Measuring the convergence of national accounting standards with international financial reporting standards: The application of fuzzy clustering analysis

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Abstract

A single set of accounting standards is considered the path to achieving accounting convergence globally. Given the important role that formal harmonization/convergence plays in the accounting profession and global capital markets, this study focuses on the methods and methodology for the measurement of formal accounting convergence. Based on our review and evaluation of the existing methods for measuring the level of harmonization/convergence between any two sets of accounting standards, we propose using a new method of matching and fuzzy clustering analysis to assess the convergence progress of national accounting standards (NAS) with International Financial Reporting Standards (IFRS) from whole and single standards, respectively. Single standards are clustered according to their convergence level, which may indicate further convergence emphasis. As an illustrative example, the achievements made in China are evaluated using this new method. The results reveal that this new method can measure the convergence level of NAS with IFRS more clearly and informatively.

Keywords: Formal accounting convergence; Measurement; Fuzzy clustering analysis; Chinese accounting standards

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1. Introduction

The globalization of the world’s economy has inevitably resulted in efforts to establish a single set of financial reporting standards, which is considered the path to achieving accounting convergence globally. In May 2000, the International Organization of Securities Commissions (IOSCO) completed the assessment of the International Accounting Standards Committee (IASC) core standards, including their related interpretations (the IASC, IAS2000). Members of IOSCO were encouraged to use the IASC standards to prepare their financial reporting for cross-border offerings and listings, supplemented where necessary to address outstanding substantive issues at a national or regional level, or to use waivers of particular aspects of IASC standards without requiring further reconciliation under exceptional circumstances. In 2001, after its reconstruction, the International Accounting Standards Board (IASB) adopted objectives for developing and promoting the use and rigorous application of a single set of global accounting standards. Numerous countries and regions obliged or volunteered to accept completely or reconcile its NAS to international standards. Since 2005, listed companies in EU countries have been required to adopt IFRS for preparing their consolidated financial statements, and non-listed companies are encouraged to do so as well. In addition, financial statements ended after November 15, 2007 and prepared using IFRS by foreign private issuers in the United States have been accepted without reconciliation to U.S. generally accepted accounting principles (GAAP). By March 2008, 110 countries and regions had accepted IFRS completely or had set their NAS based on IFRS. Some of these countries, such as Australia, have directly converged their accounting model with IFRS, while some others have not because of environmental differences or legal processes.

China, a member of the IASB, is a country that has made progress toward convergence. On February 15, 2006, the Ministry of Finance issued a new set of accounting standards, which includes 1 fundamental standard and 38 specific standards. A joint statement issued by the IASB and the China Accounting Standards Committee states that China has achieved substantial progress toward convergence with IFRS, although some differences remain (e.g., reversal of impairment losses, disclosure of related party relationships, and transactions). These new accounting standards were implemented for Chinese-listed companies beginning January 1, 2007. Implementation for large and mid-sized state-owned companies and other types of companies is expected to be ongoing.

Despite the progress, significant differences from IFRS still exist in many national accounting systems. And even for those countries that have adopted IFRS directly, certain

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2 IASB adopted the following reconstructed objectives in 2001: (a) to develop, in the public interest, a single set of high-quality, understandable, and enforceable global accounting standards, which require high-quality, transparent, and comparable information in financial statements and other financial reporting, to help participants in the world’s capital markets and other users make economic decisions; (b) to promote the use and rigorous application of those standards; and (c) to bring about the convergence of national accounting standards and IAS to effect high-quality solutions. On June 21, 2005, the IASC Foundation added the following objective to its constitution: (c) in fulfilling the objectives associated with (a) and (b), to take account of, as appropriate, the special needs of small and medium-sized entities and emerging economies.

3 IASB & China Ministry of Finance. 2005. Joint Statement of the Secretary-General of the China Accounting Standards Committee and the Chairman of the International Accounting Standards Board. 8 November, Beijing.