Appraising Economic Performance of Government Departments: A Case for Preparing Accrual Based Accounts

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Introduction

The published accounts of an organisation are expected, *inter alia,* to mirror its performance over the period of accounting. It is therefore natural that stakeholders examine relevant accounts to ascertain how efficiently an organisation has performed. If the accounts do not reflect the correct picture, this could yield misleading diagnoses regarding organisational efficacy, and thus, constrain the management from taking appropriate and timely action.

Government Departments in Sri Lanka essentially adopt a cash-based accounting methodology, where an annual Appropriation Account is submitted containing records of finances received and spent. Therefore, Departmental accounts do not necessarily reflect incomes and expenditures attributable to economic activities undertaken by the Departments within the period.

A research was conducted to examine the effect of this accounting practice, and the distortions which it could yield in reflecting organisational economic efficiency. It primarily studied the published accounts of Sri Lanka Railways (SLR), a Government Department, while focusing on one of its expenditure headings, namely fuel, for detailed investigation. This paper summarises the methodology adopted, analysis performed and results obtained, and discusses the policy relevance of the findings.

Research Problem

The total revenue, expenditures, and net surplus (or deficit) of the SLR as reflected by the published accounts of the Department (CBSL Annual Reports) for the period from 2005 to 2014 are graphically depicted in the Figure 1. The year 2010 appears to be relatively better in terms of financial results, while 2007, 2008, 2009, 2011, 2013 and 2014 indicated poorer financial performance. In 2014, for instance, fuel expenditure alone appears to be higher than the income. Total expenditure seems

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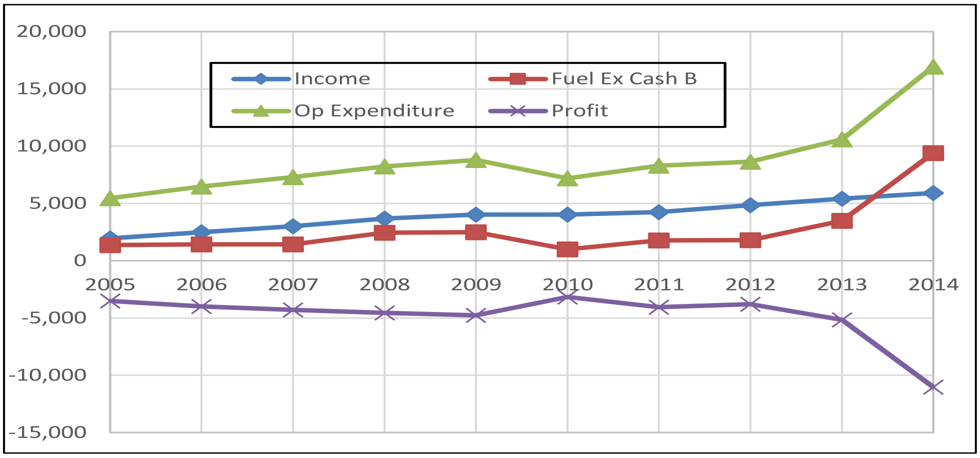
having close correspondence to the fuel expenditures, indicating that the ‘other expenditures’ would have followed a stable pattern.

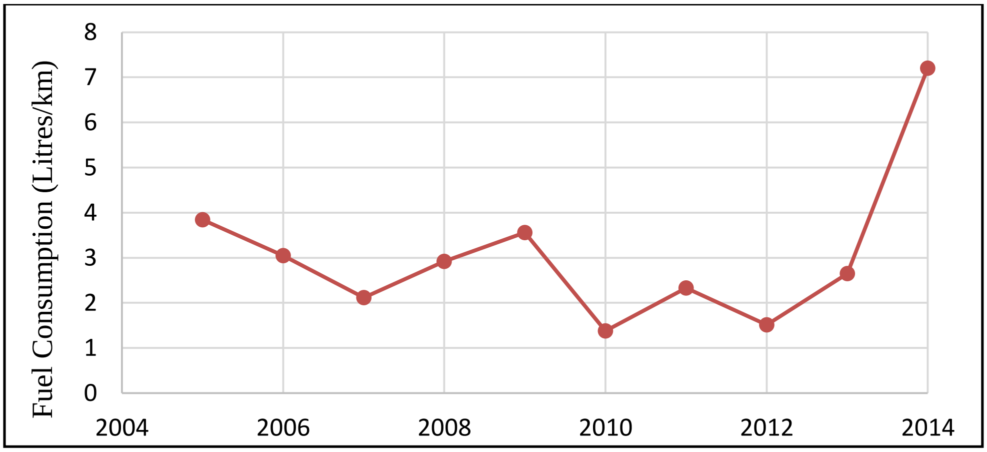
Figure 1: Operating Results of SLR as Reflected in Published Accounts



Source: Author compilations from data published in the CBSL Annual Reports

In-depth analysis of fuel expenditure by estimating the fuel consumption intensity per train kilometer operated, as reflected in the published accounts, mirrors the problem (Figure 2): the variability observed in the so estimated fuel consumption per train kilometer is far from reality; train operations appear highly fuel efficient in certain years (2007 and 2010, for instance) and highly fuel intensive in some others (2005 and 2009), which cannot be technically explained.

