

THE ROLE OF MANAGEMENT ACCOUNTING IN FRAUD CONTROL: THE CASE OF THE CITY OF JOONDALUP

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Abstract

The 2014 'Report to the Nations on Occupational Fraud and Abuse' released by the Association of Certified Fraud Examiners estimates that the potential projected losses from occupational fraud globally could run as high as US\$3.7 trillion every year. In Australia, several studies have found that the Australian public sector entities are also significantly exposed to fraud. This article considers the case of the Australian City of Joondalup and asks whether its management accounting function can provide city management with the necessary data to enable effective control over occupational fraud and whether fraud control activities specifically directed towards fraud control can be a regular feature thereof. It is concluded that although aspects of fraud control are encompassed within the broader strategies of the City, it can significantly enhance its ability to control occupational fraud by leveraging its regular management reporting and analysis function.

Keywords: Fraud Control, Local Government, Management Accounting, Occupational Fraud

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1. Introduction

On 17 April 2012, the Federal Bureau of Investigation (FBI) arrested Rita Crundwell at the offices of the City of Dixon (a small municipal government with an annual budget of less than US\$9 million) in Illinois, USA (Grimm & Jenko, 2012). At the time, Dixon's city comptroller and treasurer, Crundwell was charged with misappropriating public funds from the municipal coffers. During the time leading up to a guilty plea in 2013, it was revealed that she had single-handedly defrauded Dixon of more than US \$53 million over a period of two decades (Pope, 2013). The money embezzled was applied to several luxuries that Crundwell could not afford on her city salary. The misappropriated funds each year directly contributed to repeated financial deficits and budget cuts at Dixon (Pope, 2013). The Dixon case is only one in a number of occupational local government fraud cases that have occurred in several countries. However, what makes it stand out is the duration of the fraudulent activity and the amount of money involved. Evidence indicated that Crundwell's behaviour began in 1990 and was only detected in 2012 when she was on leave (Smith *et al.*, 2012). The key question that arises is how Crundwell got away with so much for so long without anyone, city executives and statutory auditors included, detecting the fraud.

While the above instance of local government fraud took place in the United States, fraudulent behaviour by employees is a disturbing feature in

organisations the world over. Occupational fraud, i.e. fraud committed by employees within an organisation, is rising significantly, according to recent reports by both PwC (2012a) and KPMG (2013). In fact, KPMG (2013) found that 75% of all corporate fraud is perpetrated by organisation insiders. Public sector fraud also has not lagged behind private sector fraud. The Association of Certified Fraud Examiners (ACFE) notes that as many as 15% of victim organisations globally were in the public sector (ACFE: 2014). Within an Australian context, approximately 46% of government and state-owned enterprises surveyed reported at least one incidence of fraud (PwC, 2012a: 4), of which as many as 33% reported more than 10 incidents in the same period. In terms of monetary losses, 50% of those defrauded had lost at least US\$ 100 000 with as many as 20% losing over US\$ 5 million.

In its recent *Report to the Nations on Occupational Fraud and Abuse*, the ACFE (2014) found that the average organisation loses roughly 5% of incomes to fraud. In identifying fraud, the single largest source of fraud detection (over 42%) being through tips received, predominantly from employees, with a further 16% discovered through management reviews (ACFE, 2014). The internal audit function surprisingly uncovered only 14% of frauds with external audit uncovering just 3% (ACFE, 2014). Furthermore, the ACFE (2014) also indicated that as much as 50% of all fraud could have been prevented by the diligent application of adequate internal controls and better management reviews. Concurring

with this, both Kramer (2009) and Sinnett (2009) independently confirm that internal controls are fundamental to fraud prevention. Several sources, including Boulter *et al.* (2013) and Lovik *et al.* (2007), have also concluded that corporate culture is a key influencer of occupational fraudulent behaviour and that management sets the tone for the culture of an organisation (Murphy, 2011; Kroll, 2012). In support hereof, KPMG (2013) and Gabor and Alger (2012) found that visible commitment to integrity and ethics by senior management is the primary driver of a robust anti-fraud culture in an organisation.

