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## **CHAPTER VI**

### **SUMMARY OF CONCLUSIONS AND SUGGESTIONS**

#### **INTRODUCTION**

Basically, accounting is an information system. The objective of financial accounting is to provide information that is relevant to the economic decisions of external users of the accounts with respect to the enterprise. To be relevant to the decisions of external users, information about an enterprise must be comparable through time and with information about other enterprises. To meet this objective, business transactions to be recorded by the companies across the countries should be similar in the sense the adoption of uniformity in accounting measurement policy choices. This necessitates developing accounting standards in national level as well as in international level on uniform basis. Hence the main objective of accounting standards is to harmonize the diverse accounting policies and practices prevailing across companies in the respective countries or across countries in the global level. There are two different forces involved in the task of harmonization of accounting: institutional endeavors to harmonize accounting practices by developing common accounting rules and reporting standards, and spontaneous efforts by the 'global players' to adopt accounting methods that will improve communication with users in other countries. With regard to institutional efforts in India, the ICAI has so far issued 29 accounting standards with the sole objective of bringing uniformity in the adoption of accounting methods by the companies. All these standards are mandatory in nature. In spite of these mandatory standards, it has been evidenced that existence of diversity in the treatment of certain measurement issues in the financial statements of the companies. Consequently, the need arises to study the impact of accounting standards on the harmonization endeavors of the ICAI. It enables to identify the problem areas, which require harmonization.

#### **MAJOR FINDINGS OF THE STUDY**

The major findings of the study have been presented under: (A) Findings from Annual Reports; and (B) Empirical Findings:

## **(A) FINDINGS FROM ANNUAL REPORTS**

Today, annual report lends companies a competitive edge by presenting information in a manner that helps to satisfy investors' curiosity. The review of annual reports of the sample respondent companies highlights the following general findings:

(1) All companies disclosed the policy and method adopted by them in the notes to accounts section by 2006 and it was not so in 1997 in the sense that many companies on some accounting items did not disclose anything about the policies.

(2) Almost all companies adopted the prescribed format of sources and application of funds for the balance sheet in order to present changes in financial position.

(3) Disclosure of conservation of energy and energy cost per unit of production, technology absorption and foreign exchange earnings as per the new amendments of Companies Act were sincerely followed in almost all companies.

(4) It was found in the annual reports of the companies that there was no uniformity in financial disclosures. Some companies precisely mentioned the policy that they adopted while others elaborated it.

(5) There was an absence of standard terminology relating to accounting items adopted in the preparation of financial statements.

(6) The role of firm specific characteristics had important influences in the disclosure of information.

(7) In some instances, companies provided insufficient information to allow the reader to determine the precise nature of the accounting method that they used.

(8) The percentage of older companies stood at 59.62 percent as against the younger companies constituting 40.38 percent.

(9) The distribution of companies based on performance was almost similar in the sense that high profitable companies represented 49.04 percent as against 50.96 percent of low profitable companies.

(10) Similarly, the distribution of companies based on size was almost similar in the sense that large companies represented 50.96 percent as against 49.04 percent of small companies.

(11) The percentage of uni-national companies was higher than that of multinational companies constituting 55.77 and 44.23 respectively.

(12) Based on sector distribution of the companies, the number of companies engaged in the production of consumer durable goods, basic and capital goods and intermediate goods constituted 38.46 percent, 32.69 percent and 28.85 percent.

(13) From the viewpoint of equity, the low equity base companies and high equity base companies were almost evenly distributed and their percentage stood at 50.96 and 49.04.

## **(B) EMPIRICAL RESULTS**

The empirical results have been presented under: (I) Universal Findings; (II) Group Findings; (III) Composite Findings; and (IV) Significance Test.

### **(I) UNIVERSAL FINDINGS**

The universal findings are presented under (i) Inventory Valuation Method; (ii) Inventory Costing Method; (iii) Depreciation; (iv) Borrowing Costs; (v) Valuation of Tangible Fixed Assets; (vi) Research and Development Cost; (vii) Taxation; (viii) Investments; and (ix) Foreign Currency Transaction.

#### **(i) Inventory Valuation Method:**

(1) For valuation of inventories, three methods were commonly applied. These were: lower of cost and net realizable value, cost, and cost or market value which ever is less. Some companies used a combination of valuation methods and a few companies did not disclose the method they adopted.

(2) The policy of lower of cost and net realizable value method for inventory valuation evidenced an increasing trend. The number of companies following this policy stood at 26.47 percent in 1997, 69.23 percent in 2004 and 81.73 percent in 2006.

(3) The cost or market price whichever is less was not permitted in the revised AS-2. However, some companies were adopting this method. In 1997, it was 19.61 percent and it gradually reduced to 8.66 percent in 2006.

(4) The H-Index trend between 1997 and 2006 showed that there was substantial increase in the level of harmonization in case of adopting inventory valuation method. It showed that there was about 68.08 percent level of harmony on the issue of inventory valuation method in 2006 as against 24.52 percent in 1997.

(5) The computed chi-square value of 72.29 was significant at 5% significance level; it shows that inventory valuation methods used by the Indian companies in the sample period were significantly different.

