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The Managerial Benefits of Tax Compliance: Perception by Small Business Taxpayers

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Abstract

Research undertaken in 2006 – 2007 investigated the perception of managerial benefits of tax compliance by small business taxpayers. Survey data from a sample of 300 small business taxpayers and responses to semi-structured interviews of owner-managers were examined. The study found that a majority of small business taxpayers recognised that tax compliance activities led to better record keeping and to an improved knowledge of their financial affairs. However, there seemed to be a general reluctance by respondents to accept the idea that *benefits* could be derived as a result of complying with tax. The findings of this study are important as it is the first research that systematically investigated managerial benefits and their perception by small business taxpayers in Australia.

1. INTRODUCTION

Managerial benefits may be derived by business taxpayers as a result of record keeping requirements imposed by tax compliance obligations.¹ These benefits come in the form of improved financial information and improved managerial decision making.² The managerial benefits of tax compliance have been discussed by many authors³ in the tax compliance costs literature; however the empirical evidence on how these benefits are derived and about their significance is very limited. As a consequence, managerial benefits have generally been left out by researchers when measuring net tax compliance costs.⁴

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¹ Benefits other than managerial benefits may also be derived by taxpayers from tax compliance activities; these include cash flow benefits and tax deductibility benefits. This article only considers managerial benefits. For a discussion of other benefits of tax compliance, see B Tran-Nam, C Evans, M Walpole and K Ritchie, 'Tax compliance costs: Research methodology and empirical evidence from Australia' (2000) 53(2) *National Tax Journal* 229.

² C Sandford, M Godwin and P Hardwick, *Administrative and Compliance Costs of Taxation* (Fiscal Publications, 1989), 118.

³ Authors that have discussed managerial benefits include Sandford, Godwin and Hardwick, above n 2; C Evans, K Ritchie, B Tran-Nam and M Walpole, *A Report into the Incremental Costs of Taxpayer Compliance* (AGPS, 1996); B Tran-Nam, 'Tax compliance costs methodology - a research agenda for the future' in C Evans, J Pope and J Hasseldine (eds), *Tax Compliance Costs: A Festschrift for Cedric Sandford* (Prospect, 2001) 51, J Pope, 'Research methodology for estimating the compliance costs of GST' in A Lymer and D Salter (eds), *Contemporary Issues in Taxation Research* (Ashgate, 2003) 69.

⁴ Net tax compliance costs are defined as gross tax compliance costs less tax compliance benefits. Tran-Nam, Evans, Walpole and Ritchie, above n 1, 232.

The main difficulty with managerial benefits is that even though the *concept* itself is rather straightforward, the reality of managerial benefits can be elusive because it is dependent on how the accounting information generated by tax compliance activities is valued by business owner-managers and used in business decisions. Hence, the actual realisation of managerial benefits by the firm will be closely related to the perception that owner-managers have about the usefulness of the information generated by record keeping activities.

Research undertaken in late 2006 and early 2007 compared accounting practices in businesses exposed to the record keeping requirements of the tax legislation, with accounting practices in firms of similar size that had no tax compliance obligations. The primary purpose of that study was to investigate the nature of managerial benefits generated as a result of tax compliance activities, and to identify the conditions in which these benefits may be derived. In addition, the researcher sought to examine what managerial benefits were perceived by owner-managers and contrast this perception with managerial benefits actually realised.

The study deliberately focused on small businesses for two main reasons. Firstly, managerial benefits resulting from tax compliance activities are more likely to arise in small organisations where accounting information systems are relatively undeveloped. Secondly, since previous research has indicated that the burden of tax compliance costs is felt more acutely by small businesses, it is possible that managerial benefits, if they exist and are significant, make this burden more sustainable.

This remainder of this article is structured as follows. Section 2 examines the empirical evidence on managerial benefits, and reviews the previous literature that has discussed the concept of managerial benefit. The methodology adopted for this research is described in Section 3 and the research outcomes are presented in Section 4. A discussion of the results follows in Section 5 while Section 6 concludes the article by identifying the limitations of the study and making suggestions for further research.

2. PREVIOUS LITERATURE

2.1 Significance of managerial benefits in small businesses

Two studies, the Sandford, Godwin, Hardwick and Butterworth 1981 Value Added Tax (VAT) study and the National Audit Office (NAO) 1994 VAT survey have attempted to quantify managerial benefits.⁵ Both studies relied on estimates provided by owner-managers of the benefits they received. In the Sandford et al study, respondents were asked to give values to specific managerial benefits, while the 1994 NAO study proposed an overall estimation of managerial benefits.

The report from the NAO valued the overall managerial benefits generated by compliance with VAT in the United Kingdom (UK) at £149m (\$312m),⁶ representing nine per cent of gross tax compliance costs.⁷ The value of managerial benefits relative

⁵ The report published by the National Audit Office in 1994 largely relied on the valuation undertaken by Sandford.

⁶ N The exchange rate used for the conversion to Australian dollars is the 1994 average rate.

⁷ National Audit Office, *HM Customs and Excise: Cost to Business of Complying with VAT Requirements* (Her Majesty Stationery Office, 1994), 20.

to gross tax compliance costs ranged from 7.4 per cent for business in the £100,000 to £500,000 (\$210,000 to \$1,048,000) annual turnover category to 28 per cent for businesses with an annual turnover of £19,000 (\$40,000) or less.

The main outcome from the NAO survey was that managerial benefits (measured as a percentage of gross compliance costs) derived by small businesses were roughly three times as large as those derived by medium and large firms. The results were also consistent with findings by Sandford et al which were that a higher percentage of small businesses perceived managerial benefits from complying with VAT compared to large firms.⁸

Sandford et al study also analysed the number of benefits of tax compliance reported by small business owner-managers. Table 1 presents the number of tax compliance benefits reported by small businesses (turnover under £20,000 (\$35,000)) in various industry sectors.

TABLE 1: PERCENTAGE OF SMALL BUSINESS TAXPAYERS* BY REPORTED NUMBER OF TAX COMPLIANCE BENEFITS FROM COMPLYING WITH VAT (INCLUDING CASH FLOW BENEFITS), UK, 1977-78.

Number of benefits	Sector of Activity									
	Primary	Manufacture & utilities	Construction	Transport & communication	Retail	Wholesale	Finance & bus. Services	Profess. & scient. services	Misc. public services	All sectors
0	31	51	33	28	50	50	56	41	29	40
1	16	13	25	28	15	20	21	22	15	20
2	22	18	13	31	13	17	9	17	10	17
3	14	15	13	0	13	12	3	7	8	11
≥ 4	16	3	16	12	9	0	12	13	5	11
Total[†]	100	100	100	100	100	100	100	100	100	100

Data source: Sandford, Godwin, Hardwick and Butterworth, 1981, Appendix K, pp. 235-239

* Small business taxpayers are defined as having an annual taxable turnover < £20,000.

† Percentages may not add up to 100% because of rounding.

One should bear in mind when interpreting these figures that respondents were invited to report *any* benefit of complying with VAT. It is therefore possible that the number of benefits reported included cash flow benefits as well as managerial benefits. Overall, 40 per cent of respondents perceived no benefit, 60 per cent at least one benefit and 40 per cent at least two benefits from complying with VAT. Owner-managers of small businesses in the miscellaneous public services, the professional services and the primary sectors appeared to perceive a significant number benefits from complying with VAT; on the other hand the number of benefits reported was much lower in the retail, wholesale and financial services sectors.

⁸ C Sandford, M Godwin, P Hardwick and M Butterworth, *Costs & Benefits of VAT* (Heinemann, 1981), 94.

Additional empirical evidence on the perception of managerial benefits by business taxpayers is available from research on tax compliance costs undertaken in New Zealand and Australia in the 1990s. Nearly 50 per cent business owners surveyed in New Zealand in 1991 agreed that their purchase records were better kept as a result of complying with GST obligations, and 31 per cent said that there was useful cash collected.⁹ In Australia in 1995, Evans et al found that only a small majority of small business taxpayers agreed that the requirements of the federal tax system helped them to improve their record keeping. There was an even lower level of agreement that managerial benefits were derived in the form of improvements to internal controls.¹⁰ Higher rates of managerial benefit perception were reported by a study commissioned by CPA Australia in 2003: over 75 per cent of small business owner-managers indicated that they were using financial information produced from the record keeping system to manage the business and 73 per cent agreed that compliance obligations acted as an incentive to keep up-to-date records.¹¹

In conclusion, even though the evidence on managerial benefits is extremely patchy, there is some indication that a significant proportion of small businesses perceive that they are deriving benefits from tax compliance in the form of improved record keeping. The degree of perception and the number of benefits perceived seemed to be influenced by the size of the business and the activity sector.

