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Foreword | This paper examines the evidence that would enable judgement of what is likely to happen to the incidence of fraud in the context of the Global Financial Crisis (GFC), whether as a result of the crisis or of other factors that coincide with it. Normally, statistical data on crime and/or cost of crime trends is examined to enable determination of whether a problem is getting better or worse. However, despite measures being developed to improve fraud statistics in Australia, these cannot be applied retrospectively to past data (especially since the last serious recession was almost 2 decades ago and the last comparable global financial crisis was in the 1930s); and fairly comprehensive Australian cost of fraud data are currently available only for one year and therefore cannot be used to show trends in the cost of fraud. Nonetheless, some useful insights can be gained from an examination of the GFC that could be used to predict fraud trends in the future and to determine how best to minimise risks of such opportunistic crime occurring in the years ahead.

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# Fraud vulnerabilities and the global financial crisis

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You only find out who is swimming naked when the tide goes out (Buffett 2001: np).

This paper examines the evidence on what is likely to happen to the incidence of different types of fraud in the context of the Global Financial Crisis (GFC), whether as a result of that crisis or because of other factors that coincided with it. Normally, statistical trends enable determination of whether a problem is getting better or worse. However, despite new mechanisms developed to improve fraud statistics in Australia, these cannot be applied retrospectively to past data (especially since the last serious recession was almost 2 decades ago and the last comparable GFC was in the 1930s); and fairly comprehensive Australian cost of fraud data are currently available only for one year and therefore cannot be used to show trends in the cost of fraud (Smith 1997; see also Smith & Budd 2010). In the United Kingdom, the National Fraud Authority (NFA 2010b) has begun to collect cost of fraud data from year to year as a follow up to the report to the Association of Chief Police Officers that provided an estimate of the cost of fraud in the United Kingdom in 2005 of £13.9b (Levi et al. 2007). However, longer term cost data are currently available in the United Kingdom only for payment card frauds (FFA UK 2010), some aspects of identity frauds (CIFAS 2009) and for some frauds against government departments (NFA 2010a). Except for consumer fraud data in North America and consultancy reports of variable quality (Levi & Burrows 2008), fraud data elsewhere in the world are too poor and/or intermittent to provide an adequate basis for knowing whether fraud is rising or if more of the 'dark figure' of undetected fraud has been discovered. Even useful periodic trend reports, such as KPMG's (2011a) Fraud Barometer Reports mix together high-value frauds that actually occurred at a range of different periods because there are different elapsed times from occurrence to court.

Australia was one of the countries in the OECD least affected by the GFC during 2008–09, with the harmonised unemployment rate rising just 1.3 percentage points to 5.6 percent (ABS 2010), compared with 2.2 percent for OECD countries as a whole. Before examining the implications of the GFC on fraud, what the general financial crime-relevant effects might be expected to be will be examined.

One plain effect (and cause) of the GFC is uncertainty and high volatility in economic markets (Vaitilingam 2009). Even organisations with access to credit postpone making investment and hiring decisions (Bloom 2009) and since many of Australia's markets are international, this affects the rate of economic growth.

In the early stages of the global 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 overseas (which also saw the first mass lay-offs), it was argued that highly educated workers would suffer more than their semi-skilled and manufacturing counterparts. This was expected by some to make disaffected white-collar workers more likely to commit fraud.

Research indicates that these predictions about white-collar job losses are incorrect as they apply to the United Kingdom (Muriel & Sibieta 2009). Low-skilled 'elementary' occupations have suffered most since 2008, followed by skilled trades and sales. By contrast, managers and senior officials have seen unemployment at their level increase by only one percent and 'white-collar' professional unemployment increase by just 0.7 percent; about one-sixth of the increase in the other groups. In Australia, similar trends were present, with employment of professionals declining by 0.6 percent in the 12 months to February 2009, with employment of labourers declining by 1.7 percent during this period. The employment of managers actually increased by 0.8 percent and community and personal service workers by 6.6 percent over the same period (DEEWR 2009).

These figures do not negate the fears of white-collar workers that they are more susceptible to unemployment due to the GFC. However, the impact of these fears on their propensity to commit fraud or to launder money is unclear. A rise in unemployment among those with housing commitments and 'negative equity' may lead to increased personal bankruptcies and/or crime to avoid a drastic decline in living standards. However, there are criminal skills and connections barriers to the commission of most frauds so insider collusion frauds, social security fraud and payment card fraud are the types most easily committed by the unskilled.