#### **(ii) Inventory Costing Method:**

(1) With regard to inventory costing methods, majority of the companies were adopting weighted average cost and FIFO method.

(2) The non-disclosure percentage of inventory costing method adopted was very high in 1997 at 63.37 percent compared; it was reduced to 10.58 percent in 2006.

(3) There was a significant improvement in the harmonization level in case of adoption of inventory costing methods. The H-Index for 1997 was 0.06 followed by 0.33 in 2004 and 0.41 in 2006 and this evidenced that harmonization level increased by approximately 36 percent.

(4) The chi-square test at 5% significance level ( $\chi^2 = 26.79$ ) indicated that significant differences existed for inventory costing methods.

#### **(iii) Depreciation:**

(1) The adoption of depreciation methods by the companies was very consistent. Cent percent compliance was found with regard to disclosure of the method they adopted.

(2) With regard to depreciation, there were not many differences in the H-Index for the sample years. Comparatively, a small degree of dis-harmonization was depicted in the year 2006 compared to 1997 and the value stood at 0.6003, 0.5939 and 0.5841 for the years 1997, 2004 and 2006 respectively.

(3) The marginal level of dis-harmonization was evidenced with regard to depreciation due to alternative choice available to the companies, since AS-6 permits both straight-line method and written down value method.

(4) At 5% significance level, the computed chi-square value of 0.56 was not significant.

**(iv) Borrowing Costs:**

(1) During 1997, no company disclosed the treatment of borrowing costs in their annual reports. However, with AS-16 becoming mandatory from 1-4-2000, the disclosure level increased from 50.96 percent in 2004 to 55.57 percent in 2006.

(2) The calculated chi-square value 85.32 was significant at 5% significance level and it evidenced that there were significant differences in the treatment of borrowing costs in the study periods.

**(v) Valuation of Tangible Fixed Assets:**

(1) For valuation of tangible fixed assets, companies adopted three methods viz. historical cost; current cost and revalued cost methods.

(2) There was not much difference in valuation methods among companies in three periods with regard to valuation of tangible fixed assets. However, there was a significant improvement in case of disclosure of accounting practices as all the companies percent companies disclosed the method they adopted.

(3) The harmonization level with regard to valuation of tangible fixed assets stood at 46 percent in 2006. The H-Index trend also indicated that there was a stable level of harmonization trend in the sample years.

(4) The chi-square statistic with regard to valuation of tangible fixed assets was not significant at 5% level and there was an insignificant difference in the adoption of valuation methods in the sample periods.

**(vi) Research and Development Cost:**

(1) With regard to research and development cost, the respondents' percentage of non-disclosure of method adopted was high. However, it should be inferred that this might be due to those companies, which did not have the research and development cost in the sample periods.

(2) The companies adopted divergent treatments of research and development costs, but they consistently adopted the chosen methods in three periods consistently.

(3) The H-Index indicated marginally decreasing trend in harmonization level in case of research and development cost. Due to divergent treatment of research and

development cost among the companies, the harmonization level decreased from 0.2292 in 1997 and then to 0.2054 and to 0.1940 during 2004 and 2006 respectively. This was supported by the chi-square test and it was not significant at 5% level of significance.

**(vii) Taxation:**

(1) Drastic improvement was found in disclosure of taxation information after AS-22 becoming mandatory with effect from 1-4-2001. In 1997, majority of the companies did not disclose the information and their percentage stood at 90.20. However, this percentage was substantially reduced to 8.65 percent in 2004 and then to 3.85 percent in 2006.

(2) There was an increasing trend in the harmonization level in case of recognition of taxation expenses. The H-Index, which was 0.0079 in 1997, increased to 0.5955 in 2004 followed by 0.7154 in 2006. The increasing trend was quite significant and this change was due to mandatory nature of AS-22.

(3) The chi-square value relating to the treatment of taxation was 83.25 and it was significant at the 5% level and hence the methods of recognition of taxation adopted by the sample companies in the sample period were significantly different.

**(viii) Investments:**

(1) There was an increasing trend in the harmonization level in case of adopting valuation bases of investments in the sample periods. In 1997, the H-Index stood at 0.3192 and this was followed by 0.5781 in 2004 and 0.6373 in 2006.

(2) The chi-square value of 42.93 was significant at the 5% level. This indicated significant differences in the adopting investment valuation methods which prevailed in the selected sample periods.

**(ix) Foreign Currency Transaction:**

(1) Most of the companies preferred the restatement of foreign currency transactions preferred the combination method in the sense they followed both closing rate or the year end rate and forward contract rate. The percentage of companies which adopted this method increased from 36.27 in 1997 to 65.39.

(2) The H-Index evidenced an increasing trend in the harmonization level and it was 0.2381 in 1997, 0.4058 in 2004 and 0.4687 in 2006. For the period of the study, the harmonization level increased by 0.2306.

(3) The chi-square test was significant at 5% significance level, indicating the existence of differences of treatment of foreign currency transaction in the sample periods.

**(II) GROUP FINDINGS**

The group findings have been presented under the following heads: (i) Age Status and Harmonization Level; (ii) Performance Status and Harmonization Level; (iii) Size Status and Harmonization Level; (iv) Operation Status and Harmonization Level; (v) Sector Status and Harmonization Level and (vi) Equity Base and Harmonization Level.