While fraud in any organisation is debilitating, public sector fraud has a particularly severe impact (Gee *et al.*, 2011). Local government is an important tier of government, often more so than other levels because of its close interface with the community. For this reason, fraud by a municipal employee potentially has a much greater impact on the local community than if it occurred in a federal or state government level. To this effect, the Commonwealth of Australia, as well as various other State governments and agencies, has recognised the threat of fraud in local government, whether as a distinct sphere of government (ICAC, 2002; Vic A-G, 2012; LGASA, 2007; TAO, 2013) or as a part of the public sector *per se* (ANAO, 2011). Occupational fraud within a local government context is not significantly different in character from that occurring in other corporate or organisational environments.

In 2013, the Western Australian Auditor General conducted audits of major WA public sector agencies to assess fraud control mechanisms. The report arising from this audit disclosed a number of concerning findings. Seven out of nine agencies have experienced fraud or corruption in the recent past (AGWA, 2013). Despite this, almost none actively considered the risk of fraud and corruption as part of their risk-management framework and none had, at the time, any cohesive plan to prevent or detect fraud and corruption. The report also highlighted the alarming trend of rising fraud in the WA public sector (AGWA, 2013:4), and noted that an effective fraud control regime is essential to minimise its occurrence and impact (AGWA, 2013: 13). These findings come on the heels of earlier studies conducted into fraud and corruption in public sector organisations in Australia that note a rising trend in public sector occupational fraud, coupled with a persistent failure by organisations to employ effective fraud management tools (PwC, 2008). A paper presented at the Australian Public Sector Anti-Corruption Conference (Withnall, 2011) pointed out that the current structure of local government in WA enhances the risk of misconduct by officers and makes it more difficult to improve accountability.

The City of Joondalup, as one of the largest and most prominent of Perth's metropolitan local governments, controls assets worth over A\$1 billion, along with a total annual capital and operating budget

of approximately A\$190 million (COJ, 2014a) on behalf of a 168 000-strong community. As the steward of these public resources, there is no question that a Dixon-like scenario might have immeasurably severe repercussions for the City and its ability to deliver services to the community.

2. Research problem and method

In consideration of the above, it is evident that fraud is a reality of contemporary society, including the public sector, which has a vulnerable and broad stakeholder group in the form of the society it serves. Within the context of the City of Joondalup, therefore, the questions that need to be answered are therefore i) whether management accounting can provide city management with the necessary data to enable effective control over occupational fraud and ii) whether fraud control activities or information analysis specifically directed towards fraud control can be a regular feature of the management accounting function.

To meet this objective, a structured research approach is required. Without undertaking an overly detailed analysis of fraud risks specific to the City of Joondalup, it is firstly necessary to identify the potential role of management accounting within the context of fraud control and management and, secondly, the identification of broader managerial accounting-based tools and techniques necessary to support a fraud prevention strategy within the context of the city. In meeting these objectives, a qualitative and descriptive research methodology is utilised. Based on publicly available data and policies specific to the City of Joondalup, an assessment is made of such management accounting tools, techniques and principles as are applicable to the processing of such information. The remainder of the paper is set out as follows: firstly, the possible role of management accounting in fraud prevention is considered, which is then secondly followed by an evaluation of current fraud control aspects at the City of Joondalup as disclosed by the city, including more specific best practice strategies and clear management accounting tools and techniques that can be recommended. This is finally followed by some concluding discussions and comments.

3. The role of management accounting in fraud prevention

3.1 Introduction

Even though organisations vary greatly, be it in purpose, structure or organisational characteristics, there are certain fundamental principles in fraud prevention and detection that apply regardless, particularly when it comes to occupational fraud. The ACFE's 2014 *Report to the Nations on Occupational Fraud and Abuse* found that fraud is pervasive across

national and organisational boundaries. In other words, it can happen anywhere and at any time, regardless of the type of organisation. It also found that the vast majority of fraudsters are first-time offenders, meaning that attempting to predict future actions by reference to past employee behaviour yields very little benefit. Furthermore, the ACFE notes that most organisations fail to put effective fraud control measures in place that significantly reduce the risk of fraud (ACFE, 2014).

According to the Australian National Audit Office (ANAO), organisational governance is the key to a proper fraud control strategy (ANAO, 2011: 12). Governance that is not driven by ethical senior management will be incapable of inculcating in an organisation the anti-fraud culture vital to effective fraud management (ICAC, 2002; CGMA, 2012). Fraud control can therefore be considered as an essential aspect of organisational risk management and places the responsibility for robust fraud control on the leadership of the organisation. It is evident that fraud control is considered a fundamental part of organisation strategy – which is the core responsibility of management.

