

# Moving from Rule-based to Principle-based in Public Sector: Preparers' Perspective

Roshayani Arshad, Normah Omar, and Siti Fatimah Awang

**Abstract**—The move from cash accounting to accrual accounting, or rule-based to principle-based accounting, by many governments is part of an ongoing efforts in promoting a more business-like and performance-focused public sector. Using questionnaire responses from preparers of financial statements of public universities in Malaysia, this study examines the implementation challenges and benefits of principle-based accounting. Results from these responses suggest that most respondents perceived significant costs would be incurred in relation to staff training and recruitment of staffs with relevant technical knowledge. In addition, most respondents also perceived that there will be significant changes in the current accounting system and structure in order to comply with the principle-based accounting requirements. However, most respondents perceived that these changes might not result in significant benefits for management purposes, for example, financial management, budgeting and allocation of resources. Nevertheless, most respondents perceived that principle-based accounting information would facilitate the monitoring function of the board. The general perception is that adoption of principle-based accounting information is not significantly useful than rule-based accounting information is expected to change over time as preparers of the financial statements gradually understand and appreciate the benefits of principle-based accounting information. This infers that the perceived usefulness of different accounting system is a function of familiarity by the preparers.

**Keywords**—Accrual accounting, principle-based accounting, public sector, rule-based accounting.

## I. INTRODUCTION

THE move to accrual accounting in government financial reporting and budgeting, followed by adoption of International Public Sector Accounting Standard (IPSAS) has gained global acceptance. In line with this, many countries have either started preparing IPSASs compliant financial statements, are preparing financial statements based on national accounting standards that are broadly consistent with IPSASs requirements or are in the process of adopting IPSASs [11]-[17]. Proponents of IPSASs compliant financial statements argue that the financial statements will be more transparent and as such can be a useful communication mechanism with various stakeholders [20]-[21]. For example, more comprehensive information on resources, debt and revenues will be communicated to external stakeholders such as service users, oversight bodies and other interested bodies [14]-[15]. As for internal stakeholders, IPSASs compliant financial statements will provide information that can facilitate

various functions such as budgeting and allocation of financial resources [16]-[19], service costs evaluation and internal accountability [3]-[4].

Opponents of IPSASs compliant financial statements argue that the application of business model under IPSASs ignores the differences between the public sector and private sector [12]. As a consequent, it can result in misleading financial information with little use for decision-making purposes [6]-[7]. Even though the arguments regarding the appropriateness of IPSASs compliant financial statements in the public sector continues to be debated in the literature, the move towards IPSASs compliant financial statements has gained global acceptance [23]. Hence, it is important that top public managers, civil servants and other related parties understand the importance of implementing IPSASs compliant financial statements. In getting the support of these parties, it is important that relevant information is disseminate to educate and raise interests in the IPSASs standards [8]-[9]. Hence, this study aims to examine the perspective of preparers of financial statements in relation to the implementation challenges and benefits associated with IPSASs compliant financial statements in Malaysia and whether these challenges and benefits are associated with the decision usefulness of the information. Findings in this study will add to the limited insight on these issues from a developing country perspective. Malaysia is currently in the process of implementing IPSASs compliant financial statements. To date, the national public sector accounting standard body is developing IPSASs compliant standards and IPSAS standards are not mandatorily required in the preparation and presentation of the financial statements for the public sector.

This paper will proceed with the review of past literature and will then proceed to the empirical stage of sampling, data analysis and discussion of results. The final part of this paper presents conclusion, limitations and suggestions for future research.

## II. LITERATURE REVIEW

The move from cash accounting to accrual accounting, or rule-based to principle-based accounting, by many governments is the result of calls for greater accountability and transparency in the public sector [2]-[22]. It is expected that within the next few years, many countries including the developing countries, will be changing their accounting and reporting structure in implementing accrual based accounting [10]. To date, implementation of accrual accounting is associated with compliance of IPSASs standard. These standards are developed by the International Public Sector

Roshayani Arshad, Normah Omar and Siti Fatimah Awang are with the Accounting Research Institute, Faculty of Accountancy, Universiti Teknologi MARA, Malaysia. (e-mail: roshayani@salam.uitm.edu.my).

