risk throwing good money after bad). At the individual level, levels of indebtedness and illiquidity are major components that make some aspects of the current GFC different, and the reduction in lending capacity has affected the depth of the economic crisis. One would not want to overstress this – the great scammers of the 1980s were highly leveraged on their corporate assets and gave personal guarantees that turned out to be worthless (Barry, 2001). However, not only are wealthy entrepreneurs of the current era (e.g., Russian oligarchs) highly mortgaged on their assets and therefore more pressurised to lie to stay afloat long enough to avoid...
a forced sale; but also a broad range of people in many walks of life are hugely indebted compared with the 1980s (see Keen, 2007, for an Australian dataset). The long period of prosperity is one reason for this, alongside the rising housing market that tempted many to borrow for current optional expenditure beyond their capacity to repay. Business, consumers and regulators fell victim to the convenient myth that the boom and bust cycle had been abolished.\textsuperscript{11}

The rise in visible mortgage frauds (Carswell & Bachtel, 2009) and consumer/investment scams has energised the regulatory process, assisted by forensic linking software developments which make it easier proactively to search out connections between banking and insurance fraud networks. Since Ponzi investment pyramids rely on a high rate of incoming investments to sustain pay-outs, a fall in the rate of increase of investments or a reduction in the rate of re-investment of imaginary profits causes them to collapse earlier.

Judgments about the impact of the GFC on fraud

Even professional judgments about trends in fraud should be treated with care, because unless there is plausible argument and some data/case studies, this can be the product of group-think rather than of rigorouse review of evidence. Conventional wisdom is not always correct. However given these caveats, it seems plain that professionals are not at all unanimous that fraud will go up. Interviews with businesspeople and fraud managers conducted for the U.K. National Fraud Authority (Gill & Goldstraw-White, unpublished), plus a fraud professional networking request for evidence and for views conducted by this author in the United Kingdom in June 2009 for this study, support the proposition argued here that some frauds are expected to go down while others are expected to go up. This is a function of impact on both motivation and opportunities, the latter rising as a result of declining staffing numbers in fraud and compliance departments.

A pan-European study of 2,246 employees by Ernst & Young (2009) found that 55 percent of respondents expected corporate fraud to increase over the next few years, one-third because changes to their business opened up new areas of risk, 31 percent because management were not focused on anti-fraud measures, 29 percent because they did not trust management, and an equal number because pressures to protect the future of the company will be greater. East Europeans were particularly sceptical about their own management. Over one-third of respondents mentioned that normal controls were likely to be forgotten or overlooked during cycles of redundancies, especially when linked to merger activity which could easily lead to disorganisation and low morale. When asked whether activities would be justified if they help a business survive the economic downturn (a form of noble cause corruption), one-quarter found it justifiable to make cash payments or give personal presents to win or retain business, one-fifth to provide entertainment to win or retain business, and one-twelfth to misstate the company’s performance. Only two-fifths said that it was unjustifiable to commit corruption or fraud under such circumstances. Stock-exchange

\textsuperscript{11} Minsky (2003) suggests that periods of stability lull market players (and regulators) into thinking that the stability is an inherent and defining aspect of the financial system. In such a situation, more risky financial tactics are adopted, as investors believe that they can have high profits without risk. More speculative patterns emerge and, as this way of thinking spreads from the professional investment world to the whole population, Ponzi styles of investment become generalized. Regulators and politicians, too, became absorbed into this group-think, and by no means solely in the United Kingdom (Treasury Committee, 2009).
listed companies differed little from others. The extent to which there is a read-across from this to the United States, Australia, or any other country is open at present.

As regards the impact of the financial crisis on consumer frauds, as with other scams, any “current idea” generates scam possibilities, and eligibility for an economic stimulus payment may appear to come from a rebate company or from the Internal Revenue Service. A key is often an incorrect web address, but this sometimes is not obvious to viewers. As with 419 scams generally, there follows a request to send a small processing fee, which then escalates; or a bank account number so they can “deposit” your check, which leads to the cleaning out of an account or opening of new credit lines. Some stimulus scams encourage targets to click on links, open attached forms, or call phony toll-free numbers, installing malware. Such frauds, like adverts offering employment opportunities, usually overseas, are a product of economic stress and downturn, but are basically tuned into some desired goal of potential victims and could as well happen (perhaps in a different form) in an economic boom.

**Conclusions**

The impact of the Global Financial Crisis upon fraud depends upon what one includes within the latter category. The damning verdict of the Valukas (2010) report into Lehman Brothers and the civil charges of fraud against Goldman Sachs by the SEC (and the media treatment thereof which signalled this in a quasi-criminal mode) make the fluctuating boundaries of fraud even more apparent. Frauds and white-collar crimes need to be broken down in conformity with the purposes for which one wants to use the typology, especially if a link to the business cycle is to be established. Opportunity, culture and the expectations about others’ behaviour are so central to the propensity to defraud that one must be wary of automatic assumptions about transferability. If that were not the case, there would be more uniformity in fraud levels between countries than appears to be the case, though analytically, the vulnerability criteria that underlie comparative risks rates remain to be explored.

In their powerful analysis of animal spirits, Akerlof and Shiller (2010) identify confidence, fairness, corruption and bad faith, money illusion, and stories as the key drivers of economic change, both positive and negative. As they acknowledge, their work is of a high level of generality, and to turn them into operationalizable models capable of correlating with financial crimes of various kinds is too major a task for this study. What seems plain is that generalizations about the correlation between economic crises and fraud (or other types of financial crime) are far too glib to be sustainable in the round. More limited evidence exists of some subsets of fraud but even here, the recession serves to mask the complexity of trends and, once the lagged awareness, reporting and investigation of larger frauds is taken into account, the relationship is shown to be less strong than it initially appeared. In short, we are only a little way along this empirical journey, but I hope that readers have found it an interesting road to travel.

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