

Management Accounting in the Malaysian Public Sector: Analysing the Adoption of Financial and Risk Analysis

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Abstract

Purpose: This paper aimed to analyse the introduction of financial analysis and risk management for internal decision-making in the Malaysian public sector and determine the limitations/ gaps as well as areas for improvement.

Design/ Methodology/ Approach: The paper was based on the analysis of documents, government circulars and guidelines pertaining to financial statement analysis and risk management, including interviews with officers at two ministries.

Findings: Policy and guidelines were established for financial analysis and risk management in the Malaysian public sector. However, given the complexities and unique context of each ministry, there is a need for clearer and more context-specific guidelines regarding financial and risk analysis. It is also crucial that the conducted financial and risk analyses are relevant and meet the specific needs of public sector entities. The usefulness of information relies on a comprehensive understanding of the context and types of decision needed. Therefore, fostering collaboration and engagement between the management accountant unit and other key units within a ministry is crucial to conduct an effective financial and risk analysis.

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Originality/ Value: This study offered insights into the financial and risk analysis reporting framework and its implementation in the Malaysian public sector.

Keywords: Management accounting, public sector accounting, financial statement analysis, risk management, public sector accountants.

1.0 Introduction

Public sector organisations (PSOs) are currently operating in an era of broadening and blurring organisational boundaries, increased citizen demand for accountability and better governance, rapid technological advancement, and continual uncertainties - arising not only from the COVID-19 pandemic, but also from foreign wars, financial austerity and other natural disasters (Grossi & Agento, 2022). Therefore, given this period of uncertainty, financial austerity and resource constraints, appropriate management accounting information and analysis are necessary to enable more informed decisions for policy formulation and implementation (Morales et al., 2014; Grossi & Agento, 2022).

Management accounting (MA) is useful for decision-making support in PSOs through the provision of relevant information and insights that relate to resource allocation and execution of strategic objectives and policies (CGMA, 2014; 2017; Cohen, 2022). MA supports public officers in decision-making by extracting value from information, translating numbers into meaningful narrative analysis, turning information into insights by analysing the impact of outcomes and providing information related to sustainability factors, which are then integrated into business planning and reporting (CGMA, 2014; 2017).

Therefore, MA information reporting is needed for government organisations, specifically in Malaysia as the country is facing a myriad of challenges. Unfortunately, as compared to financial accounting, the role of MA is not well developed in the Malaysian public sector. The Malaysian public sector management accountants have no specific position, even though MA is utilised heavily in reforming the public sector. The most significant MA elements introduced in the Malaysian public sector relate to performance measurement and budgeting plan (Rozaidy & Siti-Nabiha, 2022). However, it is not within the ambit of public sector accountants to be responsible for introducing or overseeing these MA reforms.

Originally, the establishment of accounting is mainly aimed to facilitate parliamentary oversight rather than serving managerial requirements. Since then, the potential role of accounting, specifically management accountants, has become more significant. This is aligned with calls for greater result-based accountability, which were made in conjunction with the demand for efficiency, effectiveness and equity of public service delivery. Moreover, the impact and outcomes of government policies and programmes were increasingly questioned by citizens. Aligned with this, the introduction of a MA section in the accounts division of various ministries could be considered as one of the efforts to promote the role of MA in providing relevant information for decision makers.

The Accountant General's Department of Malaysia (AGD) subsequently issued MA implementation guidelines, specifically related to financial statements and risk assessment

(Jabatan Akauntan Negara Malaysia, 2021). The analysis of the organisation's financial position enables determination of financial strategies as well as gathering information for risk assessment. Given this effort, it is imperative to evaluate both current financial statement analysis and risk management, which have been introduced and adopted. Therefore, this paper has two aims. First is to explain the financial analysis and risk management introduced in the Malaysian public sector. Second is to investigate issues regarding their implementations. The paper is structured as follows. Section 2 provides a literature review related to financial and risk analysis. Section 3 outlines the research approach employed in this paper, while Section 4 discusses the financial and risk analysis practices in the Malaysian public sector. Section 5 addresses the gaps and issues concerning the information usefulness of financial analysis and risk assessment. Subsequently, a brief conclusion for this paper is presented in Section 6.