Accounting Standards Board (IPSASB). The application of these standards under the accrual accounting is in line with the need for high quality global standards that can enhance consistent financial reporting in the public sector [5]-[18]. Reference [18] highlight that many governments in the developed countries have prepared their financial statements in compliance with IPSASs standards. However, [13]-[22] argued that many governments in the developing countries are facing difficulties in implementing IPSASs compliant financial statements. Reference [22] argued that developing nations with a relatively low-skilled civil service and insufficient infrastructure will experience difficulties implementing accrual accounting in the same way as their more highly skilled counterparts (e.g., Australia and New Zealand). Consistent with this argument, [24] found that the main obstacles in implementing accrual accounting in the public sector in South Africa are the need for skilled finance people, need for new information systems, need for recording assets in the system and the need for changing the mindsets of the officials. In addition, his study also highlighted that these obstacles are contributing to the very slow pace of the transformation process of implementing accrual accounting. This points to the need for specific funds to be allocated in removing any obstacles in order to speed up the transformation process. For example, costs will be incurred by the government entities to appoint highly qualified finance staff to address the implementation problems, to provide extensive accounting training programmes for existing finance staff to change their mindsets and update their technical knowledge.

As highlighted earlier, changing the mindset of officials involved in the transformation process of implementing accrual accounting is an important element in speeding the process. In particular, these officials should perceive that IPSASs compliant financial statements will result in more decision usefulness information. However, the shifts towards acknowledging the benefits associated with IPSASs compliant financial statements might require an adjustment period, in that public sector managers required time to understand, and appreciate, the benefits of accrual accounting information. Reference [1] find that Western Australian public sector managers considered accrual accounting information more useful than cash accounting information in the majority of the decision situations examined in their study after accrual accounting has been implemented by the governments in Western Australian for some times. In addition, they also find that these managers perceive that accrual accounting to be more useful for discharging accountability obligations, for assessing performance, and for assessing the effectiveness and efficiency of the provision of goods/services. They concluded that the general perceptions regarding decision usefulness of the information prepared under accrual accounting might be associated with familiarity and experience of the managers with regards to accrual accounting.

### III. METHODOLOGY

The sample in this study is based on a focus group of accountants, assistant accountants and treasurer of all public universities in Malaysia. Questionnaires on the implementation challenges and benefits of IPSASs compliant financial statements were distributed, completed and returned by the group during a specific session for completing the questionnaires. Public universities in Malaysia are currently preparing their financial statements based on Malaysian Accounting Standard Board Standard. These standards are mandatorily required for the preparation and presentation of financial statements for private companies in Malaysia and adopted by the public universities. The distributions of the respondents are shown in Table I below.

TABLE I  
DISTRIBUTION OF RESPONDENTS

Position	Frequency	Percentage
Treasurer	4	8.90
Assistant Treasurer and others	41	91.10
<b>Total</b>	<b>45</b>	<b>100</b>

Table I highlighted that most of the respondents are holding assistant treasurer position. These individuals are actively and directly involved in the preparation and presentation of the financial statements.

The data used in this study has been tested for normality based on skewness, kurtosis and Kolmogorov-Smirnov values and the results revealed that the data are not normally distributed. Further test using the 5% trimmed mean was conducted and the results indicated that the original mean values and the new mean values are similar. Hence, the data used in the multiple regression analyses in this study has not been normalized.

### IV. ANALYSES AND RESULTS

Linear multiple regression is used as the basis of analysis in this study. The relationships between the independent variables and the two decision-making outcomes in this study are examined based on the following models.

$$\text{Model I: Outcome I} = \beta_0 + \beta_1 \text{Position} + \beta_2 \text{Length\_Service} + \beta_3 \text{Age} + \beta_4 \text{Academic Qualification} + \beta_5 \text{Benefits} + \beta_6 \text{Challenges} + \epsilon_t$$

$$\text{Model II: Outcome II} = \beta_0 + \beta_1 \text{Position} + \beta_2 \text{Length\_Service} + \beta_3 \text{Age} + \beta_4 \text{Academic Qualification} + \beta_5 \text{Benefits} + \beta_6 \text{Challenges} + \epsilon_t$$

The results based on model I and model II are presented in Table II.