3.2 Management accounting perspectives

The US-based Institute of Management Accountants (IMA) emphasises that the design and execution of organisational strategy are a fundamental professional attribute of a management accountant, and the profession's position is essentially one of partnership with management through the provision of financial reporting and controlling expertise (IMA, 2008). The era of the management accountant as a mere preparer of reports appears to have been overtaken by the management accountant as a key role-player in organisational strategy and decision-making (Forsaitth *et al.*, 2004: 19; Clinton and White, 2012: 43). Some of the most important management accounting developments of the past twenty years, for example activity-based costing principles and balanced scorecard concepts, are rooted in the profession's engagement with strategy development and decision-making processes in the contemporary organisation, rather than simply extracting and reformatting organisational data (Talha *et al.*, 2010: 94). This emphasises the vital need for management accounting to be proactively involved in addressing real business difficulties that demand strategic solutions (Johnson & Kaplan, 1987). A robust and high-performing management accounting function has a correspondingly positive impact on organisational performance (Nevries *et al.*, 2010: 21). Notably, management accounting, as such, is primarily a function in the organisation, rather than a departmental/divisional appellation. Traditionally, management accounting has been identified as part of an organisation's finance and accounting function. However, Forsaitth *et al.* (2004: 19) and Clinton and

White (2012: 43), among others, have found that management accounting has been evolving away from the perceived *backward-looking* accounting function to that of a more strategic partner in an organisation. The hierarchical *position* of management accounting in the organisational structure is, therefore, not the critical factor, but rather its *function and purpose* in the organisation.

The involvement of the management accountant in organisational strategy formulation and execution should logically, therefore, include fraud control wherever this is driven as a strategic imperative.

3.3 Fraud control and the management accountant

One of the fundamental aspects of fraud prevention and detection in an organisation is the requirement that management must continually pay close attention to effective management basics (Turpen & Messina, 1997:37). Very simply, organisational management should have strategies and measures in place that allow for critical, accurate and relevant information to be regularly and prominently available to ensure pragmatic actions to reduce the risk and incidence of fraud. With the increasing trend of occupational fraud (KPMG, 2013), it has never been so important for management to get this right.

As alluded to before, fraud control is considered an essential aspect of organisational risk management. The Chartered Institute of Management Accountants (CIMA) considers a proper fraud control strategy to incorporate the four aspects of prevention, detection, deterrence and response (CIMA, 2009: 25). None of these can be effectively executed without sufficient and proper data analysis and adequate consideration of fraud as part of an overall risk management framework. The comprehensive understanding of an organisation's structure, operational environment and financial activity that management accountants possess (Charron & Lowe, 2008: 10) is an asset that can be leveraged to maximum benefit. CIMA and the American Institute of Certified Public Accountants (AICPA) agree that management accountants have the critical expertise and knowledge essential to be key participants in effective fraud risk management (CGMA, 2012).

As indicated above, an efficient management accounting function is key to a structured and well-ordered system of financial information flow and analysis that enables the organisation to take appropriate and timely decisions. This could not be truer where fraud control is concerned. Organisations cannot be effective at preventing or detecting fraud without the right information that is accurately analysed and interpreted. There is a pivotal role here for the management accountant to enhance an organisation's capacity to fight fraud.

4. Fraud control at the city of Joondalup

4.1 Introduction

With an estimated population of 168 000, the City of Joondalup is one of WA's largest and fastest developing local government areas. Considering its significant annual budget and asset base, the nature and diversity of its operations and the findings of the ACFE's 2014 study, it would be naïve to presume that the City has no risk of occupational fraud. Apart from the elected Council, which is the ultimate decision-making body, the City is led by a CEO supported by four directors, and comprises several functional streams (COJ, 2014b). The City, as a local government, covers a wide spectrum of activities, including library services, engineering and parks maintenance, waste management and community safety. A structure incorporating such diverse functions requires robust fraud control measures to minimise the risk and incidence of fraud.