2.0 Literature Review

Management accountants create value from the provision of timely, relevant and accurate financial and non-financial information, which supports strategic decision-making and implementation (CGMA, 2014). By transforming their analysis into key insights, management accountants provide assessment of the impact of various policies on outcomes. Reporting and financial analysis and strategies and risk management are amongst the MA tools and practices to generate and preserve organisational values (CIPFA, CGMA 2017).

2.1 Analysis of the Financial Statement for Internal Decision-Making

Amongst the reasons for the propagation of the accrual accounting adoption by international bodies is the argument that accrual accounting will facilitate the timely provision of financial information for decision-making purposes (IPSASB: CF-ED 1, 2010; Nogueira et al., 2013). With the availability of accrual-based financial statements, the analysis of these reports can be conducted, providing the top management of PSOs with an overall view of their entities' financial position, and thus aiding them in decisions related to resource allocation as well as addressing political and social matters (Nogueira et al., 2013; 2016; Fuchs et al., 2017). Consequently, the implementation of accrual accounting plays a vital role in fostering more strategically oriented usage of financial data (Fuchs et al., 2017).

Various ways were proposed to conduct analysis of the PSOs financial situation. Such approaches included the use of financial indicators, from basic accounting ratios to the more advanced usage of statistical models (Iacuzzi, 2022). The Canadian Institute of Chartered Accountants model for the analysis of local governments' (LGs) financial conditions was based on three elements (CICA, 2009; Iacuzzi, 2022). First was sustainability, which referred to the LG's capacity to maintain its programmes while adhering to credit requirements, all without increasing its debt burden. Second, was flexibility, which assessed LG's capacity to increase its financial resources in order to manage its growing obligations. Third was vulnerability, which evaluated the extent to which LG relied on resources that were external to its own control.

Nevertheless, it should be noted that in evaluating financial performance there are issues presented by using only financial indicators. This is due to the specific nature of financial information, as it basically involves the examination of historical data. In addition, the

problematic issues of comparing these indicators in different socio-environmental and organisational contexts have also been raised by researchers (Iacuzzi, 2022). For these reasons, the usefulness of financial information, especially to internal users, has been questioned in various empirical research, whereby the financial information provided was unable to entirely fulfil the needs of users (Nogueira et al., 2013; 2016). However, there is some contrasting empirical evidence. For instance, studies which investigated the value of financial reports for senior officers within the Australian Government departments indicated that these officers perceived accrual-based financial reports to be more helpful in facilitating internal decision-making processes as compared to budgetary cash-based accounting (Kober et al., 2010; Adriani et al., 2010).

In view of the pressure on PSOs to achieve more with less resources, the formulation of financial strategies for PSOs is necessary. This partly hinges on their ability to conduct effective financial and risk analysis. Therefore, considering the myriad uncertainties that are confronting PSOs, it is vital for public sector management accountants to integrate financial analysis with risk management and analysis in order to support their decision-making processes. It should be noted that a PSO is different from a private-oriented organisation in terms of conducting an evaluation of its performance and financial situation. In contrast, with profit-oriented organisations - which emphasise financial analysis by using metrics such as profitability, growth and return on assets - PSOs have a broader approach to their analysis (Prowle, 2021). Factors such as the quality of services provided, resource utilisation, and societal impact should also be considered in the analysis of PSOs (Prowle, 2021).

2.2 Risk Management and Analysis

The challenges arising from various simultaneous internal and external crises, such as financial, health and political crises, have underscored the importance of having a long-term perspective for financial reporting as it is crucial for PSOs to consider issues related to financial sustainability over the medium and long-term (Jorge et al., 2023). Consequently, there have been growing demands for management accountants to provide information that assesses the impact of various types of risk - not only financial risk, but also environmental, social and political risks (Jorge et al., 2023; Cohen, 2022). Unlike risk management in business organisations which mainly focuses on managing risks to ensure profitability, the purpose of risk management in PSOs is to guarantee the continual provision of delivery and maintain accountability (Bracci et al., 2021).