### Beliefs and judgments about the impact of the global financial crisis on fraud

Even professional judgments about trends in fraud should be treated with care, because unless there is plausible argument and some data or case studies, this can be the product of 'group-think' rather than of rigorous review of evidence; and conventional wisdom is not always correct. However, even with these caveats, researchers and analysts are not in complete agreement that fraud will increase as a result of the GFC. Interviews with businesspeople and fraud managers conducted by the first-named author for the UK National Fraud Authority, as well as a professional networking request for evidence and views conducted by the first-named author in the United Kingdom in 2009, suggest that any variations in the rate of fraud are dependent on type. 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 by Ernst & Young (2009) found that 55 percent of respondents expected corporate fraud to increase over the next few years; a 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 didn't trust management and an equal number because pressures to protect the future of the company would be greater. East Europeans were particularly sceptical about their own management. Over a 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 illicit activities would be justified if they help a business survive the economic downturn (a form of 'noble cause corruption'), only two-fifths said that it was unjustifiable to commit corruption or fraud under such circumstances. Stock exchange-listed companies differed little from others.

These findings should not be simply be extrapolated to Australia—opportunity, culture and expectations about the behaviour of others are so central to the propensity to defraud that automatic assumptions about transferability should not be made. If it were so, there would be greater uniformity in fraud levels between countries than the limited data show, although the vulnerability criteria that underlie comparative risks rates remain to be explored analytically.

## The global financial crisis and models of fraud explanation

There has never been a simple causal link between recession, poverty and crime. Becker's 'rational choice' theory as an economic explanation of crime has been modified by an understanding from behavioural economists that beliefs about what other people are doing and find acceptable have a significant influence on behaviour, including consumer behaviour. 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 criminological theories. For 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.

When thinking about different fraud risks, it may be helpful to use a fraud typology (see Levi 2008) of pre-planned fraud, intermediate fraud (where an individual has previously been honest and then consciously turns to fraud) and slipperyslope fraud (where an individual acts dishonestly to continue trading in the unrealistic hope that things will turn around). A priori, it might be expected that the types of fraud most affected are those perpetrated within already existing organisations. These might take the form of greater willingness to trade off the perceived risk of moneylaundering prosecution against doing extra business without making reports to AUSTRAC. Although any such effects

are hard to observe in aggregate statistics they might be observed via cash dealers and bankers rather than via lawvers and accountants, since the latter are not yet regulated in Australia for anti-money laundering purposes. 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; however, there may be a significant escalation in take-up of such formerly unseized crime opportunities.

To the extent that crimes are occupational, an individual must have an occupation in order to commit them. One example is the extent to which fraudulent top executives were able to allocate to the company expenditures that, in fact, were largely or wholly personal. Accountants, bankers and lawyers might manipulate clients' accounts or set up trust and other corporate secrecy vehicles for embezzlement and/or laundering if under financial pressure from falling work volumes (Middleton & Levi 2005). Even if they lose their jobs, they (and anyone else) can create new firms, impersonate existing ones and use pretexts (eg '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 be more difficult in times of recession and credit squeezes which have reduced both fraudulent and legal opportunities for new entrants. At a lower level, staff in call centres (whether physically located in Australia or in India) cannot so easily copy and extract personal data of account holders if they have been fired. 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. 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 by fear of redundancy and peer group pressure.

Knowledge of criminal techniques should be differentiated from opportunity and motivation to offend, although offending may be inhibited if people do not believe that they have enough knowledge to commit the particular sorts of fraud that they contemplate. It is the expectation or fear that one may become unemployed, not post-employment status per se, that presents the extra risk. For some crimes computer hacking for example—employment may not be crucial, although the importance of social engineering in obtaining 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 etc) suggests that it is useful to have a job where the individual already knows these current gateways. Past gateways may still be current if controls are not changed when people are 'let go'. Impacts of the GFC on professionals elsewhere may affect Australia because, given international finance and trade, and internet purchases, Australians may be the victims of frauds originating elsewhere. Significant populations of technologically sophisticated people in Eastern Europe have never had sufficient economic opportunities to meet their wants, so except in reducing their future expectations, the GFC has not changed their life chances. Anywhere in the world, 'geek' free time from voluntary or involuntary unemployment can give greater room for experimentation and criminal attempts seldom are investigated, punished or even officially recorded.