**(i) Age Status and Harmonization Level:**

The following were the major findings on the relationships between harmonization level and age status under group analyses:

(1) With regard to inventory valuation method, 27.5 percent of younger companies and 25.81 percent of older companies adopted lower of cost and net realizable value method in 1997. This percentage enormously increased from 69.05 percent in 2004 to 80.95 percent in 2006 in case of younger companies and from 69.35 percent in 2004 to 82.26 percent in 2006 with regard to older companies.

(2) In case of inventory valuation, the harmonization level increased in both the older and younger companies. However, the harmonization level was higher with

regard to older companies at 0.6904 in 2006 as against 0.6678 in younger companies. The chi-square value was significant at 5% level of significance test.

(3) Inventory costing method adopted by the companies evidenced that 60 percent of younger companies and 66.13 percent of older companies did not disclose the method they adopted in 1997, but the non-disclosure level reduced considerably by 2006 in both the categories.

(4) The older companies were more inclined to weighted average method in contrast to the younger companies, which preferred FIFO method of inventory costing. In 1997, 20 percent of the younger companies adopted weighted average method but in 2004 it was increased to 40.48 percent followed by 47.62 percent in 2006. In case of older companies, the increasing trend was a little higher and it was 22.58 percent, 61.29 percent and 67.24 percent in the respective years.

(5) The H-Index showed increasing trend in the harmonization level with regard to inventory costing method in both the categories of companies. However, the older companies had higher harmonization level compared to younger companies. The chi-square results showed that it was statistically significant at 5% significance level.

(6) Adopting the policy of straight-line method of depreciation was higher in case of younger companies than in older companies. The average percentage stood at 86.31 percent in younger companies as against 67.20 percent in older companies. The percentage of companies using the combination of straight line and written down value method was higher in older companies with 22.58 percent than with 7.14 percent of younger companies in 2006.

(7) The H-Index indicated consistent harmonization trend in adopting depreciation method for all the three-sample periods. However, surprisingly it was found that the harmonization level was higher among younger companies with an average of 0.7553 as against 0.5093 in older companies. The chi-square test revealed that there were no significant differences among companies in the sample period of study.

(8) With respect of treatment of borrowing cost, the percentage of disclosure level was higher in case of older companies compared to younger companies which and the levels stood at 40.48 percent and 42.86 percent for younger and 58.06 and 64.52 percent for older companies for the years 2004 and 2006 respectively.

(9) Regarding the treatment of borrowing cost, significant difference was found in the H-Index trend. For the year 2006 the H-Index showed 0.4162 for older as against 0.1837 for younger companies. The chi-square value also indicated that significant differences existed in the disclosure levels of borrowing costs in the selected sample periods.

(10) In case of tangible fixed assets, except with a minute deviation, majority of the companies consistently adopted similar valuation methods in all the three sample years. The choice towards historical cost younger companies' was comparatively high and the average percentage stood at 78.49 as against 51.61 in older companies for the period between 1997 and 2006.

(12) The harmonization trend for valuation of tangible fixed assets evidenced that it was consistent in both the younger and older categories. However, the average harmonization level was higher among younger companies at 0.6435 as against 0.4163 in the older companies. The chi-square value was not significant at 5% level and this indicated that there were no much differences in the policy adopted for valuation of tangible fixed assets in the sample period of the study.

(13) For the treatment of research and development cost by the younger and older categories of companies, the majority of the younger companies did not disclosed, the method that they used. The percentage was 62.50, 59.53 and 57.15 for younger companies and 32.25, 30.65 and 29.03 for older companies in 1997, 2004 and 2006 respectively.

(14) The H-Index for both the categories of companies for research and development cost slightly decreased from 1997 to 2006 indicating dis-harmonization trend. The index stood at 0.1406, 0.1162 and 0.1100 for younger companies and 0.3044, 0.2885 and 0.2752 for older companies for the years 1997, 2004 and 2006 respectively. The chi-square value was not significant at 5% level and evidenced that there were not many differences in the method adopted by the companies in the period of study.

(15) With regard to recognition of taxation by the younger and older companies, high percentage of non-disclosure of policy adopted for the treatment of taxation liability in both the categories of the companies was evidenced. The percentage of non-disclosure stood at 92.50 for younger companies and 88.71 for older companies in 1997.

(16) There was an increasing trend in harmonization level in recognition of taxation by the younger and older companies after 1997. By 2006, the percentage of policy disclosure and the measurement policy disclosure was substantially higher at 0.6831 in younger companies and at 0.7401 in older companies. The computed chi-square value was significant at the 5% significance level and hence differences existed in adoption of policies between younger companies and older companies.

(17) For the investment valuation methods, the non-disclosure percentage decreased substantially in both the categories. In the sense it was reduced from 35.00 percent to 16.67 percent in younger companies and from 11.29 percent to 3.24 percent in older companies.

(18) The H-Index evidenced an increasing trend in harmonization level for investment valuation methods in both the categories of companies. However, harmonization level was very higher among older companies than among younger companies; it was 0.7436 and 0.4972 in 2006 for older and younger companies respectively. The chi-square value was significant at 5% level and thus significant differences existed in the sample periods of study.