Figure 2: Fuel Consumption estimates as per Cash-based Published Accounts



Source: Author compilations from Cash-based Accounts of the SLR

The hypothesis examined in this research therefore is that the fuel expenditure figures appearing in the published Departmental accounts do not represent the actual fuel consumption, and therefore do not reflect the true economic cost of train operations.

Materials and Methods

The adoption of cash-based accounting in the Government Departments stems from the colonial practice in which the Departments are considered as part of the main Government body, and not as separate organisations which manage finances on their own. Thus, Departments historically were not allowed to commit to expenditure without financial allocations received from the Treasury, and all revenues accrued to Departments were considered Treasury income. The accounting procedure adopted in the Department structure therefore corresponds more to a cashiering role than a financial management exercise.

The suitability of using the accrual basis of accounting for publicly owned enterprises has been subject to discussion for some time by accounting professionals as well as by scholars. Most Asian countries are in the process of converting publicly owned enterprises to accrual basis (Abdi, 2015). Even in Sri Lanka, all State enterprises, except those within the Department structure, use accrual basis. Pressure from international financial institutions such as the IMF and the World Bank is behind this trend; they persuade Governments in underdeveloped and transitional economies to undertake reforms which include better accountability and transparency in public sector management (Ouda, 2003). Besides, the increase in Government activities, Government debt and the increased need of transparency and accountability, require Government-owned entities to adopt accrual basis of accounting (Marand, et al., 2014).

The present research went into critically examining the Railway Department's fuel cost heading. It appraised the process involved in recording purchases of fuel, their inventories and dispatches from stocks to relevant consumption units of the Department. Information pertaining to actual amounts of fuel pumped in for locomotion and the actual train kilometers operated on such fuel were gathered from the records of the relevant sub-Departments through a primary data collection exercise. Fuel consumption for other auxiliary purposes also were estimated using the available information and balancing off from recorded purchases. The actual fuel expenditure of the Department attributable for each year was thus calculated, and compared against those reflected in the published accounts (which are on cash-basis) to perceive whether there were any significant differences, and if so, the possible causes. The study also attempted to reconcile the accounts based on actual fuel expenditure, and to better reflect financial performance over the period between 2005 and 2014.

Unit cost computation and accounting reconciliation approaches were adopted in conducting the research while graphical and tabular presentations were used to perceive analytical results.

Results and Analysis

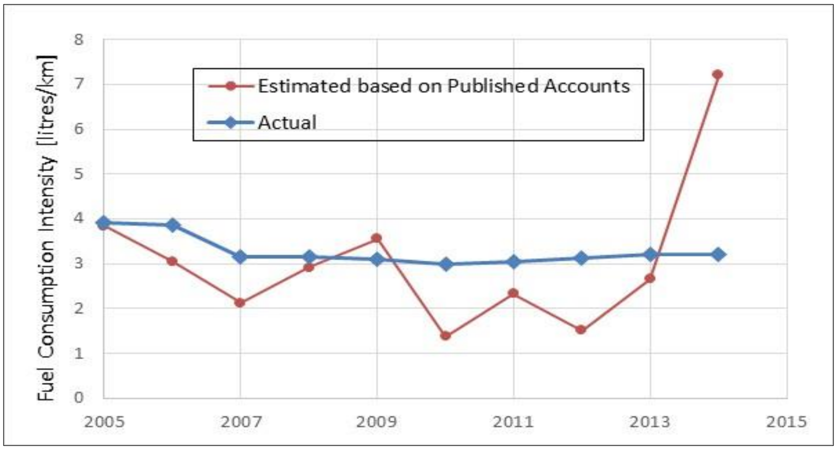
Table 1 contains the summary of data gathered on actual fuel consumption in the SLR for the period from 2005-2014, train kilometers operated during the same period, and the actual fuel consumption intensity (litres per train kilometer). The comparison between the actual fuel consumption intensity and the fuel consumption intensity estimated based on the Departmental accounts are presented in the Figure