The 'crime triangle' of motivation, opportunity and capable guardianship can be applied to fraud and it is in human and technological changes to these parameters that an explanatory framework may be found (see Table 1). 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 the

monitoring, the more likely it is that an accurate model of interactions between players in the network will be generated. In most countries of the world, anyone can start up a new business. The exception is for financial services businesses, largely on the grounds that they can directly steal funds from the public. It is important to understand such restrictions in a global context rather than the traditional nationstate perspective and powers of regulation and criminal justice.

'Animal spirits' or primarily male biological drives may generate higher risk-taking (Coates & Herbert 2008; Deflem 2011), whose economic damage is seldom punished as fraud. Fraud is facilitated by 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 by passive Singaporeans and reported to British superiors who understood little about his trades and were content to take the results he fed them that inflated their own large bonuses (Leeson 1997). Likewise, French 'rogue trader' Jerome Kerviel of Société Générale, who was jailed in 2010 but never charged specifically with fraud. Neither this reckless trading nor the supervision that failed to pick up deceptions about the trading levels that enabled them have any obvious connection with the GFC.

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 and lending activity (although the GFC was blamed partly on the rise in the short-term bonus culture). Some corporate fraudsters—such as Alan Bond and other Australian entrepreneurs of the 1980s, the late pension fund fraudster Robert Maxwell and the chiefs of Enron—appointed staff on much higher than normal market salaries, partly to ensure their lovalty or wilful blindness in the face of alternative employment on much lower salaries. In general, these examples support the argument of Sykes (1994) that the cause of the corporate failures lies in boom practices, not in the bust.

As with the recent Madoff and Stanford scandals (where misconduct began during a boom but collapsed in bust times), corporate fraudsters may employ small firms of accountants who are dependent on them—although these accountants are not always active conspirators. Such scams are facilitated by trust, combined with pressure on investors and funds managers to get higher than average returns (as well as by greed). By contrast with much lower value, high-volume credit card 'skimmers' who (with non-chip and PIN cards or Card Not Present) may need to be helped by numerous people to use the card numbers 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 the competent application of controls. What some offenders are able to do is simply to create the appearance that they are carrying out normal business transactions whose purpose is not clear. Barry (2001) highlights the role played by Alan Bond's ingenuity and the delays of law in enabling him to exploit the rule whereby gifts 'not for value' can 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 person who was alleged to have acted as a nominee for Bond, using a variety of foreign trust companies. Despite global money laundering regulations, undisclosed beneficial ownership remains easy to arrange.

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 (Levi & Burrows 2008; Levi et al. 2007). Many surveys have a very low response rate, making them unrepresentative. 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 readily tell whether fraud or almost any sub-component of it (other than plastic fraud) was being strongly affected by the GFC. However, such warnings may be needed because otherwise it is easy to

misread the data as evidence of underlying realities. With these caveats, for the sake of completeness, included below is the trend in recorded fraud data in Australia (Figure 1). Such data reflect only those frauds that come to light and are reported to state and territory police, thus excluding the many federal prosecutions for tax and welfare fraud—but they occur closer to the date of first fraud commission than the court proceedings aggregated by accounting firms.

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, there is an uneven time lag between fraud and its prosecution, with longer exposure lags for management than for outsider frauds, and uneven prosecution risks.

## 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 losses), since it may be possible to misrepresent fraud as legitimate commercial failure among all the other corporate collapses. 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. This cannot be overstressed—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 (eg Russian 'oligarchs') highly mortgaged on their assets and therefore under more pressure to lie in order to stay afloat long enough to avoid a forced sale, but 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 and rising house prices encouraged personal indebtedness. Minsky (2003) suggests that periods of stability lull market players (and regulators) into more risky financial tactics. As this way of thinking spreads from the professional investment world to the whole population, Ponzi styles of investment become generalised. Regulators and politicians, too, become absorbed into this group-think (FCIC 2011; Treasury Committee 2009).

In the United States—because of different incentives and controls—and to a far lesser extent elsewhere, financial intermediaries engaged in wholesale falsification of



Source: AIC unpublished data

mortgage details in order to earn commission (Nguyen & Pontell 2010). Australia's late entry into derivatives securitisation protected its banks against direct local and global fraud effects from this market. Public and political risk aversion and the rise in the visibility of mortgage frauds and consumer/investment scams since the GFC led to re-evaluation of deregulation. Since Ponzi investment pyramids rely on a higher rate of incoming than outgoing investments to sustain payouts, a fall in the rate of increase in investments or a reduction in the rate of re-investment of imaginary profits causes them to collapse earlier. So what appears to be a rise in fraud following the GFC may be merely a shake out of pre-existing frauds. In the volume fraud area, recent forensic linking software developments make it easier to proactively search out connections between banking, insurance, public sector and other fraud networks.