2.2 The concept of managerial benefits

The concept of managerial benefits was first introduced by Sandford et al in the 1981 VAT study and further discussed in a further publication a few years later.¹² Sandford argued that the effect of complying with tax may not always be detrimental, as individuals who complete their tax return and file the necessary information, may at the same time be encouraged to engage in more efficient management of their financial affairs. These benefits are likely to be more significant in the case of businesses (hence the terminology “*managerial* benefits”) as compliance with the tax system will force the business owner to introduce a more efficient financial information system.¹³ Sandford described managerial benefits from compliance with VAT in this manner:¹⁴

“[...]It is clear that there are continuing and not inconsiderable cash benefits from the better record keeping which is necessary to comply with VAT requirements. It is not possible to put a realistic value on these benefits but they are an important offset to the compliance costs of some of the smaller businesses.”

⁹ C Sandford and J Hasseldine, *The Compliance Costs of Business Taxes in New Zealand* (Institute of Policy Studies, 1992), 96-97.

¹⁰ Evans, Ritchie, Tran-Nam and Walpole, above n 3, 131-133.

¹¹ CPA Australia, *Small Business Survey Program: Compliance Burden* (CPA Australia, 2003), 17.

¹² Sandford, Godwin, Hardwick and Butterworth, above n 8, 90; Sandford, Godwin and Hardwick, above n 2, 13.

¹³ Sandford, Godwin and Hardwick, above n 2, 13.

¹⁴ *Ibid*, 118.

Some years later, Tran-Nam proposed a broader definition of managerial benefits which expanded the concept beyond better record keeping to include improvement to business decision making:¹⁵

“Tax compliance is supposed to generate recurrent managerial benefits to taxpayers, especially business taxpayers, in the form of improved decision making. These benefits are brought about by the need to have more stringent record keeping in order to comply with the requirements of the tax law.”

In the above definitions, record keeping, particularly more stringent record keeping, is identified as the source of managerial benefits. However, record keeping is a broad concept that involves a number of varied activities from which discrete managerial benefits may result. These specific benefits, which were for the most part described by Sandford,¹⁶ can be classified according to three broad sources: improvements to the accounting information system; improvements to controls; and savings on other costs.

2.3 Sources of managerial benefits

2.3.1 Improvements to the accounting information system

Improvements to the accounting information system (AIS) are achieved as a result of the necessity to have a complete record keeping system. Compliance with the Goods and Services Tax (GST) (or with VAT, its UK equivalent), for instance, requires taxpayers to keep a record of their sales and purchases.

In recent years, the proliferation of tax compliance obligations has also been a major driver of the acquisition of computerised accounting systems (CASs) by small businesses. Significant computer costs were typically incurred by small firms when a new tax was introduced or when substantial amendments were brought to an existing tax.¹⁷ In Australia for example, small business owners interviewed prior to the introduction of GST in 2000, stated that the new tax was the main reason for acquiring a computer.¹⁸ This acquisition of information technology was actively encouraged by the federal government through the provision of a grant and the possibility of immediate tax deduction.¹⁹ The acquisition of computers is potentially an important source of managerial benefits for small businesses as the use of technology is expected to bring substantial improvements to the AIS. These improvements come mainly in the form of the increased efficiency that is achieved when the use of a CAS enables staff to perform the same task in less time, more accurately and using fewer resources.²⁰ Effectiveness benefits can also arise because the use of technology allows owner-managers to perform new activities that contribute more to the value of the business than the old activities they replace.²¹

¹⁵ Tran-Nam, above n 3. 55.

¹⁶ Sandford, Godwin, Hardwick and Butterworth, above n 8, 90-4.

¹⁷ G. Bannock and H. Albach, *The Compliance Costs of VAT for Smaller Firms in Britain and Germany* (Bannock Consulting, 1987); Centre for Fiscal Studies, *The Tax Compliance Costs for Employers of PAYE and National Insurance in 1995-96* (University of Bath, 1998); Pope, above n 3.

¹⁸ Pope, *ibid*, 75-6.

¹⁹ *Ibid*.

²⁰ M Roberts and M Wood, 'The strategic use of computerised information systems by a micro enterprise' (2001) 15(1/2) *Logistics Information Management* 115.

²¹ *Ibid*, 120.

A recent survey of Australian accountants found that practitioners believed that most of their clients benefited from the adoption of a CAS, but in their opinion these benefits come in the form of improved efficiency (improved accuracy and savings on accountant's time), rather than increased effectiveness.²² Additional evidence of managerial benefits derived as result of the adoption of computerised accounting by small business was found by a case study which investigated the costs and benefits of the introduction of GST in Australian small businesses: participants in the case study reported that adopting a CAS allowed them to have up-to-date records from which they could retrieve information "at the touch of a button".²³

2.3.2 Improvements to controls

Better control mechanisms will often be associated with the adoption of more sophisticated accounting systems. These improved controls will assist small businesses in three main areas of financial management: cash flow monitoring, stock control and credit management.

Even though business operations are the major sources of cash inflows and outflows, in many jurisdictions the requirements of the taxation system are also likely to have a significant influence on the cash flows of small firms. There is some evidence that the introduction of GST in Australia had a positive impact on the ability of some small business owner-managers to monitor their cash flows.²⁴

Sandford also expected that more stringent record keeping might lead to improved stock control.²⁵ This form of managerial benefits does not appear to be commonly perceived by business taxpayers;²⁶ however the widespread use of integrated accounting software incorporating a stock management function could facilitate the systematic monitoring of trading stock in small businesses.

In many respects, record keeping associated with tax compliance may also be an incentive to develop credit management routines. For example, a comprehensive and up-to-date record of purchases will allow the firm to claim discounts more frequently. Likewise, a well kept sales transaction ledger will make it easier to follow customer payments and reduce losses from bad debts. A majority of Australian SMEs surveyed in 2004 had in-house computer based record keeping systems and in almost all cases, a record of invoices was a feature of that system.²⁷

²² C Evans, S Carlon and D Massey, *Record Keeping: Its Effect on Tax Compliance* (CPA Australia, 2005), Appendix E.

²³ B Tran-Nam and J Glover, 'The GST recurrent compliance costs/ benefits of small business in Australia: A case study approach', (2004) 10(4) *New Zealand Journal of Taxation Law and Policy* 344.

²⁴ M Drever and J Hartcher, 'Issues relating to cash flow management for SMEs after the introduction of GST' (Paper presented at the Small Enterprise Association of Australia and New Zealand 16th Conference, Ballarat, 28 Sept–1 Oct 2003), 8.

²⁵ Sandford, Godwin, Hardwick and Butterworth, above n 8, 93.

²⁶ Only 8 per cent of UK business taxpayers, 12.6 per cent of New Zealand taxpayers and 15 per cent of Australian small business taxpayers agreed that improved stock control was a benefit of complying with GST. Sandford, Godwin, Hardwick and Butterworth, above n 8, 92; Sandford and Hasseldine, above n 9, 77; Evans, Ritchie, Tran-Nam and Walpole, above n 3, 133.

²⁷ Evans, Carlon and Massey, above n 22.

2.3.2 Savings on other costs

Where tax compliance encourages taxpayers to prepare their accounts internally or at least to do their own bookkeeping, there will be potential savings on accountancy and audit fees.²⁸ Strictly speaking, savings on other costs should not qualify as managerial benefits as they do not result in additional information that will lead to better business decisions. However, since the costs associated with hiring an external accountant are essentially related to the acquisition of accounting or managerial information, it can be contended that savings on these costs constitute a managerial benefit.

The essence of Sandford's proposition was that, where businesses keep their records in-house for tax compliance purposes, they will not have to hire an external accountant to prepare their financial reports, or at least they will save on accountant time. This proposition assumes that the entity would still prepare accounts either for external parties or for internal purposes even if it did not have to comply with tax laws. Prior research in Australia indicates that assistance with tax related matters was the main reason why a majority of small business taxpayers sought the services of an accountant.²⁹ In other words, only a small percentage of small businesses would use the service of an accountant if there was no tax compliance, and therefore there seems to be a limited number of cases where savings on accountancy fees would be realised as a result of tax compliance.

Nevertheless, savings may also be realised where business taxpayers are obtaining additional services for which they would otherwise have to pay, had they not hired an accountant for tax compliance reasons. Empirical evidence suggests that many accountants or other tax advisers were providing a variety of business services incidentally to tax related activities.³⁰ In Australia, accountants often assist their clients with compliance tasks for third parties other than the Australian Tax Office (ATO). Many accountants also offer general business advice, financial planning and business plans,³¹ and are an important source of support in the selection and installation of computer software as well as the training of internal staff.³²

Even where accounting practitioners charge their clients for these additional services, it is reasonable to expect that the fees would have been higher if the services had been provided separately from tax compliance activities. The main reason for this is that the accountant will be able to perform different tasks for the same client with increased productivity. Economies will be achieved because in most cases a common base of information (accounting records) is used to provide different services and also because the practitioner is familiar with the client's financial affairs.