(19) Regarding the treatment of foreign currency transactions by the younger and older companies, the percentage of non-disclosure level was higher in case of younger companies stood at 25 in 1997, 14.29 in 2004 and 11.90 in 2006 when compared to 14.52 in 1997, 4.84 in 2004 and 3.23 in 2006 in older companies. But in both the categories it led to decreasing trend.

(20) The H-Index indicated insignificant differences in younger companies for three-year period and the average harmonization level stood at 31.21 percent with regard to foreign currency transaction. However, the harmonization level increased among the older companies and it stood at an average harmonization level of 42 percent. The chi-square value was not significant at 5% level in case of younger companies, but it was significant for older companies.

## **(ii) Performance Status and Harmonization Level:**

The following were the major findings on the performance status and harmonization level under group analyses:

(1) With regard to inventory valuation, it was evidenced that the majority of the companies inclined towards lower of cost and net realizable value method under

both the categories. In case of low profitable companies, it was 20.75 percent in 1997 followed by 60.38 percent in 2004 and 73.58 percent in 2006. It also depicted that the trend was comparatively higher with regard to high performance companies with the harmonization level standing at 32.65 percent, 78.43 percent and 90.20 percent in 1997, 2004 and 2006 respectively.

(2) The harmonization level showed an increasing trend in both the categories of companies in case of inventory valuation methods. However, the level was significantly higher in high profitable companies to the extent of 25 percent in the year 2006. The chi-square value was significant at 5% level.

(3) Inventory costing methods adopted by the low profitable and high profitable companies evidenced that the non-disclosure percentages were high in low profitable companies, which stood at 69.81, 24.54 and 18.86 as against 57.14, 5.88 and 1.96 for low profitable companies and high profitable companies respectively for the respective years of 1997, 2004 and 2006.

(4) The harmonization level evidenced by the H-index in case of inventory costing methods adopted indicated that the level of harmonization was higher with regard to high profitable companies standing at 0.4691 in 2006 compared to 0.3692 for low profitable companies. The chi-square value tested at 5% significance level also indicated that there were significant differences in the study period.

(5) For depreciation method adopted, almost all companies disclosed the method adopted. There was a marginal increase in adopting a combination of straight line and written down value method by low profitable companies.

(6) The H-Index stood at 0.7052, 0.6511 and 0.6355 in 1997, 2004 and 2006 respectively for low profitable companies denoting a slight decreasing trend in harmonization level with regard to depreciation methods adopted. But with regard to high profitable companies, it was equal in both 2004 and 2006 periods of study. At 5% significance level the chi-square test indicated insignificant differences.

(7) Regarding borrowing costs, the non-disclosure percentage decreased in both the categories and it stood at 100 percent, 50.94 percent and 43.40 percent in low profitable companies and 100 percent, 47.06 percent and 45.10 percent in high profitable companies for 1997, 2004 and 2006 respectively.

(8) Moderate levels of harmonization trend were evidenced in both the categories under performance status for treatment of borrowing cost. Further, the harmonization level increased moderately in both the categories and the values stood at 0.2407 in 2004 and 0.3204 in 2006 in case of low profitable companies as against 0.2803 in 2004 and 0.3014 in 2006 in high profitable companies.

(9) The measuring practices for tangible fixed assets were consistently adopted in the respective years of the study in both the categories of companies.

(10) The harmonization trend indicated by the H-Index showed that there was a consistent level of harmonization in both the categories of companies for tangible fixed assets. However, the level of harmonization was higher in low profitable companies than in high profitable companies with the index level standing at 0.5002 and 0.4310 respectively. The chi-square test evidenced that there were no significant differences in the valuation method in the periods of study.

(11) Throughout the sample period, the companies consistently pursued almost similar treatment of research and development cost. However, the percentage of non-disclosure method adopted by the companies was high in low profitable companies as against high profitable companies.

(12) With respect to the harmonization trend indicated by the H-Index, it was moderately high with regard to high profitable companies. In both the categories, the chi-square value was not significant at 5% level regarding research and development cost.

(13) The percentage of recognition of both current year's charge based on effective tax rates and deferred tax using liability method gradually increased after the mandatory of AS-22 with effect from 2001 in both the categories and it stood at nil percentage in 1997, 73.58 percent in 2004 and 86.79 percent in 2006 in case of low profitable companies and nil percentage in 1997, 78.43 percent in 2004 and 80.39 percent in 2006 for high profitable companies.

(14) The H-Index indicated insignificant percentage in 1997, in respect of treatment of taxation in both the categories, but it swiftly increased in the following years. However, higher harmonization level was evidenced to be more with 0.7590 in the low profitable companies than with 0.6774 in high profitable companies. It was supported by the chi-square value, which was significant at 5% significance level.

(15) With regard to investment valuation methods, the harmonization trend evidenced by the H-Index showed that there was an increasing trend in both the categories of companies. By 2006, the H-index was higher in high profitable companies with the value of 0.7247 than in low profitable companies with the value of 0.5589. The chi-square value was significant at 5% significance level.

(16) Similarly, harmonization level was moderately higher in high profitable companies with in the value range of 0.3374 and 0.5636 in 1997 and 2006 respectively than in the low profitable companies with the value range of 0.1812 and 0.3884 for the corresponding periods. The chi-square value was also significant at 5% significance level.