#### Opportunity theory approaches

Table 1 shows how the crime opportunities, motivations of offenders and presence or otherwise of capable guardians relate to the circumstances surrounding the GFC. Some frauds whose commission long preceded the GFC will be brought into victim and/or public consciousness as a result of the credit squeeze. But some of the pre-existing 'phoenix company' scams and 'intermediate' and 'slippery slope' failures precipitated by falling profits may be masked by the general level of insolvency and by creditors' unwillingness to 'throw good money after bad'. 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. Conversely, if people motivated to defraud have lost their jobs, they can no longer commit internal frauds.

Some fraud opportunities are increased by corporate mergers and reorganisations that create uncertain control structures and clashes of culture.

**Table 1** An opportunity theory approach to understanding frauds following the global financial

| CHSIS        |  |   |
|--------------|--|---|
| Fraud driver | Increased risk   | Reduced risk  |
| Motivation   | Perceived need to maintain failing businesses<br>Perceived need to maintain lifestyle  | Acceptability of business failure and/or reduced lifestyle in times of economic downturn  |
| Opportunity  | Availability of government payments/<br>professionals willing to create secrecy vehicles<br>and/or falsify documentation                     | Potential fraudsters who lose jobs Reduced income/assets in business Reduced capacity to lend   |
| Guardianship | Pre-existing frauds detected following reduced inflow of sustaining funds Perceptions that law enforcement and regulators are over-stretched | Increased learning from other countries' experiences Increased internal controls on lending and transactions Increased awareness of risk, surveillance and early intervention by regulators |

When economic times are hard, more people may take greater risks to pay 'employment brokers' to obtain jobs. To maintain lifestyles, when nominal interest rates are low, savers and newly redundant people may fall prey to scammers offering higher 'safe' returns on savings.

People are highly motivated by fear of losing economic and social status relative to others (and sometimes in absolute terms too). Therefore, when times become harder, those who do not have strong ethical standards or fear being shamed, are more likely to commit frauds within their skill set.

In order to examine the constraints, those frauds that require active cooperation from others need to be examined (ie those that will be likely to receive active cooperation and under what conditions and those that require merely passive/unconscious cooperation, eg people doing their normal job).

In times of recession, losses from fraud become a larger proportion of profits and therefore, firms may devote greater resources to guardianship if, and only if, they are convinced that this will prevent and recover significantly more than they expect frauds to cost them (disregarding social costs, but including regulatory and reputational penalties). Indeed, executives expect a high Return-on-Investment for anti-fraud expenditure. Whether organisations and government bodies (Australian Tax Office, Centrelink, police) actually will give greater resources to fraud control is a question of organisational culture and politics, not least because projections of cost-effectiveness are difficult to demonstrate to the sceptical. Although net returns for more tax fraud and

avoidance investigators are clearly positive and linked to recoveries, increasing tax powers and staff is seldom politically popular. KPMG (2011b) found a higher percentage of firms disregarding 'red flags' of employee misconduct in 2010 than in 2008, suggesting stretched control capacity.

The GFC has led to increased governance of reckless lender behaviour and more international cooperation between regulators and tax authorities, which should reduce some forms of fraud.

To examine the extra and reduced risks of motivation, opportunity and capable guardianship, it may be helpful to differentiate frauds by degree of planning (see Levi 2008). E-crimes are largely pre-planned, except for cases in which insiders and outsiders stumble upon security gaps. In any event, there is no reason to suppose that they are affected directly by the GFC-opportunities are rife and fortunately are not being exploited fully by criminals in Australia or elsewhere.

Recent falls in plastic fraud in the United Kingdom, despite economic downturns, show the effect of prevention measures (FFA UK 2010). Fraud on Australian domestic and foreign cards (except in non face-toface transactions) decreased significantly in 2010 compared with 2009, probably due to Australia introducing chip and PIN measures (APCA 2010). This demonstrates that measures to decrease fraud make a difference. But where data are poor or the fraud takes a long time to be detected (average 12 months for internal frauds; KPMG 2011b), it is necessary to know when the fraud started and developed before analysing the impact of the GFC.

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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. 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 in Australia or elsewhere.

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