

Embedded Problems of Segment Reporting: An Overview

Satyajit Ghorai

Research Scholar, Department of Commerce
University of Calcutta
e-mail: satyajitghorai84@gmail.com

Ram Prahlad Choudhary

Assistant Professor, Department of Commerce
University of Calcutta
e-mail: ramprahlad77@gmail.com

Abstract: Various accounting standards have failed to resolve some practical problems associated with segment reporting even after four decades of its development. There is a gap between the expectation of stakeholders from the segment report and content of the same. This study highlights such practical problems of segment reporting and the silence of various accounting standards on these issues. The article provides some suggestions to improve the quality of the segment report, and also to resolve the different critical issues associated with it.

Key-words: Segment reporting, IFRS, segmental transfer pricing, segment disclosure, segment result, window dressing.

1. Introduction

In the present scenario when the world has become a global village, information technology has become complex, economic policies have been liberalized and business entities diversified, the consolidated financial statement alone fails to represent the overall view of financial information precisely and correctly. Due to the different growth rate, profitability and risk among the segments of a diversified company, stakeholders are not fully satisfied by the aggregated financial statement. They like to get certain separate segment information in the form of segment report besides the aggregated report. The presentation of segment information helps the stakeholders to identify and analyze the opportunities and risks which a diversified company faces.

Considering the needs of stakeholders, various accounting bodies, accounting committees, standard setting bodies have come out with some accounting standards to make the segment reporting more meaningful and relevant. These standards guide and direct as to how the reportable segment should be identified and what disclosures should be made to make up the

segment report. The main aim of accounting standards is to harmonize the diverse accounting policies and practices which will assist the stakeholders in making efficient economic decisions. So, accounting standards reduce the possibility of varying assessment for the same operating result by providing accounting information on a more comparable and consistent basis. Actually the concept of segment reporting has come to the surface in twentieth century. In the mean time, various accounting standards on segment reporting were issued by various standard setting bodies both at national and international levels. In this backdrop, it is necessary to study the validity of accounting standards on segment reporting to resolve the practical problems associated with segment reporting (e.g. basis of transfer pricing and basis of distribution of joint items like assets, expenses etc.) in terms of comparability and consistency.

The objective of the present article is to reflect some practical problems in segment reporting and explore the attempts of some important accounting standards on these counts. The study is divided into six sections. Besides this introduction part, the second section explores the historical perspective of segment reporting and the section 3 of the study identifies some key practical problems of segment reporting. The fourth section highlights the failure of some important standard setting bodies to resolve such problems by formulating various accounting standards. The fifth section of the study offers some suggestions to resolve such problems and finally make a logistic conclusion.

2. Historical Perspective of Segment Reporting

The concept of segment reporting in a finalized form is almost 38 years old. It was in 1974 that the Financial Accounting Standard Board (FASB) of USA issued SFAS 14 Financial Reporting for segment of a business enterprise with strong encouragement from the financial analyst community. This is the beginning point of segment reporting. In June 1997, FASB issued SFAS 131 which is revised format of the SFAS 14. In 1981 international accounting standard setters, International Accounting Standard Committee (IASC) issued International Accounting Standard 14 (IAS 14) Reporting Financial Information by Segment. This was revised by IASC in 1997. In India, the Accounting Standard Board of the Institute of Chartered Accountants of India (ICAI) issued Accounting Standard 17 (AS 17): Segment Reporting. SFAS 131 is effective from the financial year beginning after December 15, 1997. Earlier application is encouraged. SFAS 131 need not be applied to interim financial statements. IAS 14 is effective from the period beginning on or after July 1, 1998. It does not require segment disclosure for interim report. AS 17 comes into effect from the accounting period commencing on or after 01-04-2001 and is mandatory in nature. In this regard, one thing can be noted that SFAS had made voluntary disclosure about segment reporting for interim periods for listed companies for the quarter ended 30-09-2001, but it had made it

compulsory for all listed companies announcing their results for the quarter ended 31st December 2001. In the age of convergence IASB has issued a number of new International Financial Reporting Standards (IFRS) to replace some International Accounting Standards as part of its convergence project. In this project, IASB and FASB try to reduce difference between IFRS and US Generally Accepted Accounting Principle (US GAAP). As a result, IFRS 8 replaces IAS 14 and aligns segment reporting with the requirements of SFAS 131. Once IFRS 8 is effective, segment reporting under IFRS and US GAAP will be converged. Very recently ICAI has also issued converged Indian Accounting Standard Ind-AS 108 "Operating Segments" for segment reporting.