### **(iii) Size Status and Harmonization Level:**

The following were the major findings on the size status and harmonization level under group analyses:

(1) With regard to inventory valuation, the choice toward lower of cost or net realizable value method significantly increased from 1997 to 2006 in both the categories and the percentages of companies opting for the above policy stood at 92.16 and 71.70 during 2006.

(2) The harmonization level was found to be higher with the value of 0.8524 in larger companies than that of 0.5436 in smaller companies during 2006. The chi-square value indicated that significant differences existed in the sample years in both the categories of companies.

(3) Non-disclosure level of inventory costing methods was found to be higher in both the categories during 1997. However, such a non-disclosure reduced drastically in case of small companies as against large companies, the latter category still continuing with the non-disclosure policy.

(4) The harmonization level evidenced an upward trend in both the categories of companies. Comparatively, the H-index was higher in small companies with the value of 0.4883 than in large companies with the value of 0.3592 during 2006. In both the categories, the chi-square test indicated that significant differences existed in the sample periods.

(5) Depreciation methods adopted by the small and big companies showed the methods were consistently adopted in both the categories of companies. The harmonization level was higher in large companies as against small companies and the values stood at 0.6041 and 0.5648 respectively during 2006. However, the chi-square value was not significant at 5% level of significance in both the categories of companies.

(6) Treatments of borrowing cost by the small and large companies under size status evidenced that the percentage of non-disclosure of method adopted by the companies were comparatively higher with regard to large companies as against small companies for the periods of the study.

(7) There was an increasing trend in harmonization level in both the categories of companies and the percentage was higher in case of small companies standing at

0.3937 and 0.2407 in 2006 for small companies and large companies respectively. At 5% significance level, the calculated chi-square value was significant

(8) The companies had consistently adopted the valuation method of tangible fixed assets in the sample period. Majority of the companies adopted historical cost method. The harmonization level was very consistent in both the small and large companies. The average harmonization level in case of small companies stood at 44 percent as against 48 percent in large companies. This was supported by the calculated value of chi-square and it was not significant at 5% significance level.

(7) The treatment of research and development cost showed that the average percentage of non-disclosure of treatment of research and development cost was higher in large companies standing at 53 percent as against 32 percent in small companies for the period of the study. Due to this, the H-Index indicated comparatively lower level of harmonization in large companies. At 5% significance level, the calculated chi-square value was not significant.

(8) The recognition of taxation by the sample respondent companies under size status evidenced that about 86 percent of the small companies and 94 percent of the large companies did not disclose the method that they adopted in 1997. However, the trend enormously changed in the years 2004 and 2006. The harmonization level was significantly higher in both categories of companies in 2006 and it stood at 0.7297 percent and 0.7020 percent for small and large companies respectively. The calculated chi-square value was significant at 5% significance level

(9) The investment valuation policy adopted by the small and large companies under size status of the study evidenced that 34.62 percent of the large companies did not disclose the method they adopted in 1997 and it was followed by 15 percent in 2004 and 2006 respectively. However, it was a negligible percentage in case of small companies.

(10) The level of harmonization was comparatively higher for small companies as against large companies with their respective values standing at 0.7582 and 0.5315 during 2006. The chi-square value was significant at 5% significance level.

(11) For the treatment of foreign currency transaction, the H-Index depicted in an increasing trend in both the categories. However, the level of harmonization was higher in case of small companies standing at 0.5898 in 2006 as against 0.3720 for large companies. The chi-square value was significant at small companies, but it was not significant for large companies at 5% significance level.

**(iv) Operation Status and Harmonization Level:**

The following were the major findings on the operation status and harmonization level under group analyses:

(1) During 1997, the accounting policy choices were wide open in uni-national companies than in multinational companies. Since 2004 both the categories of companies started the adoption of the policy of lower of cost and net realizable value substantially.

(2) It was evidenced that the harmonization level was higher in multinational companies than in uni-national companies and the index increased from 0.2155 in 1997 to 0.6005 in 2006 in case of uni-national companies and from 0.3110 in 1997 to 0.7996 in case of multinational companies. The chi-square value was significant at 5% significance level.

(3) During 1997, majority of the companies in both the categories did not disclose the inventory costing method and the percentages of such companies stood at 63.79 and 63.64 with regard to uni-national companies and multinational companies respectively. However, the disclosure level as well as adoption of weighted average by most of the companies in both the categories was found to be high during 2006.

(4) Both uni-national companies and multinational companies achieved a higher level of harmonization from 0.0532 in 1997 to 0.4117 in 2006 and from 0.0610 in 1997 to 0.4130 in 2006 respectively. The chi-square value was significant at 5% significance level and this indicated significant differences in inventory costing method.

(5) With the exception of small deviations the depreciation methods adopted by the companies in both the categories were consistently followed. The harmonization trend in uni-national companies was marginally in decreased trend as against an increase in multinational companies.

(6) Comparatively, the level of harmonization in adopting depreciation method was higher in case of uni-national companies with the value of 0.6100 in 2006 as against 0.5548 in multinational companies. The indicated chi-square value was not significant at 5% significance level.