2.4 Benefits derived from accounting information usage

Improvements to the AIS and to internal controls are likely to generate additional information for the manager. Yet, managerial benefits will only materialise for the business if that information is effectively used by the decision maker. In the extreme

²⁸Sandford, Godwin and Hardwick, above n 2.

²⁹Evans, Ritchie, Tran-Nam and Walpole, above n 3, 120.

³⁰CPA Australia, above n 11.

³¹J Breen, N Sciulli and C Calvert, 'The role of the external accountant in small firms' (2004) 12(1) *Small Enterprise Research* 5, 11.

³²Evans, Carlon and Massey, n 22.

situation where the AIS generates an abundance of information but that information is not used in business decisions, no benefit will result. Three factors are likely to influence the extent to which the business will derive managerial benefits from the improved accounting information: the quality of the information, the effectiveness of usage in decision making and the impact of business decisions on business performance.

2.4.1 Attributes of tax-based accounting information

Taxation reporting requirements represent by far the widest reporting imperative for small businesses in Australia and elsewhere. In many cases, this means that accounts are prepared for the specific purpose of calculating taxable income rather than for monitoring accounting profit.³³ In view of the fact that the rules for determining taxable income in Australia diverge significantly from generally accepted accounting principles (GAAP),³⁴ it is worth considering whether tax-based information meets the necessary attributes of managerial accounting information.

Managerial accounting information will only be useful if it results in the reduction of uncertainty for the decision maker. In order to fulfil this purpose, managerial accounting information must possess fundamental attributes such as reliability, relevance, timeliness, accuracy, sensitivity and conciseness.³⁵ Brown, Fuller and Kirby claimed that tax-based information may be useful for management purposes as the tax return provides the four elements (sales, net profit, total assets, and total equity) necessary for a basic ratio analysis.³⁶ The same authors also argued that tax based accounts are reliable enough when the preparer is a professional accountant or a competent tax professional.³⁷ However, findings from other research indicate that lenders may be reluctant to use tax based reports as a performance evaluation tool mainly because the information available from the tax return is often out of date. This reluctance would suggest that tax based information may not be appropriate for decision making.³⁸ Notwithstanding these differences between accounting and tax rules, 37.5 per cent of small businesses in Australia used their tax based financial statements for internal management purposes and 28 per cent for reporting to lenders and bankers.³⁹

³³ R McMahon, PG Gerhardy, K H Hall, D H Forsaith and A M J Stranger, 'Financial reporting imperatives and the financial management of smaller enterprises in Australia' (1994) 18(3) *Accounting Forum* 17; Evans, Ritchie, Tran-Nam and Walpole, above n 3.

³⁴ M. D'Ascenzo and A. England, 'The tax and accounting interface' (Paper presented at the 15th Australasian Tax Teachers Association Conference, Wollongong, 2003); J Freedman, 'Aligning taxable profits and accounting profits: accounting standards, legislators and judges.' (2004) 2(1) *eJournal of Tax Research* 71.

³⁵ G Nichols, 'On the nature of management information' (1969) 50(8) *Management Accounting* 9, 11.

³⁶ L Brown, F Fuller and F Kirby, 'DuPont and the IRS: Useful information from the tax return' (1999) 12(1) *The Journal of Bank Cost & Management Accounting* 57.

³⁷ *Ibid.*, 60.

³⁸ J Coker and R Hayes, 'Lenders' perceptions of income-tax-basis financial reporting by small business' (1992) 30(3) *Journal of Small Business Management* 66; A J Berry, S Faulkner, M Hughes and R Jarvis, 'Financial information, the banker and the small business' (1993) 25(2) *The British Accounting Review* 131.

³⁹ Evans, Ritchie, Tran-Nam and Walpole, above n 3, 116.

2.4.2 Owner-managers' perception of accounting information usefulness

The effectiveness of accounting information usage depends in large part on the perception that the decision maker has of the usefulness of that information. Even where accounting information possesses all the required qualities and attributes to make it useful, usage can only be effective if owner-managers recognise that the information will assist them in running their business.

The literature provides somewhat contradictory evidence about how small business owner-managers perceive accounting information. A few studies found that "accounting" or "financial reporting" was often seen by owner-managers as a necessary activity which had to be carried out in order to meet external requirements. In addition, many small business owners had a general perception that financial statements were costly to produce⁴⁰ and provided little useful information because they were often "ancient history".⁴¹

On the other hand, it seemed that this negative perception about accounting and financial reporting was balanced by the recognition that having a record keeping system was important,⁴² and that good records could help to manage the business.⁴³ Only one out of three small business owner-managers surveyed in 2005 considered that the time dedicated to record keeping exceeded the benefits.⁴⁴ However, owner-managers of the smallest firms generally felt more comfortable dealing with day-to-day cash based systems than with accrual based systems and intangible concepts such as net profit.⁴⁵

Research findings also suggest that perception about accounting and accounting information usage may be influenced by owner-managers characteristics such as education, knowledge of accounting or business experience.⁴⁶ It was found for example, that entrepreneurs with greater strategic awareness and greater desire for growth were more likely to use managerial information in their decision making.⁴⁷

⁴⁰ N Marriott and P Marriott, 'Professional accountants and the development of a management accounting service for the small firm: barriers and possibilities' (2000) 11(4) *Management Accounting Research* 475.

⁴¹ E Edwards, 'What financial problems?' (1992) 74(2) *Management Accounting* 54.

⁴² Ibid, Marriott and Marriott, above n 39, Evans, Ritchie, Tran-Nam and Walpole, above n 3.

⁴³ CPA Australia, above n 11, 17.

⁴⁴ Evans, Carlon and Massey, above n 22, 9.

⁴⁵ L. Perren, A. Berry and M. Partridge, 'The evolution of management information, control and decision making processes in small growth-orientated service sector businesses: exploratory lessons from four cases of success' (1998) 5(4) *Journal of Small Business and Enterprise Development* 351; R Jarvis, J Curran, J Kitching and G Lightfoot, 'The use of quantitative and qualitative criteria in the measurement of performance in small firms' (2000) 7(2) *Journal of Small Business and Enterprise Development* 123.

⁴⁶ N Lybaert, 'The information use in a SME: Its importance and some elements of influence' (1998) 10(2) *Small Business Economics* 171; M Simpson, N Tuck and S Bellamy, 'Small business success factors: the role of education and training' (2004) 46(8/9) *Education & Training* 481.

⁴⁷ Lybaert, *ibid*, 188.

2.4.3 Accounting information and business performance

Ultimately, accounting information usage will only be beneficial to the firm if it contributes to business performance. Small business performance is generally considered from the two aspects of business survival and growth.⁴⁸

There is only mixed evidence in the literature about the existence of a correlation between quality of record keeping and business survival. Although some authors found that poor record keeping and absence of financial controls were predictors of business failure,⁴⁹ the Productivity Commission in Australia reported that only 20 per cent of cases of bankruptcy could be traced to non-existent or poor quality accounting records.⁵⁰

The relationship between accounting practices and business growth is even more difficult to establish because of the impossibility of tracing growth to specific factors. A number of studies have suggested that a correlation may exist between certain management accounting practices and financial effectiveness;⁵¹ however other authors argue that the correlation may only be apparent as it may be mitigated by other factors such as business size.⁵²

Although there is no conclusive evidence so far to support the proposition that sophisticated accounting practices lead to improved business performance, there is at least some indication that poor record keeping and absence of finance management may be an important contributor to business failure. Even where accounting information is not contributing directly to business decisions, it can be argued that it can be useful to the business where it contributes to the decision makers' learning and appreciation of their business environment.⁵³

3. METHODOLOGY

General approach

This research adopted a mixed methodological design including a major quantitative phase followed by a minor qualitative phase. While the possibility of developing testable hypotheses justified a dominant quantitative component, it was believed that the investigation of some aspects of the topic would be better addressed by qualitative analysis. For instance, compliance with tax obligations may be generating forms of managerial benefits that have not been identified by previous research. Moreover, the examination of the subjective attributes of managerial benefits called for an in-depth

⁴⁸ Jarvis, Curran, Kitching and Lightfoot, above n 44; J Maes, L Sels and F Roodhooft, 'Modelling the link between management practices and financial performance. Evidence from small construction firms.' (2005) 25(1) *Small Business Economics* 17.

⁴⁹ R Lussier and S Pfeifer, 'A cross-national prediction model for business success' (2001) 39(3) *Journal of Small Business Management* 228; S Perry, 'The relationship between written business plans and the failure of small businesses in the US' (2001) 39(3) *Journal of Small Business Management* 201.

⁵⁰ Productivity Commission, *Business Failure and Change: An Australian Perspective* (2000) <<http://www.pc.gov.au/research/staffres/bfacaap/>> 30/06/2005.