TABLE II  
MULTIPLE REGRESSION RESULTS

DV	Outcome I	Outcome II
R Square	0.469	0.508
Adjusted R <sup>2</sup>	0.292	0.344
F statistic	2.646	3.100
Significance	0.015	0.006
	Beta / Sig	Beta / Sig
Constant	0.000	0.061
Position	-0.401/ 0.030**	-0.292/0.095*
Length_Service	-0.093/ 0.524	-0.041/0.769
Age	-0.201/0.286	-0.023/0.900
Academic	-0.142/0.365	-0.084/0.577
Benefit 1	-0.319/0.114	-0.261/0.176
Benefit 2	-0.467/0.032**	-0.341/0.100*
Challenge 1	0.289/0.197	0.204/0.340
Challenge 2	0.138/0.411	0.440/0.009***
Challenge 3	0.293/0.153	-0.016/0.933
Challenge 4	0.568/0.001***	0.548/0.001***
Movers	0.069/0.666	0.145/0.346

\* Significant at 10% level (1-tailed test); \*\*Significant at 5% level (1-tailed test); \*\*\*Significant at 1% level (1-tailed test)

Outcome I refers to enhancement of decision usefulness information where preparers with adequate understanding and knowledge in financial reporting under IPSASs compliant will be able to prepare and present financial statements on a consistent basis. Results in Table II reveal a negative and significant relationship between position of the respondents and Outcome I. This result indicates that the respondents do not perceive that the resulting financial information prepared under IPSASs compliant will be more relevant to the users relative to the current financial information. It is possible that lack of knowledge on IPSASs is limiting the interests in IPSASs and concurrently on the enhancement of decision usefulness of the resulting financial information.

In relation to the benefits of IPSASs compliant financial statements, the respondents were asked two questions. Question I stated that IPSAS compliant financial statements would result in significant change in relation to the preparation and presentation of the financial statements. Nevertheless, it is not expected to result in more effective resource management. With regards to question II, it stated that the enhancement of decision usefulness of the information prepared in compliance with IPSASs standards is only possible if significant costs are incurred in training the staffs and recruiting staffs with the appropriate level of knowledge and skills in IPSASs standards. Of the two questions, the results in Table II reveal that only question II is negatively significantly associated with Outcome I. A possible explanation on this relationship is that the current staffs perceive that the costs incurred on training the current staffs and recruitment of new staffs with the appropriate knowledge and skills are not sufficient. As the move towards IPSASs compliant financial statements is fairly new in Malaysia, top managers in government departments may lack the implementation strategies with regards to the move towards IPSASs compliant financial statements. Consequently, lower proportion of the department's funds has been allocated in relation to training and recruitment costs.

With regards to questions on implementation challenges of IPSASs compliant financial statements, there are four questions. Question I stated that lack of understanding on IPSASs standards, particularly for staffs without accounting qualifications may limit the implementation of IPSASs compliant financial statements. Question II stated that the application of business model under IPSASs is expected to result in more useful information for decision-making purposes relative to the current accounting practices. Question III stated that the IPSASs compliant financial statements would involve significant change in restructuring of the current reporting and budgeting systems during the period of change. This in turn may result in a complicated reporting and budgeting environment and such conditions may persist for a reasonable period of time. Finally, question IV stated that the accounting concepts and principles under IPSASs are unique and sophisticated. However, the application of these concepts and principles may not result in significant change in the financial management of the public universities. Of these challenges, results in Table II only reveal positive and significant relationships between question 4 and Outcome I. It is possible that lack of appropriate knowledge and understanding of IPSASs standards may reduce their ability to understand the potential benefits of applying IPSASs standards in the preparation and presentation of the financial statements. In addition, it is also possible that the respondents perceive that this situation is also applicable to many other staffs in other government departments. This result further corroborates the result for the negative and significant relationships between the position of the respondents and Outcome I. Overall, the regression results for model 1 indicate that lack of knowledge and understanding on IPSASs standards are reducing the support of the relevant individuals in the government departments for the implementation of IPSASs compliant financial statements.