Table 1: Estimated Actual Fuel Consumption Intensity and its Evolution

Year	Total liters used for trains	Train km Operated	Fuel Consumption Liters/km
2005	29,613,919	7,570,000	3.91
2006	30,220,300	7,800,000	3.87
2007	30,125,806	9,560,000	3.15
2008	29,008,561	9,220,000	3.15
2009	29,474,305	9,540,000	3.09
2010	29,374,946	9,790,000	3.00
2011	30,479,035	10,030,000	3.04
2012	32,446,052	10,370,000	3.13
2013	35,024,312	10,920,000	3.21
2014	35,594,846	11,080,000	3.21

Source: Author estimates based on data collected from the SLR

Figure 3: Fuel Consumption Intensity – Actual vs Estimated based on Accounts

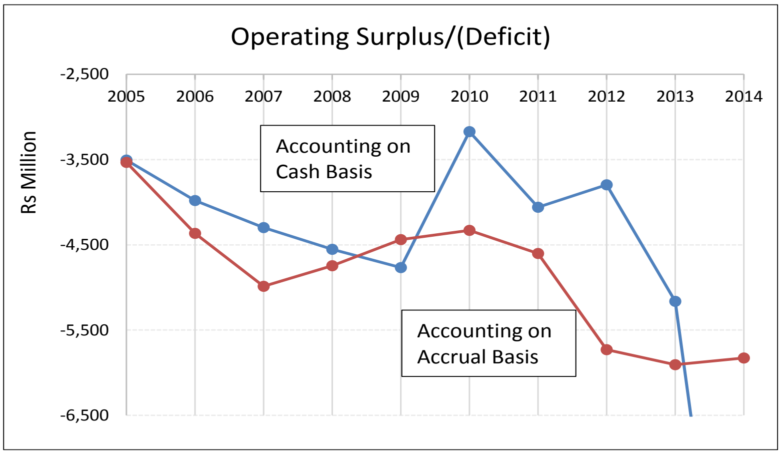


Source: Author compilations

The results show that the actual fuel consumption per train kilometer has a stable evolution, and does not experience sharp peaks or ebbs unlike the fuel consumption intensity estimated based on Departmental accounts. Thus, it becomes evident that relying on published accounts to appraise operational efficacy or economic performance would be futile.

The research went into working out the annual accounts of the Railway Department, partially converted (partial because the conversion was only regarding fuel expenditure heading) to accrual basis through substitution of cash-based fuel expenditure records by actual fuel expenditure attributable for each year calculated based on actual fuel usage as estimated in Table 1. These partially converted financial results could then be compared with published results as depicted in the Figure 4.

Figure 4: Financial Results of the SLR - Accrual Based vs Cash based



Source: Author compilations

These results indicate that the financial deficit of SLR gradually reduced (and thus, financial performance improved) between 2007 and 2009, even though a different picture would be depicted by published accounts prepared on cash basis. Similarly, the improvements seen in 2010 and in 2012 appear to be largely owing to non-payment for fuel consumed within those years. The sharp deterioration in 2014 indicated in cash-based accounts would not be real either, and appears to have been caused by the settlement of past dues to the Ceylon Petroleum Corporation. When accrual-based accounting reflects the actual fuel expenditure attributable to that year, financial performance in 2014 improves as against the previous year.

Conclusions

Results of the analysis reveal how misleading cash-based accounts could be in reflecting actual performance of operations by a Government Department in Sri Lanka. Just adjusting for fuel expenditure, the trend of performance of SLR between 2007 and 2009 reversed completely from what was reflected in cash-based published accounts.

Hence, it could be concluded that the practice of Government Departments preparing accounts on cash-basis is highly inappropriate. Not only do such cash-based accounts depict an inaccurate picture on performance, but they also thwart opportunities for making correct economic decisions for Departments.

Therefore, the outcomes of the study suggest that the Government should consider resorting to accrual-based accounting, or at least publish them in addition to the cash-based accounts currently released to public.

Key Words: Government Departmental Accounting, Revelation of Economic Performance, Financial Regulations, Sri Lanka Railways

JEL Codes: H83, L25, L32, L92, M41, M48,

References

Abdi, B., 2015. *The Fiinancial Express.* [Online] Available at: http://www.financialexpress.com/ [Accessed 02 May 2016].

Marand, A. A., Shabani, M. & Hnema, M., 2014. The Relationship Between the Corporate Governance Mechanisms and the Capital Structure of Holding Companies. *Indian Journal of Fundamental and Applied Life Sciences (Online),* April-June.4(SI).

Ouda, A. G., 2003. *Public Sector Accounting and Budgeting Reform: the Main Issues Invovled,* Beirut: United Nations – Economic and Social Commission for Western Asia (ESCWA).