⁵¹ M Zaman and D Gadenne, 'A model for best financial and cost accounting practices of SMEs: an exploratory study' (Central Queensland University, 2001).

⁵² R McMahon, 'Business growth and performance and the financial reporting practices of Australian manufacturing SMEs' (2001) 39(2) *Journal of Small Business Management* 152.

⁵³ T Mock, 'Concepts of information value and accounting' (1971) 46(4) *The Accounting Review* 765.

investigation of the phenomenon including “how” and “why” type questions best addressed by a qualitative design.⁵⁴

3.2 Quantitative phase: survey

The quantitative component of this research consisted in two contemporaneous mail surveys of two separate samples. One sample was drawn from a population of tax complying entities (TCEs) with less than 20 employees in the Capricornia region of Queensland. The other sample included business entities referred to as tax compliance free entities (TFEs) drawn from the population of small businesses in Norfolk Island, an external territory of Australia.

The list of entities used as the sample frame for TCEs was derived from the *Yellow Pages* directory of businesses. The initial list comprised over 6,000 business names, which after culling for double entries and out-of-frame entities was reduced to 3,425 entities. After listing businesses alphabetically, a random selection of one unit out of two resulted in a gross sample of 1,712 entities.

Small businesses in Norfolk Island were chosen as the sample frame for TFEs, as residents of Norfolk Island are exempt from income tax by virtue of a special exception.⁵⁵ In addition, Norfolk Island like all other Australian external territories falls outside the jurisdiction of Australia for GST purposes.⁵⁶ As a result of this special status, businesses on Norfolk Island were only exposed to custom duties and financial levies which did not require any specific record keeping.⁵⁷ The list of entities for the Norfolk Island survey was drawn from the *Yellow Pages* directory which after eliminating double entries and out-of frame-entities comprised 298 units.

A mailed questionnaire was used to collect data for both surveys. The survey forms were different for TCEs and TFEs as questions relating to tax compliance were only relevant to the first group. However, both forms had sections with identical questions which allowed the merger of the data into a common database.

The mail out of questionnaires was completed in November 2006, and resulted in 289 usable responses in the TCE sample and 65 in the TFE sample. The response rates obtained for both surveys were 23 and 22 per cent respectively;⁵⁸ this result fell within the expected range for postal surveys of this type.⁵⁹

As a relatively low response rate was achieved, it was considered important to check whether a non-response bias could have an impact on the results.⁶⁰ Testing for non-response bias was conducted using wave analysis. This method assumes that late

⁵⁴ J W Creswell, *Research Design: Qualitative, Quantitative and Mixed Approaches* (second ed, Sage, 2003), 14.

⁵⁵ ITAA 1936 (Cth), Div 1A, s 24B- 24P.

⁵⁶ ANTS (Goods and Services Tax) Act 1999 (Cth), s 195-1.

⁵⁷ A local GST at the rate 9 per cent was being adopted by the Norfolk Island government at the time of the survey. The new tax took effect on 1st April 2007 after the survey had been completed.

⁵⁸ These response rates were calculated on the basis of the net samples (after deduction of out frame responses) which contained 1,250 units and 291 units for TCEs and TFEs respectively.

⁵⁹ Rametse and Pope obtained a response rate of 27 per cent for their survey on the compliance cost of GST in 2002; Evans, Carlon and Massey scored a response rate of 28 per cent for their survey of record keeping in small businesses. Response rates for postal surveys relating to small businesses accounting were generally in the 17–24 per cent range.

⁶⁰ Creswell, above n 54, 160.

respondents are almost non-respondents and tests whether there are any differences between the responses collected from the first wave of respondents and the wave of late respondents.⁶¹ Three screening questions in the TCE survey and two in the TFE survey were selected for this purpose. Differences between early and late respondents were tested using an independent-sample t-test. No non-response bias was detected for either the TCE or the TFE surveys.

3.3 Qualitative phase: case study

The case study methodology appeared to be the best approach for the qualitative phase of this research as it allowed the collection of contextualised and meaningful information through semi-structured interviews.⁶² The case study component involved the interviewing of 12 participants, 6 from the TCE cohort and 6 from the TFE cohort, selected among respondents who had volunteered to participate in interviews. The case study used a protocol which included a set of questions and propositions, and an interview schedule as this was expected to reinforce the reliability and stability of the data collection procedure.⁶³

Case study participants from the TCE cohort were selected according to two criteria: business size and 'expected managerial expertise'; the latter criteria was evaluated on the basis of responses to the survey questions relating to level of education and knowledge of accounting. In the case of the TFE cohort, participants were selected according to business size and level of internal accounting information.

Interviews of TFE participants were conducted in April 2007 and interviews of TCE participants in early May 2007. Interviews were of a semi-structured form with open questions giving the interviewer the possibility of probing answers. Interviews lasted 1 hour to 90 minutes, and were generally conducted at the business premises giving the possibility of field observations.

Responses were recorded manually by the interviewer as it was anticipated that audio recording might have been seen as a threat to the confidentiality of responses by some participants. The data collected from the interviews was entered into *Nvivo*, a computer assisted qualitative data analysis system, which facilitated the coding of the data and provided enhanced rigour in the analysis.⁶⁴

3.4 Research questions

The research investigated a number of aspects of managerial benefits which led to the formulation several hypotheses and descriptive questions; however this article focuses on the perception of managerial benefits by owner-managers in TCEs. Since the realisation of managerial benefits by the business is linked to the perception of accounting information by owner-managers, the research also sought to explore and contrast how accounting information was perceived in TCEs and TFEs.

⁶¹ C Evans, *The Operating Costs of Taxing the Capital Gains of Individuals: A Comparative Study of Australia and the UK, with Particular Reference to the Compliance Costs of Certain Tax Design Features* (PhD Thesis, University of New South Wales, 2003), 134.

⁶² C Sandford, 'Improving the methodologies' in C Sandford (ed), *Tax Compliance Costs Measurement and Policy* (Fiscal Publications, 1995) 375, 382.

⁶³ RK Yin, *Case Study Research: Design and Methods, Applied Social Research Methods Series* (3rd ed, 2003), 36.

⁶⁴ H Marshall, 'What do we code when we code data?' (2002) 2(2) *Journal of Qualitative Research* 56.

The main hypothesis relating to the perception of managerial benefits by TCE owner-managers (Hypothesis H₄) was formulated as follows:⁶⁵

H₄: TCEs owner-managers perceive that they are deriving managerial benefits as a result of complying with their tax obligations.

As in the Evans et al 1995 research, this study tried to identify the specific managerial benefits of tax compliance which were perceived or “recognised” by small business owner-managers. Yet, even where discrete managerial benefits were identified, it was necessary to ascertain whether respondents held a different opinion about the overall proposition that their business derived managerial benefits as a result of complying with tax. It was therefore resolved to measure this broad perception about managerial benefits and contrast it with the recognition of discrete benefits. Finally, this study sought to test Sandford’s findings that perception about managerial benefits was influenced by the owner-manager’s personal characteristics.

The objectives of the research led to the formulation of three secondary hypotheses which were formulated as follows:

H_{4a}: Specific managerial benefits are recognised by a majority of TCE owner-managers.

H_{4b}: A majority of TCE owner-managers perceive that they are deriving managerial benefits from tax compliance.

H_{4c}: Personal characteristics of TCE owner-managers, such as education, knowledge of accounting and business experience influence their perception of managerial benefits.

Managerial benefit perception, particularly the influence that owner-manager personal characteristics may have on this perception, was also investigated during the case study phase of the research. The protocol underlying the case study interviewing included the following proposition:

Proposition: In TCEs, managerial benefits perception is dependent on the level of education of the decision maker.

Finally in addition to the above hypotheses, the survey questionnaire incorporated a number of descriptive questions designed to collect information relating to the perception of accounting information by decision makers in both TCEs and TFEs.

⁶⁵ The research project included 6 hypotheses in total, numbered H₁ to H₆. For a complete list of research hypotheses see P Lignier, 'The Managerial Benefits of Tax Compliance: An Empirical Study of Small Businesses in Regional Australia' in M Walpole and C Evans (eds), *Tax Administration: Safe Harbours and New Horizons* (Fiscal Publications, 2008) 349, 358.

4. RESULTS

4.1 Perception of managerial benefits by owner-managers

4.1.1 Recognition of specific types of managerial benefits of tax compliance

Recognition of specific types of managerial benefits by owner-managers was measured by including attitudinal questions in the survey questionnaire. Respondents were invited to indicate their degree of agreement (rated along a five point Likert scale) with statements about six specific managerial benefits of tax compliance. The managerial benefits identified in the questionnaire were: improvement of record keeping; better knowledge of financial position; better knowledge of profitability; better monitoring of cash flows; better monitoring of trading stock; and better monitoring of debtors and creditors. A managerial benefit was deemed to be recognised where the respondent either agreed or strongly agreed with the statement.