Outcome II in Model II stated that financial information generated under IPSASs compliant financial statements would increase board of directors monitoring effectiveness relative to the current financial information. Results in Table II reported that position of the respondents is negatively and significantly associated with Outcome II. This result also indicates that the respondents do not perceive that the resulting financial information prepared under IPSASs compliant will be more relevant to the users, including the board of directors, relative to the current financial information. As for benefits of IPSASs compliant financial statements, Table II results reveal similar results for Outcome II and Outcome I. These results suggest that sufficient funds should be allocated by the government in moving towards the implementation of IPSASs compliant financial statements.

With regards to the relationships between implementation challenges of IPSASs compliant financial statements and Outcome II, results in Table II reported two significant relationships. First, results in Table II reveal that the application of business model under IPSASs is expected to result in more useful information for board of directors' decision-making purposes relative to the current accounting

practices. Second, results in Table II reveal that the application of accounting concepts and principles under IPSASs are more likely to result in significant change in the monitoring effectiveness of the board members sitting on board of the public universities. The overall results based on Model II indicate that the respondents perceive that the financial information prepared under IPSASs compliant will be more useful for board members' decision-making purposes.

#### V. CONCLUSION AND LIMITATIONS

This study examines the relationships between the independent variables and the two decision-making outcomes. The overall results indicate that lack of knowledge and understanding on IPSASs standards are reducing the support of the relevant individuals in the government departments for the implementation of IPSASs compliant financial statements. Concurrently, it also reduces their ability to appreciate the potential benefits of IPSASs compliant financial information. This in turn suggests that it is paramount that sufficient funds are allocated by the government in moving towards the implementation of IPSASs compliant financial statements. A well planned training programmes should be developed and executed so as to ensure that relevant individuals are technically competent in applying IPSASs standards. While the overall results suggest lack of appreciation with regards to the benefits of IPSASs compliant financial information, the respondents nevertheless perceive that this information will be more useful to the board members decision-making purposes. The respondents perceive that the business model under IPSASs will be able to enhance board members monitoring role of the government departments' performance. This infers that as relevant individuals in the government departments are more technically competent with IPSASs and familiar with the accounting system under IPSASs compliant, the appreciation on the benefits of IPSASs compliant financial information will be enhanced. This in turn will facilitate the implementation of IPSASs compliant financial statements in the public sector with the consequent enhancement of transparency and quality financial information communicated to the various stakeholders.

Finally, there are some limitations in this study. First, this study focuses only on perceptions of preparers of financial statements in the public universities. Future research may also consider perceptions of preparers of financial statements in other government departments. For example, preparers of financial statements in departments preparing their financial statements mainly on cash basis may face greater challenges relative to those who are already preparing their financial statements on accrual basis. Second, this study focuses on only two aspects of decision-usefulness of the information based on IPSASs compliant. Other aspects of decision-usefulness for various stakeholders should also be considered for future research. Regardless of these limitations, the results in this study provide useful insights with regards to moving towards IPSASs compliant financial statements in the government sector.

#### ACKNOWLEDGMENT

This research has been funded by Fundamental Research Grant Scheme, Ministry of Higher Education, Malaysia.