The Corruption and Crime Commission (CCC) in Western Australia (WA) governs misconduct by public officers in all tiers of government in the state, including local government level. A number of investigations in recent years have drawn attention to the vulnerability of local governments to fraudulent employee behaviour, exemplified by a 16-month jail sentence handed down to the former CEO of a WA local government for fraudulent corporate credit card use (CCC, 2013). Such instances of occupational fraud in local governments in recent years have highlighted the seriousness of fraud here. Local governments in WA are governed by the Local Government Act, 1995 (LGA) and the corresponding regulations. Neither the Act nor the regulations explicitly address fraud or fraud control. However, the LGA contains provisions dealing with the misapplication of funds and property (Part 8, Division 4), which, on examination, essentially describe fraudulent activities by employees and prescribe certain actions to be taken by the local government on discovery of such activity. Virtually no preventive or detective measures are, however, prescribed or recommended. According to the ACFE, the most effective manner to minimise the occurrence of fraud is to prevent it from the get-go (ACFE, 2014: 76). With this as the primary objective, the ACFE (2014:76-77) recommends a fraud management tactic that includes the following:

- A management climate of honesty and integrity;
- Proactive fraud risk assessments to identify and minimise vulnerabilities;
- Anti-fraud controls properly implemented and functioning effectively;
- Ongoing anti-fraud training provided to all employees;
- Effective fraud reporting mechanism implemented; and

- Active measures against fraudulent behaviour visible to employees as a deterrent.

While not exhaustive, these components are basically the same as recommended by the ICAC (2002: 11) for fraud management in state and local governments in NSW. CGMA (2012: 8) suggests a holistic and encompassing fraud risk management strategy as illustrated below in Figure 1.

As can be seen in Figure 1, the CGMA identifies the four strategies, i.e. i) fraud prevention, ii) fraud detection, iii) fraud response, and iv) fraud deterrence as overlapping strategies. These four strategies do not stand separately, but are integrally part of a holistic approach, and may be considered management accounting best practice for fraud prevention. Similar to the above, the CGMA framework (PwC, 2008: 1) also depicts the fraud control system as an intersection of the various components as illustrated below in Figure 2.

In PwC's perception of fraud control, as per Figure 2, the *control* of fraud culminates in a holistic approach that includes i) risk assessment, ii) prevention, iii) detection and iv) investigation. The City of Joondalup's fraud risk management strategy should therefore ideally have the above indicated critical strategies adequately addressed. Even though the current risk management policy and governance framework, available on the City's website, refer to overall risks, it does not explicitly address fraud, and the City's publications do not give clear indications of a dedicated fraud management plan. This is, however, not necessarily an indication that fraud risk is not considered at the City, particularly since the Australian National Audit Office strongly urges that fraud risk should be considered by organisations within their wider risk contexts (ANAO, 2011). It is acknowledged that the actual format of fraud risk management plans is not uniform across organisations and industries. Nevertheless, it is recommended that senior management's commitment to fraud risk management should be explicitly communicated. This is especially important when it comes to employee awareness, which is a key component of an effective anti-fraud strategy, and then especially for occupational fraud deterrence purposes.

The City's management accounting function falls within the financial services business unit (COJ, 2014a), in line with the traditionally financial nature of the function. Management accounting's potential input into each aspect of a best-practice fraud management strategy is considered in Table 1 below. The table highlights specific elements, strategies, necessary actions and key outputs that are required. For each of these elements, an indication of the respective responsibilities and inputs are also provided.

Figure 1. Anti-fraud strategy (CGMA, 2012)