(7) In case of borrowing cost, there was no disclosure of the method adopted by the companies at all in both the categories of companies in the year 1997. After AS-16 became mandatory with effect from 1-4-2000, the disclosure level in both the categories increased substantially.

(8) The harmonization level in borrowing costs was higher in uni-national companies with the value of 0.3641 than in multinational companies with 0.2500. The calculated chi-square value at 5% significance level was significant.

(9) For valuing the tangible fixed assets, consistency was maintained in all the three-sample periods under both the categories of companies. However, the harmonization level evidenced by the H-Index indicated that comparatively higher harmonization level existed in uni-national companies as against multinational companies in the study periods. The harmonization level stood at 0.5404, 0.4887 and 0.4982 in uni-national companies and 0.4101, 0.3904 and 0.4301 in multinational companies for 1997, 2004 and 2006 respectively. Consistent level of policy adopted by the companies in three sample years was supported by the chi-square test, which indicated that it was not significant at 5% significance level.

(10) With regard to research and development cost, the percentage of nondisclosure of the method adopted by the uni-national companies was higher and the average percentage was 54 in uni-national companies as against 27 in multinational companies. The harmonization level was comparatively higher with regard to multinational companies, which stood at 0.4096, 0.3313 and 0.3228 in 1997, 2004 and 2006 respectively as against 0.1296, 0.1299 and 0.1192 at uni-national companies in these years. The chi-square value was not significant at 5% significance level.

(11) For recognition of taxation it was evidenced that the percentage of non-disclosure of recognition of taxation was very high in both the categories before AS-22 became mandatory, with effect from 1-4-2001. Subsequently, both uni-national companies and multinational companies preferred a both current charge method and deferred tax liability method substantially and the percentages stood at 79.31 and 89.13 respectively during 2006.

(12) The harmonization level was higher in multinational companies with the value of 0.8062 in 2006 as against 0.6480 in uni-national companies with regard to treatment of taxation items. The chi-square value was significant at 5% significance level.

(13) For investment valuation methods the harmonization level was higher in multinational companies than in uni-national companies in the sense the level increased from 0.2999 in 1997 to only 0.4881 in 2006 and from 0.3771 in 1997 to 0.8757 in 2006 respectively. The chi-square value was also significant at 5% significance level.

(14) From the viewpoint of foreign currency transactions, the harmonization trend was moderately increased both the categories. However, the trend was higher with the value of 0.5841 in 2006 in case of multinational companies than that of 0.3879 in case of uni-national companies. This was evidenced by the chi-square test. The calculated value at 5% significance level was not significant.

#### **(v) Sector Status and Harmonization Level:**

The following were the major findings on the sector classification of respondent companies and harmonization level.

(1) The harmonization level substantially increased across all sectors. However, the highest harmonization level was evidenced to be achieved in consumable durable goods industries, which achieved the harmonization level from 0.3149 in 1997 to 0.7313 in 2006 and this was followed by the increasing the harmonization level from 0.2233 in 1997 to 0.6689 in case of intermediate goods industries and from 0.2342 in 1997 to 0.6488 in 2006 in case of basic and capital goods industries. In all the three categories of companies, the chi-square value at 5% significance level was significant and it indicated the existence of differences in the valuation methods of the companies in three selected study periods.

(2) Similarly, the harmonization trend marginally increased across all the three sectors with regard to inventory costing methods. The highest harmonization level was found in case of basic and capital goods industry with the index value standing at 0.5260 in 2006 as against 0.4156 and 0.3394 in case of intermediate goods and consumable goods industries respectively. The chi-square value was not significant at 5% significance level

(3) Depreciation methods adopted by the respondent companies under sector status evidenced that in all the three sectors of industries the methods were adopted consistently. It was interesting to note that the harmonization level increased to 0.5663 in 2006 in case of consumer durable goods industries as against the decreases from 0.7600 and 0.6437 in 1997 to 0.5663 and 0.5433 in 2006 with regard to intermediate goods and basic and capital goods industries respectively. However, the calculated chi-square test at 5% significance level was statistically not significant in all the three categories of companies.

(4) Before mandatory of AS 16 (before 1-4-2000) all the companies of the three sectors did not disclose the methods adopted for treatment of borrowing costs. By 2004, their disclosure level increased moderately and there was a little progress in the year 2006. Harmonization level was almost consistent between 2004 and 2006 in all the three industrial categories. The chi-square value indicated significant differences in the sample study period.

(5) Adoption of valuation methods for tangible fixed assets was consistently followed in all the three categories of companies. If harmonization was positive in case of intermediate goods with the index value changing from 0.4044 in 1997 to 0.5822 in 2006 in case of intermediate goods industries, the levels in fact decreased from 0.5005 to 0.4135 and 0.5266 to 0.4400 in case of basic and capital goods and consumer durable goods industries respectively for the corresponding periods. The calculated chi-square value at 5% significance level was not significant for all three categories of respondents.

(6) With regard to research and development cost, the percentage of non-disclosure of the method adopted was higher in all the three categories of companies, but the treatment was at the consistent level. It was interesting to note that the harmonization levels decreased from 0.1809, 0.2944 and 0.2295 in 1997 to 0.1324, 0.2644 and 0.2131 in 2006 in case of industries manufacturing basic and capital goods, intermediate goods and consumer durable goods respectively. The chi-square value was not significant at 5% significance level.