3. Some Practical Problems of Segmental Reporting

The main objective of segment reporting is to provide segment wise financial information like segment revenue, segment expenses, segment result, segment assets, segment liabilities etc. to stakeholders to enable them to take more informed judgment about any segment of the reporting entity or about the reporting enterprise as a whole. Some problems in the reporting of income for different segments of an enterprise, of course, are related to the allocation of joint costs and the treatment of inter segmental transfer pricing. To measure profitability of segments separately, it is necessary that their net assets are reported segment wise. There are also some difficulties in the measurement of assets segment wise. The important problems are discussed below:

(a) Arbitrary allocation of joint cost

Even though it is not difficult to identify the significant reportable segments of an entity by business line or economic environment, it is difficult to report segment wise cost as most of the costs incurred by the enterprise are joint costs in nature. Reliability of the segment profit or loss largely depends on the appropriateness of the basis of joint cost allocation. This joint cost may allocate on several reasonable basis which leads to diversity and inconsistency in reporting practices. In absence of any standardized method for joint cost allocation, it is possible to opt for suitable cost allocation method to arrive at the desired segment result. So there is a chance for window dressing that means users are not getting the reliable information of the various segments from the financial statement.

(b) Interchangeable assets

Generally certain assets are utilized for more than one segment. In such case, it is very difficult to earmark assets employed for a particular segment. As a result, profitability of a separate segment cannot be accurately measured. Moreover, the proportion of unidentifiable assets may be significant and therefore no relevant result of return on segmental assets can be computed for evaluating comparative performance of various segments.

(c) Influence of transfer pricing

Transfer price is the price at which one segment transfers its product or services to another segment within a particular enterprise. There are various methods of transfer pricing like cost plus method, negotiated transfer pricing method, market price method etc. That means the transfer price is varied on the basis of the method which is applied. Hence the segment results may be influenced by the transfer pricing formula. The profit of an efficient segment can be distributed among interconnected segments which is not reliable at all. In this ground it is notable that the Bear Stearns equity research has supported the segmental manager's misinterpretation about their own segment performance by using transfer pricing mechanism because their incentive depends on their performance.

Now it is desirable that the accounting standard should chalk out a standardized method to resolve such problems as the main objective of accounting standards is to standardize the diverse accounting policies and practices with a view to enhance the comparability and consistency of financial statements. So the next part will explore the various remarkable accounting standards on segment reporting to highlight how they addressed such problems.

4. Some Important Accounting Standards on Segment Reporting

Keeping in view the needs of the users of accounting information, major accounting bodies like the Financial Accounting Standard Board, International Accounting Standard Board and the Institute of Chartered Accountants of India have come out with the revised and modified standard in order to make segment information disclosure more meaningful and relevant. It is also very much clear from the history of segment reporting that there are several accounting standards. But some of the important standards have been analyzed only to explore the attempts which have been made to resolve such practical problems by various standard setters' bodies at both national and international levels. The standards are explained one after another.

AS-17

The Accounting Standard Board of ICAI has issued AS 17 for segment reporting. This standard comes into effect in respect of accounting period which commences on or after April 1, 2001 and it is mandatory in nature. It defines *Segment Revenue* which is the aggregate of:

- i) revenue resulting from the operating activities of a segment,
- ii) relevant portion of enterprise revenue that can be allocated on a reasonable basis to the segment, and

Satyajit Ghorai and Ram Prahlad Choudhary

- iii) revenue from transactions with other segment of the same enterprise.

It also defines *Segment Expenses* which is the aggregate of:

- i) expenses resulting from the operating activities of a segment,
- ii) relevant portion of enterprise expenses that can be allocated on a reasonable basis to the segment, and
- iii) expenses relating to transactions with other segment of the same enterprise.

However, expenses incurred at the enterprise level on behalf of a segment should be included in the segment expenses, if such expenses relate to the operating activities of the segment. *Segment Result* refers to the difference between segment revenues and segment expenses.

Segment Assets are those operating assets which are used by the segment in its operating activities and those are directly attributable to the segment or allocated to the segment on a reasonable basis.

Although the standard defines the terms segment revenue, segment expenses, and segment assets it does not clear what will be 'the reasonable basis.' So it allows the accountant's choice to measure such items which leads to divergent reporting practices.