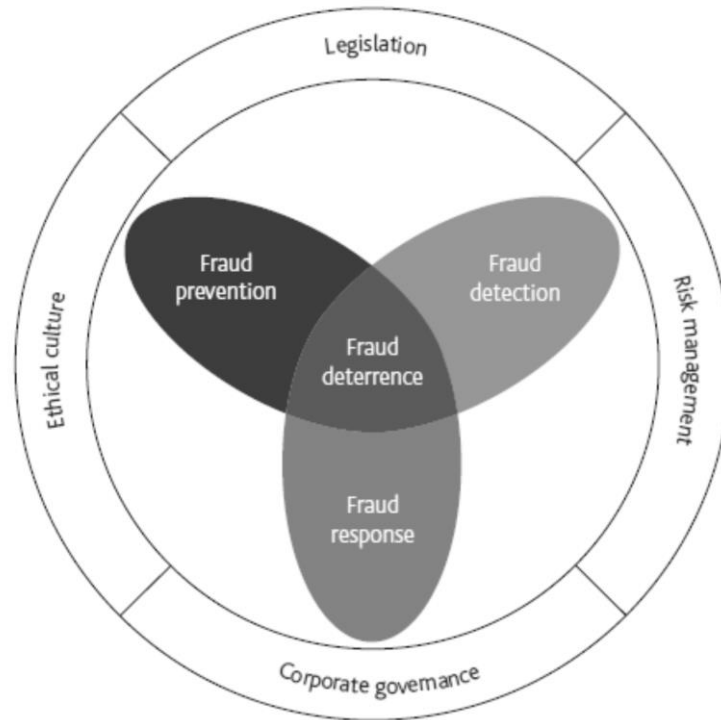
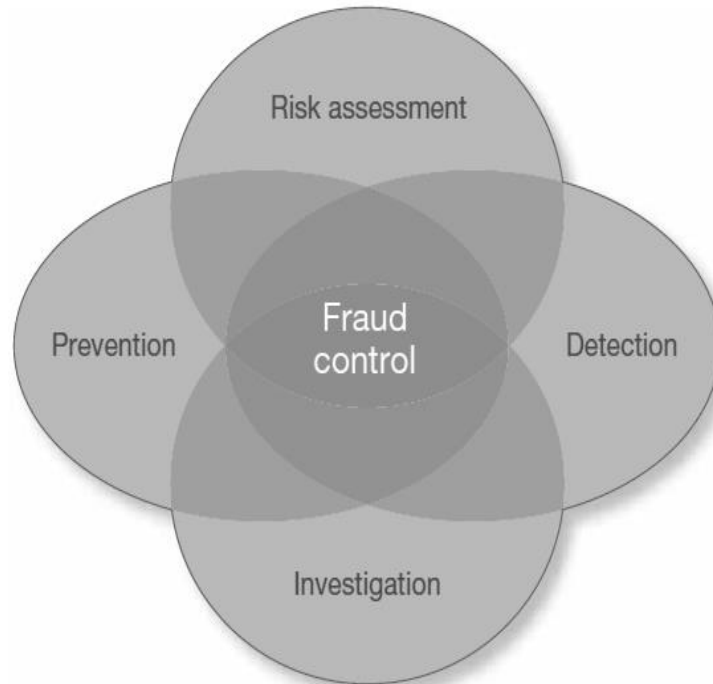


Figure 2. Fraud control system (PwC, 2008)

Table 1. Best practices: Fraud management strategy (Source: Own research)



BEST PRACTICE – FRAUD MANAGEMENT STRATEGY				
Element of Plan	Fraud strategy aspect	Necessary actions	Key Outputs required	Input from/Managed by
“Tone at the top”	Prevention, Deterrence	Establish ethical behaviour as a culture in the organisation	Senior management lead by example Communication to employees	Executive management
Proactive fraud risk assessments	Prevention	Conduct regular assessments at reasonable intervals	Assessment reports to senior management	Management accounting/executive and risk services
Anti-fraud controls	Prevention, Detection	Design, implement and monitor controls, including key measures	System of anti-fraud controls accompanied by clear measures and reporting thereon	Management accounting/executive and risk services
Employee anti-fraud training	Prevention, Deterrence	Regular dissemination of fraud awareness and training to employees	Employee attendance at training events and indication of awareness	Human resources/executive and risk services
Fraud reporting mechanism	Detection	Institute channels for fraud reporting to occur	Reports of fraudulent activity	Executive and risk services/human resources
Visible action against detected fraud	Response, Deterrence	Decisive, prompt, visible and deterrent action	Clear, transparent communication of action taken	Executive management/human resources

Bearing in mind that a distinct *strategic and organisational development* function exists, it would appear that the City presently construes a role for management accounting more aligned to the classical finance function. The contribution of management accounting to fraud control at the City, within this context, is therefore likely to be best made within the traditional context, namely financial analysis and reporting to management.

3.2 Proactive fraud risk assessment

A risk assessment is simply a tool that facilitates continuous improvement in an organisation. In this respect, fraud risk assessments consider the organisation’s vulnerability to fraud with the relevant information and understanding to effectively manage this risk. The City of Joondalup’s risk management policy clearly mandates the analysis, evaluation and mitigation of all risks facing the organisation (COJ, 2013:2). Fraud risk is not a separate discrete risk in itself, but one that is rather intrinsically connected to other organisational risks (ANAO, 2011). The City’s consideration of fraud risks, within its wider risk assessment processes, would inform any fraud management plan. The whole concept of fraud risk assessments is also in keeping with the principle of continuous management attention to basics, referred to earlier, and should not be treated simply as a checklist exercise.