The results (Table 2) indicate that four out of six types of managerial benefits were recognised by a majority of respondents. Thus, Hypothesis H_{4a} was generally supported by the survey data. Nearly three quarters of all survey respondents in the TCE group agreed that tax compliance improved the quality of their record keeping, about two thirds that they had a better knowledge of their financial position and profitability, and more than half that it helped them to monitor their cash flows. Almost 50 per cent of respondents agreed that tax compliance assisted them with monitoring their debtors and creditors, but less than a third recognised a managerial benefit in the form of better monitoring of trading stocks.

TABLE 2: PERCEPTION OF MANAGERIAL BENEFITS BY SMALL AUSTRALIAN BUSINESS OWNER-MANAGERS: COMPARISON BETWEEN STUDIES

Types of managerial benefits:	This study 2006: Percentage of respondents who agreed that this was a benefit of tax compliance	Evans et al 1995: * Percentage of small business taxpayers who agreed that this was a benefit of tax compliance
Better record keeping	72	50
Better knowledge of financial position.	66	37
Better knowledge of profitability	63	37
Better monitoring of cash flows	58	34
Better monitoring of trading stock	31	15
Better monitoring of debtors and creditors	47	N/A

*The Evans et al study results are for the small business taxpayer category.

Sources: Evans et al 1996, Tables 7.68 to 7.71.

The outcome of this study was compared with the findings of the survey of (small) business taxpayers by Evans et al in 1995 which included similar questions (Table 2). The comparison shows that the percentages of recognition were much higher (with an increase of 30 to 50 per cent) in the present study than in the Evans et al study for all types of managerial benefits. Despite this increase in perception, the distribution of percentages across the different types of managerial benefits follows roughly the same pattern: the improvement to records is the most frequently recognised benefit, while

improvement to stock monitoring is the least recognised, with the other benefits (except improvement to credit management which was not measured by the Evans et al study) having roughly the same percentage of recognition.

The higher level of managerial benefit recognition reported by the current study might be explained by the fact that at the time of the Evans et al survey, businesses did not have to comply with GST. As discussed earlier, empirical evidence from the UK suggests that compliance with consumption taxes like VAT or GST is likely to be a major source of managerial benefits.

Nevertheless, some of the difference in the results might also be attributable to the different sampling methods used for the two surveys. Evans et al surveyed a population of taxpayers across Australia, while this study focused on the small business population of a particular regional area. Differences in demographic characteristics (age of operators, business size and business age) between the sample of TCEs used in this study and the overall population of Australian small businesses may also have had an effect on the recognition of managerial benefits.

The low percentage of respondents who perceived that tax compliance improved their stock monitoring confirmed previous findings by Sandford et al in the UK and New Zealand that few business taxpayers recognised this specific form of managerial benefit.⁶⁶

4.1.2 Analysis by business size and activity sector

Small businesses constitute a heterogeneous group comprising entities ranging from micro-businesses with no employee to firms with 5 employees or more where the need for accounting information can be expected to be greater.⁶⁷ Similarly, as shown by previous research undertaken by Sandford et al, the perception of managerial benefits might also differ across activity sectors.

An analysis by business size (Table 3) shows that the percentage of owner-managers who perceived that tax compliance improved record keeping and financial knowledge varied only slightly across business size categories. The differences were more pronounced for managerial benefits related to improved controls: the level of recognition was much lower for micro-businesses (with no employee) businesses than for very small businesses (1 to 4 employees) and small businesses (5 employees and over). This outcome reflects the fact that internal management controls would be absent or undeveloped in most micro-businesses and therefore would be unaffected by tax compliance.⁶⁸

⁶⁶ See above n 26.

⁶⁷ D J Storey, *Understanding the Small Business Sector* (Thomson, 1994); M Gorton, 'Use of financial management techniques in the U.K.-based small and medium sized enterprises: Empirical research findings' (1999) 12(1) *Journal of Financial Management and Analysis* 56.

⁶⁸ The classification "micro-business", "very small business" and "small business" based on the number of employees was used by the Department of Trade and Industry (disbanded in 2007) in the UK. M Peel, N Wilson and C Howorth, 'Late payment and credit management in the small firm sector: Some empirical evidence' (2000) 18(2) *International Small Business Journal* 17, 21.

TABLE 3: PERCENTAGE OF RESPONDENTS WHO RECOGNISED SPECIFIC TYPES OF MANAGERIAL BENEFITS BY TCEs; BREAKDOWN BY BUSINESS SIZE CATEGORY

Managerial Benefits:	No employee (n= 46)	1-4 employees (n=116)	≥ 5 employees (n=119)	All TCEs (n=281)
Better record keeping	69	73	73	72
Better knowledge of financial position	61	65	68	66
Better knowledge of profitability	62	63	64	63
Better cash flow monitoring	43	61	61	58
Better monitoring of trading stocks	23	30	35	31
Better monitoring of debtors and creditors	32	48	50	47

*The percentage is calculated as the percentage of respondents who agreed or strongly agreed to the statements about specific managerial benefits

The analysis by activity sector (Table 4) reveals significant differences in managerial benefits perception between industry sectors, confirming earlier findings by Sandford et al.⁶⁹ Owner-managers of firms in the business services and personal services sectors perceived more managerial benefits from tax compliance more often, than those operating in the wholesale or in the tourism sectors. There is some overlap with the conclusions from the Sandford et al study which also found a low level of managerial benefit recognition in the wholesale sector. However, caution must be exercised when interpreting these results because of the small number of observations in some statistical cells. A combination of factors, such as nature of operations, size of the business, personal characteristics of the owner-managers could explain these variations in managerial benefit perception across activity sectors. Further research and further analysis are necessary to identify the reasons behind these differences.

TABLE 4: PERCENTAGE* OF RESPONDENTS WHO RECOGNISED SPECIFIC MANAGERIAL BENEFITS BY TCEs; BREAKDOWN BY ACTIVITY SECTOR

Managerial benefit:	Manufacturing & mining (18)	Construction (42)	Wholesale (11)	Retail (65)	Hospitality and tourism (32)	Finance & business services (46)	Personal services (16)	Other (36)	All sectors (283)
Better record keeping	73	74	60	70	55	85	81	69	72
Better knowledge of financial	72	60	60	67	60	76	69	69	66

⁶⁹ See Table 1 and discussion in the literature review section.

position									
Better knowledge of profitability	71	57	50	69	57	71	63	67	63
Better cash flow monitoring	72	56	44	57	56	58	53	64	58
Better monitoring of trading stocks	44	24	30	38	24	33	36	22	31
Better monitoring of debtors and creditors	72	44	40	47	44	49	23	50	47

*The percentage is calculated as the percentage of respondents who agreed or strongly agreed to the statements about specific managerial benefits.

4.1.3 General perception about benefits of tax compliance

Survey respondents in the TCE sample were invited to give their opinion (measured on a five point Likert scale) in relation to the following statement:

“Complying with tax obligations has benefits that compensate some of the costs”.

It is important to emphasise that the question referred to “benefits” of tax compliance and not just to “managerial benefits”. This choice of terminology was deliberate as it was believed that some respondents might have been confused by the use of the terminology “managerial benefits”. However, since the question was set in the context of the incidence of tax compliance on accounting and record keeping practices, it was expected that “benefits” would be understood by respondents as referring to managerial benefits, rather than cash flow benefits or tax deductibility benefits.

The results (Table 5) show that the percentage of respondents who agreed with the statement was higher than the percentage of those who disagreed.

TABLE 5: OWNER-MANAGERS’ PERCEPTION ABOUT BENEFITS OF TAX COMPLIANCE*

Opinion:	No employee (n=44)	1-4 employees (n=109)	≥ 5 employees (n=120)	All TCEs (n=273)
Agree that business derived benefits from tax compliance	48	31	45	40
Disagree that business derived benefits from tax compliance	30	36	22	29
Neutral or had no opinion	23	34	33	32
Total†	100	100	100	100

* Measured by the percentage of all TCE respondents who held a particular opinion about the following statement: “complying with tax has benefits that compensate some of the costs incurred by my business”.

†Totals may not be equal to 100% because of rounding.

About one third of respondents were neutral or had no opinion. However, since there were only 40 per cent of respondents who perceived benefits in tax compliance, Hypothesis H_{4b} was not supported.

A close examination of the results reveals noticeable variations in the percentages across size categories. More than 48 per cent of TCEs with no employees perceived that their business derived benefits from tax compliance, while the proportion was only 31 per cent in the “1 to 4 employees” category. The “5 employees and over” category has the lowest percentage of respondents who were of the opinion that no benefits were derived from tax compliance.