For the purpose of this standard, segments are classified as primary and secondary on the basis of dominant source and nature of risk and return of the enterprise. The extent of disclosure is lower for secondary segment than that for the primary segment. Apart from other disclosures, it also asks to disclose the following items:

i) For reportable primary segment

- Segment revenue with a break-up of sales to external customers and from transaction with other segment.
- Total carrying amount of segment assets.
- Inter segment transfer should be measured on the same basis that the enterprise actually used to price those transfers. The basis of inter segment transfer pricing and change therein should be disclosed in the financial statements.

ii) For reportable secondary segment

- Segment revenue from external customers.
- Total carrying amount of segment assets.
- Total cost incurred during the period to acquire segment assets (both tangible and intangible).

Although it is required to disclose such items for both the reportable segments, it should not be useful to the stakeholders as they are not measured accurately. It claims to measure the inter segment transfer on the basis that enterprise actually used to transfer but is silent about any specific method of transfer pricing. So the segment report may mislead the financial statement users.

IAS 14

The international standard on the segment reporting IAS 14 has been published by the IASC in August 1981. Subsequently this standard was revised and has come into effect on 1st July 1998. It provides new approaches to determine reportable segment. These approaches are:

1) Risk-Return Approach

In this approach, the segments are defined on the basis of dominant source of risks faced by and the return flowing to the enterprise.

2) Management Approach

Under this approach, segments are defined on the basis of the enterprise's organizational structure and internal financial reporting system.

As per IAS 14 geographical segment to be based on either:

- a. Location of its production or services facilities and other assets, or,
- b. The destination of its goods or services that means location of its customers and markets.

The IAS 14 asks to disclose the following items in addition to other disclosures:

A. The primary segments:

- Sales or other operating revenues
- Sales to external customers
- Revenues from transaction with other segments
- Depreciation and amortization expenses
- Segment results
- Segment assets
- Basis of pricing of inter-segmental transfers

B. The secondary segments:

- Sales to the external customers
- Segment assets
- Basis of inter segment transfer pricing

Satyajit Ghorai and Ram Prahlad Choudhary

This standard more clearly explains the basis of the determination of reportable segment but it also allows the same technique to measure such problematic items. So it is also not free from bias.

SFAS-131

FASB issued the new SFAS 131, 'Disclosures about Segment of an Enterprise and Related Information' in the place of old accounting standard on segment reporting SFAS-14. This standard is effective for the financial statement for periods beginning on or after December 15, 1997. SFAS 131 changes the framework for reporting operating segments information and identification process of operating segments to a system based on company's management approach. Operating segment is a component of an enterprise which the management has established for the purpose of decision making about the enterprise's operating matters. The enterprise may combine two or more segments:

- 1) if they have similar long-term financial performance and same features in product or services, production process, technology, type or class of customers, distribution method of product or services,
- 2) if they operate under the same regulatory environment.

Besides other disclosures, it asks to disclose the following items:

A. General information

- Factors used to identify reportable segments
- Types of products or services that reportable segments provide

B. Information about profit or loss and assets

- Revenue from external customers
- Revenue from inter segment transaction
- Depreciation, depletion and amortization expenses

C. Basis of measurement

- Basis of accounting for inter segment transaction
- The nature and effect of asymmetrical allocation to segments

This standard claims to disclose the basis of the determination of reportable segments and the method of transfer pricing but it is silent about any specific method of transfer pricing or any specific method of distribution of the joint costs or assets among the reportable segments. So it should be able to reflect the effects of transfer pricing mechanism to some extent but totally fails to ascertain the segment asset, expenses and revenue accurately.

IFRS 8

IFRS 8 “operating segment” applies only to listed company. It replaces IAS 14 and is effective from periods beginning on or after 1st January 2009. Operating segments are identified on the basis of internal reports. Internal report is a report which is used by the entity’s chief operating decision maker to allocate resources to the segment and assess its performance. This is because IFRS 8 requires the information which is used by the management to make decision about operating matters. The IASB believes that this management approach will help to improve financial reporting by allowing users of financial statement to review the operation through the eye of management. There is little cost of preparers as the information is already used internally by management and the information is available on a timely basis.