Unfortunately, risk analysis and management have represented a neglected part of the management accountants' practice. Collier et al. (2007) highlighted the lack of management accountants' involvement in risk management, which was due to the perception that their accounting skills were seen as limited as compared to the broader insights required to manage risks at the wider organisational level.

Nonetheless, risk management constitutes an important component, and thus a concern for broader MA and control systems (Bhimani, 2009; Soin & Collier, 2013). As noted by Merchant and Otley (2006), risk management is part of management control, together with other elements such as risk management, internal control and performance management.

While traditional MA systems, such as budgetary control and performance management are deemed to be useful in facilitating decision-making and enhancing accountability, they are insufficient in addressing contemporary challenges and uncertainties faced by PSOs (Bracci et al., 2021). Consequently, as noted by Bracci et al. (2021), risk management and analysis have been promoted, so that PSOs can identify the myriad of risks faced, and thus have the flexibility to take action to mitigate their effects.

The importance of risk management and analysis is due to limitations of financial data. Empirical research has shown that new financial information has not been fully aligned with the needs of internal users (Nogueira et al., 2013). Therefore, it was suggested to use voluntary information and make certain modifications to the required budgetary and financial statements in order to further improve the usefulness of financial data for decision-making purposes (Nogueira et al., 2013; 2016). This includes the provision of financial analysis, and the effects of wider types of risk, whether financial, environmental, health, social or political, is of significant importance (Cohen, 2022). Previous research indicated that, in the context of Malaysia, MA played a significant role in risk management. For instance, Abdul Rasid and Abdul Rahman (2009) found that financial statement analysis, which is the ratio analysis, was the element of MA practices that enabled risk management. Other MA practices that were crucial to effectively address operational risks were budgetary control and planning (Abdul Rasid & Abdul Rahman, 2009).

However, regarding this matter there is still lack of awareness about risk management, together with lack of knowledge and skills amongst public managers (Wan Muhammad Ali & Beh, 2019). The study findings by Wan Muhammad Ali and Beh (2019) suggested that risk management must be integrated with the strategic management process in PSOs. Furthermore, the impact of risks could be mitigated with an established risk management plan. Said et al. (2020) surveyed risk management practices amongst department heads in Malaysia's federal ministries. The study findings indicated that the department heads agreed to implement risk management within their respective departments. Nonetheless, the prioritisation of implementation differed, reflecting variations in risk management factors according to their district service schemes (Said et al., 2020).

Previous empirical research had also highlighted the myriad of challenges faced in integrating risk management into PSOs. One of the challenges arose when the risk management team was not integrated or coordinated with other functions of the PSOs, resulting in lack of communication between those involved (Said et al., 2020). Besides the internal factors, the fast-changing external landscape further complicated the efforts of PSOs to mitigate risks in an efficient and effective manner (Bracci et al., 2021). Therefore, risk management and analysis should be supported by integrated management systems and control systems in PSOs. In this regard, MA plays a crucial role by providing the management of PSOs with relevant information to enable them to effectively manage their organisations, and thus facilitating better governance and accountability to society (Bracci et al., 2021).

3.0 Research Approach

A qualitative approach was undertaken in this research to address its objective. Data were collected through interviews and documentary review with accountants and non-accountants in two ministries. Meanwhile, non-accountants who were interviewed comprised

those holding senior positions at the ministries in various functional areas. The accountants interviewed were mainly those from the MA sections of the ministries' accounting divisions. The interviews were supplemented with analysis of government documents and regulations.

4.0 Financial and Risk Analysis Practice in the Malaysian Public Sector

In the Malaysian context, analysing the financial statements of the Malaysian Government involves examining the key financial documents issued by the government, such as the budget and financial statements, which include a statement of memorandum accounts and notes to the financial statement. These statements provide insights into the government's revenue, expenses, assets, liabilities and cash flows.