Prima facie, these results appear to contradict the findings for Hypothesis H_{4a} which showed that almost three quarters of small business owner-managers recognised at least one specific type of managerial benefit, and possibly over 60 per cent recognised at least three. In addition, the percentage of respondents perceiving that benefits were derived from tax compliance appeared to be higher among non-employing entities, while the level of recognition of specific managerial benefits was generally lower in that category.

In summary, there appears to be some ambivalence regarding the perception of managerial benefits by small business owner-managers. While a significant proportion of respondents seemed ready to recognise specific improvements to their accounting system as a result of tax compliance, only a minority acknowledge the fact that their business derived any benefit from tax compliance activities.

4.2 Influence of personal characteristics on managerial benefit perception

4.2.1 Analysis of survey data

The relationship between managerial benefit perception and the personal characteristics of owner-manager was statistically tested using quantitative data from the survey. Three personal characteristics expected to influence managerial benefit perception were selected for the purpose of testing Hypothesis H_{4c}: “Level of education” “Knowledge of accounting” and “Business experience”.

In view of the fact that attitudes of respondents towards specific types of benefits of tax compliance were not necessarily consistent with their overall perception about benefits of tax compliance, two separate models were developed to test the relationship between personal characteristics and managerial benefit perception. In the first model, the dependent variable was “Number of managerial benefits recognised”, in the second model the dependent variable was “perception about benefits of tax compliance”.⁷⁰

The results for the testing of the first model (Table 6) revealed significant relationships between two variables representing personal characteristics “Level of education” ($p < 0.01$) and “Knowledge of accounting” ($p < 0.05$) and the number of managerial benefits perceived. No significant relationship was found with “Business experience”. Therefore, Hypothesis H_{4c} seemed to be supported by the survey data when managerial benefit perception was measured by the number of managerial benefits recognised. In other words, the number of managerial benefits recognised seemed to be influenced by the level of education and the accounting knowledge of the owner-manager. Surprisingly, “Level of education” and “Number of benefits

⁷⁰ In the General Linear Model procedure used for testing this relationship, the independent variables (EDUC, ACKNOW, BUSEXP) were treated as covariate in the model, i.e. they were assumed to have a combined effect on the dependent variable.

recognised” were negatively correlated (Pearson $r = -0.154$); this can be interpreted as meaning that owner-managers with a lower level of education were more likely to recognise specific managerial benefits than those who were “better” educated. “Knowledge of accounting” and “Number of managerial benefits recognised” were positively but weakly correlated (Pearson $r = 0.09$).

TABLE 6: RELATIONSHIP BETWEEN PERSONAL CHARACTERISTICS OF THE OWNER-MANAGER AND NUMBER OF MANAGERIAL BENEFITS RECOGNISED

Independent variable	Level of education	Knowledge of accounting	Business experience
Dependent variable:			
Number of managerial benefits recognised	F=8.526**	F=3.924*	F=0.376

Degrees of significance: * $p < 0.05$, ** $p < 0.01$.

The testing results for the second model (Table 7) revealed a significant relationship between “Knowledge of accounting” and “perception about benefits of tax compliance” ($p < 0.01$). However, no significant relationship was found with either “Level of education” or “business experience”. Therefore Hypothesis H_{4c} was also supported by the survey data when the dependent variable represented the perception about benefits from tax compliance. In other words, the overall perception about whether the business derived benefits from tax compliance was influenced by the owner-manager’s knowledge of accounting. Since the two variables were positively correlated (Pearson $r = 0.178$), owner-managers with better knowledge of accounting were more likely to perceive that tax compliance generated benefits for their business.

TABLE 7: RELATIONSHIP BETWEEN PERSONAL CHARACTERISTICS OF THE OWNER-MANAGER AND PERCEPTION ABOUT BENEFITS OF TAX COMPLIANCE

Independent variable	Level of education	Knowledge of accounting	Business experience
Dependent variable:			
Perception about benefits of tax compliance	F=3.227	F=8.910**	F=0.234

Degrees of significance: ** $p < 0.01$.

4.2.2 Analysis of interview data

The influence of personal characteristics on managerial benefits perception was also examined during the case study phase of the research. Four questions in the interview schedule used for TCE participants aimed to collect data about their perception of managerial benefits. The first two questions asked participants to describe the benefits (if any) of having a CAS, and the benefits (if any) of having an external accountant, which were seen as being indirect benefits of tax compliance. In the last part of the interview, participants were invited to identify the benefits (if any) for their business of complying with GST and the benefits (if any) of preparing an income tax return?

As described in the methodology section, the expected level of managerial expertise was one of the two selection criteria for TCE participants. “Expected level of managerial expertise” was rated either high or low on the basis of two personal characteristics measured by the survey questionnaire: “Knowledge of accounting” and “Level of education”. The six selected TCE participants included three participants with an expected low level of managerial expertise and three with an expected high level.

In order to facilitate the analysis of the relationship between expected level of managerial expertise and managerial benefit perception, the interview data was coded into a relational matrix (Table 8).⁷¹ The figure in each cell in the matrix reports the number of coded references relating to a question about managerial benefits. This number is used as a proxy measure for the level of perception of managerial benefits as answers to these questions would only be recorded where participants *did* identify managerial benefits.

TABLE 8: MATRIX OF RELATIONSHIPS BETWEEN EXPECTED LEVEL OF MANAGERIAL EXPERTISE AND MANAGERIAL BENEFIT PERCEPTION; TOTAL NUMBER OF CODING REFERENCES*

	Participants with expected low level of expertise	Participants with expected high level of expertise
Managerial benefits of using a CAS	6	3
Managerial benefits of having an external accountant	11	9
Managerial benefits of complying with GST	4	4
Managerial benefits of complying with income tax	4	6
Total number of references	25	22

* A coding reference corresponds to an identifiable answer (other than Yes or No) to a question about managerial benefits.

Overall, 25 references coded to managerial benefits were reported for participants with expected low managerial expertise, whereas 22 were reported for participants with expected high managerial expertise. In other words, it seemed that managerial benefits were more often identified by participants with lower managerial expertise than by those with higher expertise. However, further analysis of the numbers of coded references in the matrix revealed that the difference in the level of perception between the two groups of participants varied depending on the type of managerial benefits.

The benefits derived from using a CAS seemed to be more frequently perceived by owner-managers in the lower expertise category. This outcome was consistent with the expectation that the increased efficiency and the effectiveness brought by computerisation would be more easily perceived where the owner-manager felt unable

⁷¹ Matrix coding was a feature of the *Nvivo* software.

to perform the same activities without the assistance of a computer. The benefits of having an external accountant were also more frequently reported by the 'low expertise' group; however the difference was too small to be interpreted as meaningful.

The analysis of answers to direct questions about benefits of complying with GST and of preparing an income tax return did not reveal meaningful differences between the two groups.

In summary, the hypothesis that managerial benefit perception is influenced by the personal characteristics of owner-managers received some support from the analysis of the survey data. There is some indication that the perception of managerial benefits is negatively correlated with the owner-manager's level of education but positively correlated with her or his knowledge of accounting. The analysis of the qualitative interview data appears to confirm the hypothesis that the managerial benefits associated with the use of a CAS may be more readily recognised by owner-manager who have less managerial expertise.

4.3 Owner-managers' perception about accounting information

4.3.1 Relevance to managerial benefits

It was argued earlier in this article that the realisation of managerial benefits by the firm will largely depend on how accounting information generated by the AIS or the external accountant was perceived by the owner-manager. Benefits will only arise if the information is perceived as being useful and of good quality, and if it is used in business decisions.

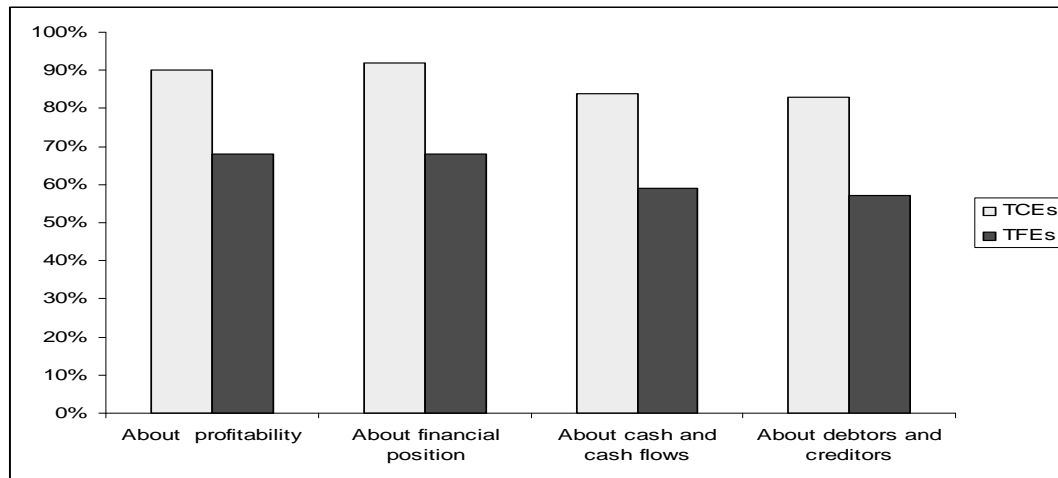
The perception that small business owner-managers have about accounting information was examined from three perspectives. Firstly, data relating to perception about accounting information quality and usefulness was collected by the survey and during the interviews. Secondly, the survey examined how owner-managers perceived the importance of accounting information. Thirdly survey respondents were asked to assign a value to the accounting information which they considered useful to the management of their business.