Core Principle

An entity should disclose information to enable the users of financial statements to evaluate the nature and financial effects of the different types of operation in which it engages and the surrounding economic environment. This principle is consistent with the objective of financial reporting discussed in the IASB’s Framework for the preparation and presentation of financial statements. It defines *operating segment* as a component of an entity that engages in business activities from which it may earn revenues and incur expenses; whose operating results are reviewed regularly by the entity’s chief operating decision maker to make decision about its resource to be allocated to the segment and assess its performance and for which discrete financial information is available. According to this standard, an entity should disclose information about its operating segments to enable users of financial report to evaluate the nature and financial effects of the business activities and the economic environment in which it operates. Like SFAS – 131, it also asks to present the disclosures on general information, information on profit or loss and assets and basis of measurement apart from the other disclosures to be made by the entity. For better reporting purpose, these disclosures are also required to be made under IFRS – 8 where the entity is to disclose some additional information about profit or loss and assets, basis of measurement. It is very interesting to mention below the disclosure requirements under IFRS – 8 to make a comparison with the requirements of disclosure to be made under SFAS – 131. It appears to be very similar though some additional information are required in the case of IFRS – 8. It asks to disclose the following items:

A. General information

- Factor used to identify reportable segments.
- Types of products and services that reportable segment provides.

B. Information about profit or loss and assets

- Revenue from external customers.
- Revenue from inter segment transfer.
- Depreciation, depletion and amortization expenses.
- Income tax expenses and benefit.
- Material items of income and expenses.

C. Basis of measurement

- The amount of each item shall be measured on the same basis which is used for reporting to the chief operating decision maker.
- Adjustment, elimination and allocation shall be made if they are included in the chief operating decision maker report.
- Assets also are reported on the same basis which is followed to prepare the chief operating decision maker report.
- If the chief operating decision maker uses more than one method to determine the segment profit or loss and assets, then reported method should be the one consistent with the corresponding amounts in the entity's financial statements.

However, entity shall also disclose the following general measurement basis:

- Basis of accounting for inter segment transaction.
- Nature of difference between the measurement of profit or loss of reportable segments and enterprise as a whole.
- The nature of any difference between the measurement of segment assets and consolidated assets.

This standard claims to use the same method of transfer pricing and same method for allocation of joint assets or expenses which are followed to prepare the chief operating decision makers' report. Therefore, it gives weight to managements' discretion, but not to any specific method. It also requires disclosure of the basis of determination of reportable segments and the method of transfer pricing, but it is silent about any specific method of transfer pricing or any specific method of distribution of the joint costs or assets among the reportable segments. It is able to capture the effects of transfer pricing mechanism to some extent, but totally fails to ascertain the segment asset, expenses and revenue uniquely. So it may lead to non-comparable and in-consistent report as sometimes decision makers change their pattern of analysis.

5. Conclusions and Suggestions

In the age of convergence, almost all accounting standard setting bodies are trying to develop a single set of accounting standards for improving the quality of financial statement, but they forget about the basic objective which is to recognize the system of measurement and disclosure rules for preparation and presentation of financial statements. Another main objective of the accounting standard is to standardize the divergent accounting policies and practices. But the available accounting standards on segment reporting do not pave the way for allocation of common cost or assets and are also silent about any specific method of transfer pricing. Almost all the accounting standards are only concerned with the identification of reportable segment and the items to be disclosed. Some international standards claim to disclose the method of transfer pricing and suggest using the same basis of distribution of joint cost and assets which is used by internal decision makers. Very recently, developed international accounting standards IFRSs are 'principle-based' standards, rather than 'rule-based' standards which rely more on professional judgment. It allows management wide latitude in the choice of accounting; management faces discretionary accounting decisions which are heavily oriented to a judgment process of determining amounts, rates and timing. This situation enables management to influence the figures disclosed. Discretion in particular is recognized in the translation of the management accounts (internal report) to the financial accounts (annual reports). It is unfortunate to note that even after four decades of development of segment reporting, accounting standards have failed to standardize the various accounting policies and practices. It is important to note in this context that it fails to maintain two basic qualitative characteristics, comparability and consistency of financial statements. From the analysis it is very much clear that there is a gap between the expectation of stakeholders from the segment report and content of the segment report which is not desirable to us. So to minimize the gap as well as to improve the quality of the segment reporting some suggestions are put forward.

- The segmental reporting system should be supported by guidelines for allocation of joint costs to reporting segments and transfer pricing policy.
- To allocate the joint cost among the various reportable segments, activity based costing system may be used such that a cause-effect relationship can be maintained between activity consumption and cost incurrence. It will be helpful to both internal management as well as external stakeholders in taking better economic decisions.
- Entities should also have to disclose the basis upon which they distribute their total assets among various reported segments.