At the ministry level, requirement for the financial statements analysis arises from Treasury Circular PS 1.3, which outlines the implementation of Management Accounting in Malaysian Federal Government (*Pekeliling Perbendaharaan*, PS 1.3). This circular requires that accountants within the Ministries prepare the Strategic Management Accounting and Reporting (SMART) reports, encompassing four elements of management accounting, including financial analysis and risk assessment. This initiative represents part of the government's efforts under the purview of the AGD, which is aimed at strengthening the public sector MA. The AGD's Guidelines No. 2, 2021 subsequently offer a more detailed explanation of financial analysis and risk assessment tasks to be conducted by accountants and incorporated it in the reports submitted to the top management (Jabatan Akauntan Negara Malaysia, 2021). Therefore, the financial analysis and risk management discussed here relates to that undertaken at the ministry's level, which is to be used for internal decision-making by the top management.

4.1 AGD SMART Report: Financial Statement and Risk Analysis

As per the AGD's guidelines, four components form financial statement analysis in assessing and evaluating accrual accounting-based financial information with the objective to enhance the decision-making processes at the ministries (Jabatan Akauntan Negara Malaysia, 2021). Therefore, the use of financial analysis here is for internal users, and not for external users. The details of the analysis are as follows, based on the AGD's Guidelines No. 2, 2021 (Jabatan Akauntan Negara Malaysia, 2021; pp. 6-10).

a) Trend Analysis

Trend analysis involves the collection of data regarding the same item for several periods of time, such as three or five years, to identify the increasing or decreasing trend of a specific item analysed based on a specific purpose. Trend analysis, amongst its uses, provides basic information related to the performance history of a financial statement item and its changes, whether there is an increase or decrease in a certain period of time; useful information for projections, budget planning and reorganisation of resources (assets, humans, and financial) to implement future programmes or to change a policy and identify financial information that can be linked to effectiveness and efficiency in the ministry's financial management.

The analysis can be divided into two categories. The first is trend analysis for the statement of financial position and its key components, such as revenues, expenditures, assets, liabilities

and equity. The second is trend analysis for the cash flow statement, which involves analysing changes and patterns in the cash flows of an entity over a period of time. This helps in understanding the entity's ability to generate and manage cash, assessing its liquidity position, and identifying any underlying trends or changes that may impact the government's financial position.

b) Ratio Analysis

Ratio analysis is an evaluation of the quantitative relation between two items selected from the financial statements. The guidelines stress that the ratio obtained is not an answer in itself, but an indicator of certain aspects of the ministry's financial management. According to the AGD's guidelines, the objective of the ratio analysis is to evaluate the ministry's financial strengths and weaknesses from certain aspects, such as solvency, liquidity, and leverage; to identify the increase and decrease of indicators to anticipate the ministry's capabilities through appropriate comparisons and to assess the ministry's ability in managing the resources provided. There are five types of ratio outlined in the guidelines that can be used by the ministry to evaluate its financial abilities, namely the activity ratio, solvency ratio, debt ratio, efficiency ratio, and liquidity ratio.

c) Analysis of Variance

Variance analysis is a comparison of quantitative data for a financial statement item between the actual achievement and target set within a certain period. The guidelines indicate that variance analysis is used to identify significant differences between actual achievements and targets; to identify the causes of variances and improvement actions that must be implemented in line with the ministry's direction; and to provide basic information in making projections and future budget planning.

d) Qualitative Data Analysis of Financial Statements

The government will use the qualitative data analysis of financial statements to examine intangible information that cannot be measured numerically. Most data for qualitative analysis will be extracted from notes to the financial statements and other related government documents. The main purpose of this analysis is to help the government to make a more comprehensive interpretation and further improve the usefulness of information reported in the financial statements.

According to the AGD's guidelines, risk management information is to be developed based on the analysis of ministry's financial statements and other relevant information. Consequently, from this analysis, the uncertainties faced by the ministries can be determined, which is whether the risk sources are internal or external factors.

The guidelines explain four steps to evaluate risk and uncertainties:

- i. Identification of risk - identify risk (financial, operational, legal, reputation or image) affecting the financial position and attainment of strategic objectives.

- ii. Measurement of risk - this step involves measuring and assessing the impact of risks and classification of risk from a scale of 1 to 5, from a low to high probability of occurring.
- iii. Mapping of risk matrix - this step maps probabilities of occurrence to the impact of risk on performance, from low to high impact.
- iv. Classification of risk level - once the risk matrix has been mapped, the risk level can be classified into extreme, high, moderate or low risk. Once risk has been assessed and the risk level classified, risk mitigation strategies include action to transfer, avoid, minimise or absorb the risk at a minimal rate. The guidelines make the general statement that risk analysis can also be used as a basis in strategic decision-making, in which it provides a pathway to integrate risk with the strategic management process.