This, of course, means that City management needs to consider all relevant organisational data and analyses, particularly of a financial nature, in order to be proactive in their fraud assessment practices. In support hereof, the management accounting function not only has access to the full extent of the financial information, but also other significant operational

information across the entire organisation, along with the technical capacity and capability to analyse this data. Management accounting can therefore report on key activity measures of various operational aspects of the City that could be possible indicators of fraud, and assist in tailoring the assessment to consider all relevant fraud risks that might arise out of the functional structure and operational activities of the City.

3.3 Anti-fraud controls

The purpose of a fraud control plan is to mitigate risks identified in a fraud risk assessment. The essence of a fraud control plan is therefore the controls that are put in place to minimise these risks (ANAO, 2011). The controls are designed as preventive measures, in line with the principle that fraud prevention is preferable to fraud detection. The specific nature of fraud controls that are put in place depends almost entirely on the weaknesses highlighted through the fraud risk assessment process, subject to the operational structure of the organisation and the tools available to capture, record and measure data.

Anti-fraud controls at the City would typically form part of the overall structure of internal controls (COJ, 2014c). The quality of anti-fraud controls depends on the regular monitoring and reporting of relevant control indicators, which reveal measures of activity that provide insight into the performance of a particular control. Depending on the tolerance level that the organisation has for a particular indicator, this information would allow management to identify control lapses and progressively gauge whether an inherent control weakness exists, which needs addressing. The reporting of such indicators that

measure the effectiveness of anti-fraud controls is easily incorporated into regular management reports, with management accounting performing further analyses of the underlying data to measure these and include them in regular reporting. The analysis from anti-fraud control reporting should also feedback not only into the design and structure of the controls themselves, but also into the structure of subsequent fraud risk assessments as the data is considered in the risk evaluation process.

3.4 Management accounting contributions

Effective management of fraud involves both minimising the possibility of fraud incidents and maximising the probability of early detection of such incidents. As mentioned earlier, minimising the risk of fraud occurrences requires robust systems and controls that will act as a filter to prevent most fraud from starting at all. Establishing these control mechanisms requires an appreciation of the City's activities and the vulnerabilities that require controls to mitigate.

At the City of Joondalup, the management accounting function has the primary responsibility for budgeting and financial reporting in the organisation.

This provides for an extensive understanding of the City's varied operations, giving insight into the different systems in place and the risks associated with these activities. Management accounting, while not directly responsible for risk management at the City, can nevertheless provide significant input into the process of identifying fraud risks and strategies to minimise them. Charron and Lowe (2008, 10) agree that management accounting generally possesses a level of knowledge of activities in an organisation that transcends that of the audit and other functions.

Continuous monitoring of relevant data and analysis of the information generated are critical to fraud prevention strategies (ICAC, 2002: 14). The identification of key fraud indicators and regular reporting of these to detect anomalous activity is therefore central to the strength or weakness of a fraud control strategy. Fraud indicators, correctly defined and measured, can be applied to both detection of existing fraud and prediction of future fraud. This is really where the importance of the management accounting function to fraud control at the City lies. Table 2 (below) considers a number of fraud risks and relevant controls, along with key indicators that can be measured and reported on regularly.

Table 2. Key indicators for fraud reporting (Source: Own research)

KEY INDICATORS FOR FRAUD REPORTING				
Risk area	Indicator	Activity	Suggested tolerance level	Organisational impact
Procurement	Number of purchases without purchase orders	Purchasing	<10% of total \$ value of purchases	
Procurement	Number of purchase orders raised after supplier invoice date	Purchasing	<1% of purchase orders	
Procurement	Number of purchase orders below quotation threshold	Purchasing	<20% of total value of purchase orders, subject to pattern identification and trend analysis	Possible active avoidance of purchasing protocols
Procurement	Number of purchase requisitions approved by an employee	Purchasing	To be determined after analysis of patterns and trends	
Procurement	Number of purchase requisitions raised and approved by the same employee in excess of purchase authority levels	Purchasing	Zero	System control weakness.
Payables	Number of supplier invoices authorised for payment by purchase requisition approver/requestor	Purchasing	Zero	
Payables	Number of payments to suppliers without an invoice	Purchasing	Zero	Misappropriation of funds
Payables	Number of supplier payments raised and approved by the same person	Payments	Zero	System control weakness
Payables	Number of creditors unpaid for 90 days or more		Zero, except for specific exceptions directed by CEO	Misappropriation of funds
Payables	Number of employee names corresponding to suppliers	Purchasing	<5%, to accommodate similar names and relatives	
Payables	Number of employee bank details corresponding to supplier bank details		Zero	
Payables	Number of one-off suppliers	Purchasing	<1%. Trends to be closely monitored	
Payables	Number of supplier credit notes	Purchasing	<10% of total invoices	Error or fraud