Satyajit Ghorai and Ram Prahlad Choudhary

- A contribution format can be used instead of only disclosing the basis of common cost distribution because it separates fixed costs from variable costs and it enables the calculation of a contribution margin. In this case, traceable fixed costs should be separated from common fixed costs to enable the calculation of a segment margin.
- It will be preferable to disclose the common assets separately in the balance sheet of the entity and it may be disclosed in footnote that these assets are used commonly by several segments.
- It is not practicable to suggest any specific transfer pricing mechanism as it may be used as a tool to maximize the value of the enterprise as a whole. So it can be suggested that the manager should select the best method of transfer pricing not to maximize the value of his segment, rather to maximize value of the enterprise as a whole. The basis of transfer pricing should be used consistently such that financial statement is consistent enough. The basis of transfer pricing and if any change therein should be disclosed properly.
- Accounting standard setting bodies must address and resolve problems properly, so that segment reporting is made more reliable and relevant to the stakeholders for making more informed judgment in their economic decisions.

References

Books

Banerjee, B. (2002). *Regulation of Corporate Accounting and Reporting in India*, The World Press Private Ltd., Calcutta.

Basu, A.K. (2008). *Accounting Standards and the Standard Regime in India*, Indian Accounting Association Research Foundation.

Choi, F. D. S. (2003). *International Accounting and Finance Handbook*, John Wiley & Sons, New York.

D'Souza, D. (2007). *Indian Accounting Standard & GAAP: Interpretation, Issues and Practical Application*, Snow White Publication Pvt. Ltd., Mumbai.

Ghosh, T. P. (2009). *Understanding IFRSs*, Taxmann Publications (p.) Ltd., New Delhi.

Nobes, C. and Parker, R. (2000). *Comparative International Accounting*, Prentice Hall.

Porwal, L. S. (2001). *Accounting Theory: an Introduction*, Tata McGrawhill Publishing Company limited, New Delhi.

Raiyani, J.R. and Lodha, G. (2012). *International Financial Reporting Standards (IFRS) and Indian Accounting Practices*, New Century Publications, New Delhi.

Rawat, D. S. (2006). *Accounting Standards*, Taxmann Allied Services (P.) Ltd., New Delhi.

Sen, S. (2005). *Segment Reporting In India*, Jyotsna Publishing House, Kolkata.

Journals

Aravanan, S. (2002). "Segment reporting-Towards more informed judgment", *The Management Accountant*, October.

Balakrishna, R., Harris, T.S. and Sen, P. K. (1990). "The Predictive Ability of Geographic Segment Disclosure", *Accounting Review*, Autumn.

Banerjee, B. (2001). "Corporate Financial Reporting Practices in India", *Indian Journal of Accounting*, December.

Bardia, S.C. (2002). "Segment Reporting: Overall Considerations", *The Management Accountant*, October.

Berger, G. Philip and Hann, N. Rebecca. (2007). "Segment Profitability and the Proprietary and Agency Costs of Disclosure", *The Accounting Review*, Vol. 82, No. 4.

Ghorai, S. (2011). "IFRS 8 'Operating Segments': A Critical Evaluation", *Journal of Multidisciplinary Research*, December.

Ghorai, S. (2011). "Segment Reporting Practices: A Study Based on Indian Banking Industry", *SHARE Journal of Multidisciplinary Research and Studies*, July-September.

Hunton, E. James, Libby, R., Mazza, L. Cheri. (2006). "Financial Reporting Transparency and Earning Management", *The Accounting Review*, Vol.81, No. 1.

Mallick, A. and Rakshit, D. (2005). "Transfer pricing: View in the Context of Segment Reporting", *The Management Accountant*, July.

Reports & Standards

Backer, M. and McFarland, B.W. (1968). *"External Report for Segment of a Business"*, New York: National Association of Accountants.

Biddle, G. C. and Choi, J. H. (2002). "Is Comprehensive Income Irrelevant?" *Working Paper*, Hong Kong, University of Science & Technology.

Satyajit Ghorai and Ram Prahlad Choudhary

IASCF, (2007). *International Financial Reporting Standards*, London, ISBN 978-1-905590-26-1.

Institute of Chartered Accountants of India, (1979). *Preface to the Statement of Accounting Standards*.

Institute of Chartered Accountants of India, (2000). *AS 17: Segment Reporting*.

KPMG IFRG Limited, (2007). *First Impression: IFRS 8 Operating Segments*, July.

Websites Consulted :

<http://www.ey.com>

<http://www.iasb.org>

<http://www.iasplus.com>

<http://www.icai.org>

<http://www.pwcglobal.com>

<http://www.ssm.com>