The joint investigation of entities free of tax compliance and entities exposed to the normal obligations imposed the Australian tax system, also gave the possibility of finding out whether tax compliance obligations had an effect on the perception of accounting information.

4.3.2 How is the reliability and usefulness of accounting information rated by owner-managers?

The analysis of survey data provided information on how TFE and TCE respondents rated the reliability and usefulness of accounting information with respect to different aspects of financial management (Figure 1).⁷²

⁷² Only entities with 4 employees or less were included in this report to eliminate the distortion that could have been brought in by the difference in size distribution between the two samples.

FIGURE 1: PERCENTAGE OF TCE AND TFE BELIEVING THAT THEIR RECORD PROVIDED RELIABLE AND USEFUL INFORMATION

The results reveal that the vast majority of respondents considered that their accounting records provided them with reliable and useful information.⁷³ However, the reliability and usefulness was generally rated more highly by TCE respondents than by TFE respondents.

Interviews also investigated owner-managers' perception about the quality of the accounting information produced by their AIS. Interviewees were invited to self-evaluate the reliability, accuracy and timeliness of the accounting information available to them. All but one participant considered that the information was very or reasonably reliable and quite accurate. About half of all interviewees thought that the information was not always timely; however most participants did not see timeliness as a critical attribute of information quality in comparison with reliability and accuracy. The emphasis on accuracy and timeliness seemed to be stronger in the case of TCEs than for TFEs as illustrated by the following comments collected during the interviews:

"The information is reliable and accurate and available when we need it."
TCE participant A

"Overall, we are satisfied with the quality of the accounts. I like to have my accounts ready by the first week of the following month so that I have a fair idea of where we're at." TCE Participant F

"Reliability is the most important. Precision and timeliness are not critical."
TFE Participant H

"I do not have high expectations of my accounts. I am happy to have the accounts as they are as they are good enough for the business." TFE participant J

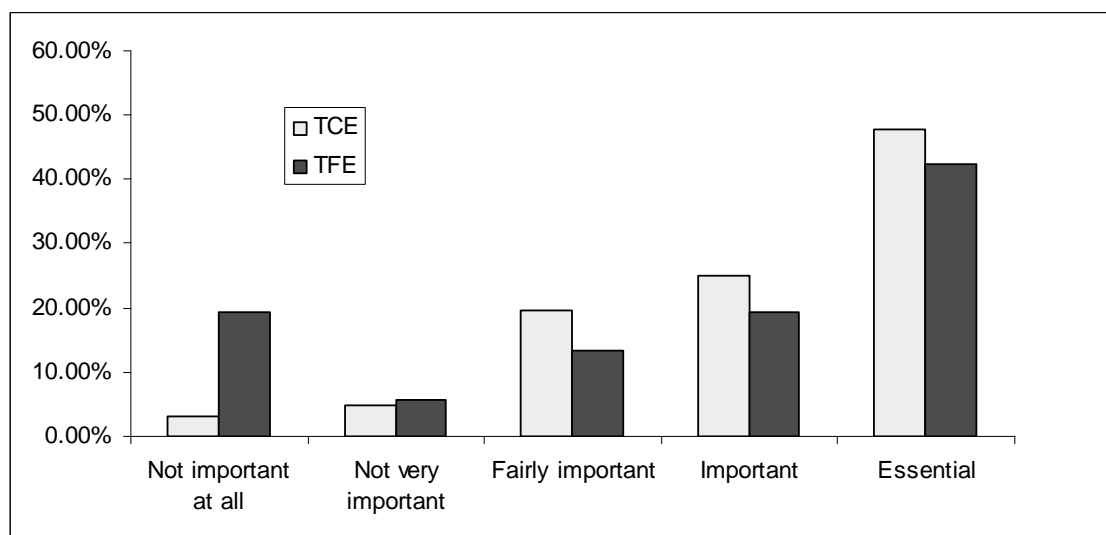
⁷³ Both survey forms included an identical question which aimed to measure respondents' attitudes regarding the reliability and the usefulness of the information provided by their accounting records.

One could not make any inference about the actual quality of accounting information from this perception as very few entities either on the mainland or in Norfolk Island had their accounts audited. Yet, it seems that in the case of TCEs, the fact that accounting data was also used for tax reporting purposes was an incentive to ensure that records were accurate and up-to-date.

4.3.3 How important is accounting information to owner-managers?

Survey respondents were also invited to rate the importance of accounting (financial) information for running their business. Business size was expected to be one of the factors influencing this perception. Since the TCE sample contained a higher proportion of entities in the “5-19 employees” category, the comparison was limited to the “4 employees or less” cohort in both samples in order to avoid any bias in the interpretation.

FIGURE 2: PERCEPTION ABOUT THE IMPORTANCE OF ACCOUNTING INFORMATION BY TCEs AND TFEs WITH 4 EMPLOYEES OR LESS



The results reveal that overall a majority of respondents in both TCEs and TFEs considered accounting information as “important” or “essential” (Figure 2). There is also an indication that TFEs did not rate the importance of accounting information as highly as TCE: 24 per cent of TFE respondents considered that accounting information was not very important or not important at all, while less than 10 per cent of TCE respondents shared the same opinion. A Chi-square test confirmed that the difference in the distribution of ratings was statistically significant ($p < 0.01$).

The importance of accounting information for TCE owner-managers was confirmed during the interviews when most participants declared that they would still prepare accounting reports even if they did not have to comply with tax. However, some participants would not incur the expense of an external accountant:

“If we didn’t have tax, keeping records of our debtors would be the only thing I would do. I would prepare accounts in-house only; [...] there would be no point in having an accountant.” TCE participant A

“If we didn’t have tax, I would probably do it all [the accounting] in house. But I admit that I would be a bit concerned about the accuracy of the records as nobody would check the work. At least the accountant does.” TCE Participant E

4.3.4 Perceived value of accounting information in TCEs

Although many TCE owner-managers regard the cost of preparing accounting information as essentially tax compliance costs, they would still be prepared to incur at least some of the costs involved if they saw any value in the information regardless of whether tax compliance obligations existed. The following question was included in the TCE questionnaire with the purpose of measuring the perceived value of accounting information generated as a result of tax imposed record keeping:

“If you did not have to comply with tax obligations, would you be prepared to incur some of the costs to obtain important financial information that would help you run your business. If so, how much would you be prepared to spend per financial year?”

The distribution of valuation per business size categories is shown in Table 9.

TABLE 9: AMOUNT TCEs WOULD BE PREPARED TO PAY TO OBTAIN ACCOUNTING INFORMATION IF THERE WERE NO TAX COMPLIANCE OBLIGATIONS (IN PERCENTAGE)

Amount spent per year	No employee (n= 49)	1-4 employees (n=115)	≥ 5 employee (n=125)	All TCEs (n=289)
Nothing	41	35	21	30
Less than \$500	16	25	10	17
Between \$500 and \$1,000	18	11	11	13
Between \$1,000 and \$2,500	20	18	20	19
Between \$2,500 and \$5,000	2	7	19	11
More than \$5,000	2	4	19	10
Total*	100	100	100	100

* Percentages may not add up to 100 because of rounding

Overall, 70 per cent of TCE respondents stated that they would be prepared to incur costs to obtain accounting information which they would use for internal management purposes. This result may be interpreted as meaning that 70 per cent of small business taxpayers assigned a positive value to the accounting information generated by their record keeping system.⁷⁴ The average amount that a firm was prepared to spend was \$2,017.

A breakdown of responses by business size category reveals that the perception of the value of accounting information was largely influenced by business size. More than 40 per cent of micro-businesses assumedly saw no value in obtaining accounting information, on the other hand almost 80 per cent of small businesses with 5 employees or more were prepared to incur costs to obtain useful managerial

⁷⁴ It is assumed that the amount owner-managers would be prepared to pay for accounting information where there was no tax compliance represents the value they assign to the useful accounting information they are obtaining now.

accounting information with nearly 40 per cent prepared to spend more than \$2,500 per year.