Financial data and non-financial data, including information derived from the ministry's risk management plan, need to be analysed to determine the main risk which could significantly impact the achievement of strategic objectives for the ministries. It is anticipated that the ministries have each developed their own risk management plan in accordance with the guidelines provided by the Malaysian Administrative Modernisation and Management Planning Unit (MAMPU), specifically the Public Sector Organisational Risk Management Plan (PROSA). Additionally, risk management practice for PSOs can be traced back to the implementation of the Star Rating System by MAMPU. This rating system assesses various management practices, including risk management.

5.0 Gaps and Issues for the Information Usefulness of Financial Analysis and Risk Assessment

The second purpose of this paper is to determine and investigate issues regarding the implementation of financial analysis and risk assessment. Therefore, this section discusses the gaps and issues in regard to the two components. It should be noted that the SMART implementation is in its early stages. For instance, the guidelines were provided in 2021. Therefore, various challenges are expected to be addressed during this initial stage of implementation at the ministry level.

5.1 Issues Related to Financial Analysis

As mentioned, the financial analysis and risk management policies and practices rely significantly on the existence of complete financial statements for the public entities. However, despite all the government's efforts, especially AGD, accrual-based financial statements analysis is far from being complete, and this can be confirmed by referring to the AGD's guidelines. Moreover, enhancement of the guidelines is necessary. Of all financial statement analysis techniques, only two analyses were properly constructed, namely trend analysis and ratio analysis. This was because the two analyses were much easier to construct, with many examples (the private-based financial analysis framework) that can be referred to or followed. For the other two analyses which are required as evidence - especially qualitative data analysis, which has been vaguely constructed - the published AGD management accounting guidelines do not provide details of qualitative analysis measurements that can be used as a template to be followed by a ministry. This situation has become the main challenge for AGD in

terms of constructing and finetuning the variables suitable to be utilised as measurements for non-financial information. Furthermore, variance analysis is also far from clear, as the variance analysis illustrated in the guidelines does not provide a benchmarking reference or parameter that can be used as the main standard of comparison, such as year-to-year comparison variance analysis - involving comparison with other countries' standards which have the same nature in terms of economic and social structure, or International Monetary Fund (IMF) or World Bank standards.

Without a properly established standardised parameter of comparison, it is very difficult for the ministries to measure and compare their performance. In addition, the objective of the implementation of MA is to provide a strategic overview for decision makers. Yet there is no concrete evidence which shows the financial and risk assessments reports prepared by the accountants at the ministries are fully utilised by the top management for strategic decision-making, since the Malaysian Government on its current cash accounting basis uses budgeting as the main parameter for strategic decision-making, especially for fund distribution and development expenditure. Moreover, the intricacies inherent in the ministries require full understanding on the part of the prepares regarding the nature of the ministries and their operational environments. This understanding is crucial in order to ascertain the specific analyses that should be conducted.

It should be noted that PSOs are different from private-oriented organisations in conducting the evaluation of performance and financial situation. In contrast to profit-oriented organisations - which emphasise financial analysis with the use of metrics such as profitability, growth and return on assets - PSOs have a broader approach to their analysis (Prowle, 2021). Factors such as the quality of services provided, resource utilisation and societal impact should be considered in the analysis of PSOs (Prowle, 2021). As a result, for PSOs, both financial and economic analysis should also be considered.

5.2 Issues Relating to Risk Assessment and Management

Proper assessment of risk is necessary in regard to risk analysis and strategies, because the Malaysian public sector is currently undergoing significant challenges precipitated by technological advances, health and financial crises, as well as other forms of uncertainties. Therefore, risk management and analysis have become more crucial for public sector decision-making and resource allocation. As highlighted in several empirical research studies, organisational accountability and governance could be enhanced through risk management practices, which are driven by PMS use with the ultimate aim of achieving organisational objectives (Abu Bakar et al., 2016; 2019).