	recorded in the last 30 days		processed.	
Payables	Frequency of single-use suppliers in the past 24 months	Purchasing	<1%. Trends to be closely monitored	
Payables/receivables	Supplier details matching non-rates debtor details	Payments	<10%. Trends to be closely monitored	
Receivables	Number and \$ value of debtors (rates/other) outstanding for 90 days or more		<10%. (Exclude state and commonwealth government agencies)	
Receivables	Number of debtor debit notes raised in the last 30 days		<1%. Trends to be monitored.	
Cash management	Number and \$ value of monthly payments to suppliers over 12 months		Pattern to be consistent with yearly trend	
Cash management	Number and \$ value of monthly collections from rates debtors over 12 months		Pattern to be consistent with yearly trend	
Cash management	Number and \$ value of cash and cheque receipts in the last 30 days		Observe pattern proportional to total number and value of receipts and compare to trend	
Cash management	Number and \$ value of cash and cheque payments in the last 30 days		Observe pattern proportional to total number and value of receipts and compare to trend	
Revenue	Number of rateable properties without issued rate notices for the year		Zero	
Revenue	Number of eligible properties without issued waste collection charges for the year		Zero	
General financial	Number of journal entries posted during the month		To be determined, based on expected month-end activity, etc.	
General financial	Number of journals raised and approved by the same person in the last month		Zero	Lack of separation of duties
General financial	Number of journals entries posted without supporting documents		Zero	Control weakness

The most significant fraud risks in any organisation tend to occur predominantly within the procurement and payments areas (PwC, 2008:24), which would be no different for a local government such as the City of Joondalup, and as evidenced by the Dixon case referred to earlier. There are a number of other risks that would be similarly significant within the City's context, which are also considered. These risks (per table 2) are primarily classified into procurement, payables, receivables, cash management, revenues and general financial categories. Table 2 also suggests key indicators that could be set as benchmark control measures to gauge potential instances of fraud. These indicators, however, may not by themselves be clear signs of the presence or absence of fraud, but must be considered in conjunction with other controls, such as fraud reporting and data analytics. Fraud measures must be designed within the context of the particular organisation and industry. In addition, there are several indicators that can be included in reports that may not correspond directly with a particular risk or control, but may provide indirect substantiation of untoward activity elsewhere. It is important, therefore, to consider indicators collectively when analysing the information obtained. The table therefore highlights only some of the more prominent indicators that the

City of Joondalup could identify, analyse and report on a regular basis. Tolerance levels should be carefully considered and set and all deviations investigated. Adverse measures are not always indicative of fraud, but they highlight possible deficiencies that the organisation needs to address.

4. Conclusion

Research has indicated that the public sector is very much also vulnerable to occupational fraud. This study considers the potential role of management accounting, as a distinct function within management processes within local government. At the City of Joondalup, the primary role of management accounting presently is the traditional one. While including a wide range of fraud control aspects in management accounting outputs has been considered across various industries internationally, within the local government sector in Western Australia, this does not appear to have had much traction. Government authorities and investigative agencies also appear to limit the fraud control measurement and reporting to traditional disciplines. The fact remains, however, that proper information and related analyses provided to organisation management on a regular basis are imperative for success in all respects,

but especially for fraud control. Fraud control in itself is a holistic strategic approach that includes fraud prevention, detection and response. Within this context, there is really no question that the capacities and capabilities of management accounting functions appear to be significantly under-utilised by many organisations, including local government, when it comes to fraud prevention and detection. It would also seem evident that the City of Joondalup would potentially greatly benefit by leveraging its management accounting function into its overall fraud management strategy to maximise its ability to minimise the risk of occupational fraud.

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