(7) Majority of the companies did not disclose the treatment of policy with regard to taxation before AS-22 became mandatory (mandatory with effect from 1-4-2001). Subsequently, the non-disclosure level reduced substantially in the years 2004 and 2006 in all sectors of companies. The harmonization level indicated by the H-Index was high in basic and capital goods industries at 0.7863 in 2006 as against 0.7381 in consumer goods industries and 0.6156 in intermediate goods industries. The calculated chi-square value in all the three sectors was significant at 5% significance level.

(8) With regard to investment, the non-disclosure of the methods adopted by the companies was high in basic and capital goods industries. However, the percentage reduced gradually. The harmonization trend had an upward trend for consumer durable goods industries standing at 0.3800, 0.7381 and 0.8156 and these were followed by basic and capital goods industries with the values of 0.2911, 0.5199 and 0.6384 for 1997, 2004 and 2006 respectively. With regard to intermediate goods industries, it showed some slight fluctuations. The calculated chi-square value was significant at 5% significance level in basic and capital goods industries and consumer durable goods industries. But it was not significant in intermediate goods industries.

(9) The treatment of foreign exchange transaction evidenced that the harmonization trend was on the rise in all the three categories of companies. Comparatively, higher level of harmonization was found with regard to basic and capital goods industries with the value of 0.5272 in 2006 and it was followed by 0.4856 and 0.4056 in 2006 with regard to intermediate goods and consumer durable goods industries respectively. The chi-square value was significant for consumer durable goods industries. However, it was not significant for other two categories of industries at 5% significance level.

**(vi) Equity Base and Harmonization Level:**

The following were the major findings on the equity base and harmonization level under group analyses:

(1) In case of inventory valuation methods, the tendency towards adopting the lower of cost and net realizable value method substantially increased in both the low equity base companies and high equity base companies. However, the trend was higher in high equity base companies with the values of 0.2536, 0.5409 and 0.7224 for the years 1997, 2004 and 2006 respectively as against 0.2378, 0.4923 and 0.6483 in low equity base industries in the years 1997, 2004 and 2006 respectively. In both the categories of companies the calculated chi-square value was significant at 5% significant level.

(2) The adopted inventory costing methods evidenced that the percentage of non-disclosure of the method they adopted reduced drastically between 1997 and 2006 in both the categories of companies. The companies' choice of method was getting concentrated towards the weighted average method in both the categories of companies. Relatively, high level of harmonization was found in high equity base companies with the values standing at 0.1080, 0.3810 and 0.4641 as against 0.0322, 0.2951 and 0.3695 for 1997, 2004 and 2006 respectively. The calculated chi-square value was statistically significant at 5% significance level in both the categories of companies.

(3) On an average, 81 percent of the low equity base companies consistently adopted the straight line method of depreciation. The harmonization level reflected by the H-Index showed that higher level of harmonization was found in low equity base with the value of 0.6355 as against only 0.5048 in case of high equity base companies. However, a downward trend of H-Index indicated the existence of dis-harmonization trend in adopting depreciation methods. The chi-square value in either case was not significant at 5% significance level.



(4) The disclosure of treatment of borrowing costs by the respondent companies, under equity base status, was comparatively higher in low equity base companies standing at 54.72 percent in 2004 and 49.06 percent in 2006 as against 43.14 percent and 39.22 percent for the same periods for high equity base companies. In 1997, both the categories of companies did not disclose the treatment of borrowing costs. The harmonization level was comparatively higher in high equity base companies standing at 0.3233 and 0.3695 percent as against 0.2051 and 0.2595 in low equity base companies for the years 2004 and 2006 respectively. The calculated chi-square value was significant at 5% significance level.

(5) For tangible fixed assets under equity base status with the exception of minor deviation, both the categories of companies consistently adopted the valuation methods for three sample periods. It showed little flexibility in the harmonization level in either case *albeit* it was at consistent level. Comparatively, the harmonization level was higher in low equity base companies at 0.5586 as against 0.3918 in high equity base companies in 2006 respectively. The chi-square value was not significant in both the categories of companies at 5% significance level.

(6) With regard to the treatment of research and development cost, the level of non-disclosure was considerably higher in low equity companies than in high equity companies and the average percentages of companies stood at 59.54 and 36.47 respectively for the period of the study.

(7) If the H-index increased from a low level of 0.0758 in 1997 to just 0.1118 in 2006 in case of low equity companies, there was a decrease in H-index from 0.4768 in 1997 to 0.3037 in 2006 in case of high equity companies with regard to research and development cost. The chi-square value at 5% significance level is not significant at both the categories of companies.

(8) For taxation expenses, the harmonization level evidenced through the H-Index was comparatively higher in high equity base companies and it stood at 0.6002 and 0.7539 as against 0.5924 and 0.6810 in low equity base companies for the years 2004 and 2006 respectively. The chi-square value was significant in both categories of companies at 5% significance level.

(9) The classification of investments was not substantially practiced during 1997 in both low equity and high equity companies and their respective percentages stood at 46.15 and 42.00.