However, even though risk management guidelines were implemented, there is still a lack of awareness about risk management, which is further compounded by lack of knowledge and skills amongst public managers (Wan Muhammad Ali & Beh, 2019). Therefore, risk assessment seems to be heavily oriented towards financial risks in the SMART reporting framework. This is not surprising given that risk analysis and assessment, especially when not related to financial risk, is not within the traditional purview of public sector accountants. Moreover, there appear to be elements of fragmentation between various units and departments in regard to risk analysis assessment at ministries.

Even though the AGD's risk assessment guidelines follow a systematic approach in managing risk and provide a pathway to integrate risk into the strategic management process, the AGD's guidelines on the assessment of risk seem to be quite loose and too general, which consequently results in a simplistic assessment of risk. The guidelines for risk assessment are also seen to be quite superficial and very much less detailed. This might be because the guidelines for risk management for the public sector have been pioneered by MAMPU for quite some time. MAMPU released the PROSA in 2012. There is a possibility that AGD wishes to avoid the duplication of guidelines on risk. Nevertheless, little is known about this possibility, and more detailed guidelines and clearer directions on risk management and analysis, along with better coordination between various units on risk management and assessment, are needed.

Moreover, the guidelines state that potential risks are identified after the analysis of the financial position is completed. This could justify for incorporating risk assessment guidelines into the financial statement analysis. However, this raises the concern that risk identification and assessment will be heavily oriented towards financial risk. This in turn raises the issue regarding whether risk assessment is linked with an organisational strategy and the impact of risks on organisational goals and performance.

Public officers' understanding of objectives and importance of risk management has contributed to challenges in undertaking risk assessment. Enhanced understanding is required regarding the importance of financial and risk analysis and how this analysis is vital for service delivery to society as well as the achievement of PSOs. Therefore, the coordination of various units responsible for risk management and assessment, such as those responsible for strategic planning, resource allocation and MA, should be further improved for more effective risk assessment, mitigation and management to be employed. In addition to providing clearer and more contextual guidelines for ministries, it is vital to ensure that the financial and risk analysis conducted is useful for decision makers, whereby the information is relevant and tailored to the ministries' specific needs and context. Therefore, this is not only an issue of analysing the financial position of the ministry in question, but also about offering a comprehensive view of the organisational financial and non-financial performance. Furthermore, it involves the communication of prescriptive and predictive insights, which assist in the formulation of financial strategies for the ministry.

A good MA report and analysis would not be useful if the information provided were not utilised by policy makers and implementers. If a public officer deemed the MA reports to be of limited value, then the objective of reforming the public sector to achieve effectiveness, efficiency and equity in public services would be undermined. Usefulness of information would depend on the context and complexities of ministry involved, as well as the types of decisions made at the organisation. Therefore, it is vital for management accountants to comprehend the decisions that need to be made in organisations. Such an understanding would assist them in providing useful information to decision makers, and thus result in decision-driven data and analysis. In so doing, a comprehensive explanation of the observed financial situation and risk evaluation could be offered.

In order to offer insights regarding financial and risk situations, management accountants need to engage and collaborate with other key units in the ministries. The MA unit in the ministry in question should also be able to communicate insightful financial and risk analysis, which is

decision-relevant, timely and useful (CGMA/ AICPA, 2017). In so doing, the role and technical and non-technical competencies of management accountants in the public sector need to be enhanced in order to achieve full value from the public sector.

6.0 Conclusion

The Malaysian Government has implemented various reforms in the public sector and utilised MA as a tool to support and sustain these reforms. One of the MA practices used is financial and risk analysis, which is crucial in developing financial strategies for an organisation, as well as its strategic implementation and reorientation. In this context, this paper discusses the implementation of financial and risk analysis within the ministries. Consequently, it offers insights regarding the development of management accounting in the Malaysian public sector, specifically in the context of analysing and reporting information for internal decision-making processes. Therefore, it is noted that to conduct a successful analysis, management accountant's role and competencies must be strengthened so that decision-driven analysis can be conducted and the provided information is deemed useful by public sector decision makers.

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