#### REFERENCES

- [1] Adrianni, Y., Kober, R and Ng, J. (2010). "Decision usefulness of cash and accrual information: public sector managers' perspective". *Australian Accounting Review*, 2, 144-153.
- [2] Adam, B., Mussari, R and Jones, R., (2011), "The diversity of accrual policies in local government financial reporting: and examination of infrastructure, art and heritage assets in Germany, Italy and the UK", *Financial Accountability & Management*, 27(2), 0267-4424.
- [3] Arnaboldi, M. and Lapsley, I. (2009), On the implementation of accrual accounting. *European Accounting Review*, Vol.18(4), pp. 809-836.
- [4] Caccia, L., and Steccolini, L., (2006), "Accounting change in Italian local governments: what's beyond managerial fashion?" *Critical Perspectives in Accounting*, 17, 154-174.
- [5] Carnegie, G.D., and West, B.P., (2005), "Making accounting accountable in the public sector". *Critical Perspectives on Accounting*, 16, 905-928.
- [6] Carlin, T.M. (2005). "Debating the impact of accrual accounting and reporting in the public sector". *Financial Accountability and Management*, 21(3), 0267-4424.
- [7] Christensen, M., and Skaerbaek, P., (2007), Framing and overflowing of public sector accountability innovation: a comparative study of reporting practices, *Accounting, Accountability and Auditing Journal*, 20(1), 101-132.
- [8] Figlio, D.N., and Kenny, L.W., (2009), "Public sector performance measurement and stakeholder support". *Journal of Public Economics*, 93, 1069-1077.
- [9] Garseth-Nesbakk, L., (2011), "Accrual accounting representations in the public sector – a case of autopoiesis". *Critical Perspectives on Accounting*, 22, 247-258.
- [10] Goddard, A. (2008). Contemporary public sector accounting research – a international comparison of journal papers. *The British Accounting Review* 22, 36-45.
- [11] Hauner, D., (2008), "Explaining differences in public sector efficiency: evidence from Russia's regions". *World Development*, 36(10), 1745-1765.
- [12] Hyndman, M., and Connolly, C., (2011), "Accrual accounting in the public sector: a road not always taken". *Management Accounting Research*, 22, 36-45.
- [13] Lapsley, G., Musari, R., and Paulsson, G. (2009). "On the adoption of accrual accounting in the public sector: a self-evident and problematic reform". *European Accounting Review*, 18(4), 719-723.
- [14] Marti, C., (2006), "Accrual budgeting: accounting treatment of key public sector items and implications for fiscal policy", *Public Budgeting and Finance*, 45-65.
- [15] Munisa, F., & Linhardt, D. (2011). "Trials of explicitness in the implementation of public management reform". *Critical Perspectives on Accounting*, 22, 550-566.
- [16] Pinnuck, M., and Potter, B.N., (2009). "The quality and conservatism of the accounting earnings of local governments". *Journal Accountability, Public Policy*. 28, 525-540.
- [17] Paulsson, G. (2006), "Accrual accounting in the public sector: experiences from the central government in Sweden", *Financial Accountability and Management*, 22(1), 0627-4424.
- [18] Rohe, G., Vasicek, D and Vasicek, V (2010). "Accounting regulations and IPSAS implementation: Efforts of transition countries towards IPSAS compliance". *Journal of Modern Accounting and Auditing*, 6 (12), 1.
- [19] Ramadhan, S., (2009), "Budgetary accounting and reporting practices in Bahraini governmental units: an empirical study", *International Business Review*, 18, 168-183.
- [20] Rayegan, E., Parveizi, M., Nazari, K. and Emami, M. (2012). "Government accounting: as assessment of theory, purposes and standards". *Interdisciplinary Journal of Contemporary Research in Business*. 3(9), 521-531.
- [21] Rossi, N. & Trequattrini, R. (2011). "IPSAS and accounting systems in the Italian public administrations: expected changes and implementation scenarios", *Journal of Modern Accounting and Auditing*. 7(2), 134-147.

- [22] Tickell, G. (2010). "Cash to accrual accounting: one nation's dilemma". *International Business & Economics Research Journal*, 9(11), 71-78.
- [23] Timoshenko, K., and Adhikari, P., (2010), "A two-country comparison of public sector accounting reforms: same ideas, different paths?" *Journal of Public Budgeting, Accounting and Financial Management*, 22(4), 449-486.
- [24] Wyk, H.A. (2007). "Is the transformation of public sector financial reports in South Africa's provincial government on track". *Meditari Accounting Research*, 15(2), 65-75.