5. DISCUSSION

5.1.1 *Research objectives*

As stated in the introduction of this article, this study had the broad aim of filling the knowledge gap on managerial benefits of tax compliance. This article discusses how managerial benefits are perceived by owner-managers. Among its different objectives, the research attempted to find answers to four broad issues relating to the perception of managerial benefits. Firstly, it sought to identify which specific types of managerial benefits of tax compliance were recognised by small business owner-managers. Secondly, it sought to establish whether overall small business taxpayers believed they were deriving managerial benefits from tax compliance and if so, which tax requirement(s) they thought was (were) generating benefits. Thirdly, it sought to determine whether discrepancies existed between benefits actually realised and benefits perceived. Fourthly, it sought to investigate whether some personal attributes of owner-managers influenced the level of perception of managerial benefits.

5.1.2 *Recognition of specific types of managerial benefits and overall perception about benefits of tax compliance*

The analysis of survey responses shows that a significant majority of respondents agreed or strongly agreed that tax compliance was improving their record keeping and their knowledge of their financial affairs (Hypothesis H_{4a}). These findings largely confirm the outcomes of a recent study carried out by CPA Australia. The improvements to credit management and cash flow monitoring were recognised by roughly one half of all respondents with a lower degree of recognition among owner-managers of entities with no employees. Improvements to stock control were only recognised by about 30 per cent of respondents.

These outcomes reveal a significant increase in the recognition of specific types of managerial benefits compared to what they were 12 years previously, at a time when small businesses in Australia were exposed to income tax obligations, but not to GST obligations. Indeed, data collected during interviews suggest that the introduction of GST played a part in the increase of managerial benefit perception. This again would confirm Sandford's prediction that this particular tax (or VAT, its British equivalent) was likely to generate significant managerial benefits for small businesses, because it compels owner-managers to keep detailed and up-to-date records of their transactions. It also appears that the requirement of regular reporting imposed by GST legislation, gives many small businesses the opportunity to prepare a straightforward internal report providing them with a snapshot of their financial situation. In contrast, evidence collected during the case study suggests that the end-of-year financial report that accompanies the tax return does not receive a lot of attention from owner-managers because it is perceived to be out of date.

Although specific types of managerial benefits were recognised by a significant proportion of small business taxpayers, barely half of all respondents perceived that their business derived benefits from complying with their tax obligations (Hypothesis H_{4b}). This apparent inconsistency between recognition of discrete benefits and overall perception about tax compliance benefits could be explained by owner-managers'

reluctance to accept the idea that *any* benefit may arise out of tax compliance. There was also the possibility that, while owner-managers recognised the fact that their record keeping and knowledge of their financial affairs had improved since they had to report for tax (mainly GST), they did not readily attribute these improvements to tax compliance. Finally, improvements to accounting records may not be seen as a *benefit*, mainly because many owner-managers saw record keeping as a necessity (of tax compliance) rather than an advantage for the management of their business.

However, the latter argument could be refuted on the ground that more than 80 per cent of respondents to the TCE survey stated that they would still keep accounting records even if tax compliance obligations were removed. This is supported by the findings that more than 70 per cent of respondents indicated that they would be prepared to incur cost to acquire useful accounting information. It also emerged from survey responses that besides tax calculation, accounting information was often used for internal management purposes.

5.1.3 Managerial benefits perceived and realised

Sandford anticipated that discrepancies might exist between perception and realisation of managerial benefits. Some benefits might be perceived but not realised, and conversely some actual managerial benefits might not be perceived. Besides managerial benefit perception, this study also investigated the actual realisation of managerial benefits by TCEs.⁷⁵ The comparison between the actual realisation of specific managerial benefits and their perception by owner managers is presented in Table 10.

TABLE 10: REALISATION OF SPECIFIC TYPES OF MANAGERIAL BENEFITS AND PERCEPTION BY OWNER-MANAGERS

	Actual Benefit	Perceived benefit
Improvements to record keeping system	Strong evidence	Strong perception
Improvements to cash flow monitoring	Some evidence	Moderate perception
Improvements to stock control	No evidence	Weak perception
Improvements to credit management	Some evidence	Moderate perception
Savings on accountant costs	Some evidence	Weak perception
Better knowledge of financial affairs	Strong evidence	Strong perception
Better decision making	Some evidence	Weak perception

By and large, owner-managers recognised the specific types of managerial benefits actually realised by their businesses. Similarly, benefits that were perceived by a majority of owner-managers seemed to be actually realised. The two areas where perception diverged from actual realisation of managerial benefits related to savings on accountant costs and improvements to decision making.

⁷⁵ For more details about the findings on actual benefits see Lignier, above n 65.

Although the relationship with the accountant was valued by many owner-managers, this was not generally perceived as a managerial benefit of tax compliance, possibly because the benefits were obscured by the fact that the main reason for hiring an accountant and paying accountancy fees was taxation. The second area of discrepancy was related to improvements in decision making. Survey responses seemed to indicate that owner-managers in TCEs were using accounting information more effectively than their counterparts in TFEs, but interviews showed that owner-managers in both TCEs and TFEs believed most business decisions were made without the support of accounting information.

However, it must be noted that while many interviewees claimed that they did not use accounting reports when making decision, they often added the comment “it is all in my head”. This would suggest that even though it was impossible to link decision making with specific accounting reports, the availability of accounting information was clearly contributing to the owner-manager’s knowledge about the business.

5.1.4 Influence of owner-manager characteristics

In their 1981 VAT study, Sandford et al only considered the influence of the accounting training of small business owner-managers on managerial benefits perception. The outcome of their investigation was summarised as follows:⁷⁶

“The more the training the less the benefit perceived.”

The authors explained this finding by the fact that the impact of the introduction of VAT would be higher on owner-managers whose record keeping was initially the worst than on those who were already qualified accountants.⁷⁷

The analysis of quantitative and qualitative data collected by this research suggests that managerial benefits perception may be influenced by the owner-manager’s knowledge of accounting, but also by the level of basic education. While it was found that owner-managers with a lower level of basic education tended to perceive more managerial benefits than those with more advanced school education, it appears that knowledge of accounting was positively related with managerial benefit perception. In other words, the more accounting training the owner-manager had received, the more managerial benefits were perceived.

The computation of correlation coefficients shows that the positive relationship between “Knowledge of accounting” and “Managerial benefit perception” was strong and significant while the negative relationship between “Level of education” and “Managerial benefit perception” was not statistically significant.⁷⁸ This would indicate that accounting knowledge was a far more important predictor of managerial benefit perception than the basic level of education.

⁷⁶ Sandford, Godwin, Hardwick and Butterworth, above n 8, 95.

⁷⁷ Ibid.

⁷⁸ Pearson r between “Knowledge of accounting” and “Managerial benefit perception” was 0.178 ($p < .01$). Pearson r between “Level of education” and “Managerial benefit perception” was -0.080 (not significant). These coefficients measured the individual relationships between each factor and the dependent variable whereas the model described in Section 4.2.1 assumes a combined effect of the factors.

Factors such as time lag, cultural factors and the fact that the Sandford study only considered the impact of VAT could explain the discrepancy between the findings. Bearing in mind that the number of observations in this research was relatively small, there is clearly a need for more investigation of this aspect of managerial benefits.

6. CONCLUSION

Although some evidence about managerial benefits had been collected by earlier research, the findings of this study are important as it is the first research that systematically investigated the managerial benefits of tax compliance in small businesses and their perception by owner-managers. The major outcome of this research in relation to managerial benefit perception is that a large majority of small business taxpayers believed that, as a result of tax compliance requirements their record keeping had improved, and that they had a better knowledge of their financial affairs. Comparisons with the findings of previous research undertaken in Australia before the introduction of GST reveal an increased perception of these managerial benefits. Data collected from interviews also confirm that compliance with that particular tax was seen as a major incentive to upgrade the quality of accounting records. In spite of this increased awareness of specific benefits of tax compliance, only a minority of owner-managers perceived that despite the costs incurred, compliance with tax obligations generated some benefits for their business.

As in all research, this study has strengths as well as limitations that must be acknowledged.

The major limitation relates to the representativeness of the sample of small business chosen for the survey. Although the choice of a narrow sampling frame for the population of TCEs allowed useful comparisons with the TFE sample, it necessarily limited the possibility of generalisation to the general population of Australian small businesses.

Another limitation was the small size of the sample of useful responses which did not allow data analyses at sub-sample level to produce significant results. This was particularly the case when investigating the influence of personal characteristics on managerial benefit perception.

The findings of this research need to be confirmed by a large scale study which would include a wider cross-section of small businesses drawn from different areas of Australia. Such a large scale research would allow the investigation of the influence of business size and activity sector on managerial benefit perception. There is also a need of further investigation of the influence of personal characteristics on managerial perception since the findings of this research were not fully conclusive and seemed to deviate from the conclusions established by previous research. Finally, additional research is necessary to explore the extent to which tax based information is effectively used by small business owner-managers in decision making.