(10) However, majority of the companies in both the categories adopted the classification of investments into current and long term investments by the end of 2006, but this classification trend was higher in high equity base companies than in low equity base companies and the percentages of the companies stood at 82.35 and 75.47 respectively in 2006.

(11) In tune with the trend in non-disclosure of taxation treatments, the H-index in high equity base companies was substantially higher with the value of 0.7539 than in low equity base companies with the value of 0.6810 in 2006. The calculated chi-square value was significant at 5% significance level in both the categories of companies.

(12) The treatment of foreign currency transactions evidenced that the non-disclosure percentage reduced progressively. The harmonization level was higher in high equity base companies than in low equity base companies and the respective values increased from 0.2138 in 1997 to 0.4397 in case of low equity base companies as against 0.3236 in 1997 and 0.5037 in case of high equity base companies. However, the chi-square value was not significant for low equity base companies, but it was significant for high equity base companies at 5% significance level.

### **(III) COMPOSITE ANALYSIS**

The composite analysis of the independent variables led to the following conclusions and they are presented under the following heads:

(i) Universal Findings; (ii) Age Group; and Comparative Index; (iii) Performance Level and Comparative Index; (iv) Size and Comparative Index; (v) Operation Level and Comparative Index; (vi) Sector and Comparative Index; and (vii) Equity Level and Comparative Index.

**(i) Universal Findings:**

The comparative analysis of harmonization level for all 104 respondent companies by considering all the nine dependent variables resulted in the following conclusions:

(1) Significant improvement was found in the harmonization trend between the years 1997 and 2006.

(2) The harmonization level increased by 0.2550 in a span of 9 years from 0.2409 to 0.4959.

(3) The highest level of harmonization was evidenced with regard to the treatment of taxation items followed by inventory valuation method and inventory costing method, which evidenced the increase in the harmonization level by 0.4406 and 0.3527.

(4) The least increase in the harmonization level was found in case of accounting for tangible fixed assets followed by accounting for depreciation and accounting for research and development.

**(ii) Age Group and Comparative Index:**

(1) The harmonization level was significantly high with regard to depreciation in younger companies than that of older companies for the period of the study.

(2) The highest harmonization level was evidenced in the case of older companies with the value of 0.7305.

(3) The overall harmonization level indicated by the mean value supported by the standard deviation was on the rise in both the categories of companies.

(4) The degree of harmonization was higher in older companies with 0.2467, 0.4673 and 0.5357 as against 0.2596, 0.4234 and 0.4698 at younger companies for 1997, 2004 and 2006 respectively.

(5) The marginal increase in the harmonization level was higher in older companies than in younger companies with their respective values standing at 0.2890 and 0.2102, taking all the nine variables into consideration.

**(iii) Performance Level and Comparative Index:**

(1) The harmonization level was the highest in accounting for taxation in low profitable companies with regard to taxation with the value of 0.7590 in 2006, it was 0.8185 in high profitable companies with regard to inventory valuation methods in 2006.

(2) The least harmonization level was achieved in low profitable companies on research and development cost with the index value of 0.1129 in 2006 and it was 0.3014 for borrowing costs in high profitable companies.

(3) The marginal increase in the harmonization level between 1997 and 2006 was the highest in taxation with the value of 0.7558 in low profitable companies and 0.6620 in high profitable companies.

(4) The overall harmonization level was marginally higher in high profitable companies with the value of 0.2654 as against 0.2389 in low profitable companies.

**(iv) Size and Comparative Index:**

(1) The highest harmonization level was evidenced in treating taxation items in both small companies and large companies with a higher harmonization level of 0.7149 than that of 0.6987 in smaller companies.

(2) The total harmonization level was higher in small companies than in large companies with their respective values standing at 0.5712 and 0.4378 during 2006.

**(v) Operation Level and Comparative Index:**

(1) The highest harmonization level was achieved by multinational companies in case of investments followed by investments and taxation items.

(2) The least harmonization level was achieved by both uni-national and multinational companies with regard to the treatment of research and development cost, fixed assets and depreciation and this was due to higher level of harmonization existing in the base year.

(4) The total harmonization level was found to be higher in case of multinational companies with the value of 0.5596 in 2006 than in case of uni-national companies with the value of 0.4586 over the base year of 1997.

(5) The marginal increase in the harmonization level in all the nine variables taken together was higher in multinational companies with the value of 0.2924 than in uni-national companies with the value of 0.2206.

**(vi) Sector and Comparative Index:**

(1) The highest levels of harmonization were achieved by consumer durable goods industries, basic and capital goods industries and intermediate goods industries in the accounting treatment of investments, taxation and inventory valuation method.

(2) The marginal increase in harmonization level was found to be the highest in basic and capital goods industries and this was followed by consumer durable goods industries and intermediate goods industries with their respective increased values of 0.2631 and 0.2336 in 2006 over the base year of 1997.

**(vii) Equity Level and Comparative Index:**

(1) The highest harmonization level was evidenced with regard to treatment of taxation items with the value of 0.7539 in 2006 in high equity base companies and this index was followed by the adoption of inventory valuation method and the presentation of investment with their respective values of 0.7224 and 0.6920.

(2) Considering all the nine variables on equity base, the high equity companies achieved the maximum harmonization level with the value of 0.5229 as against the low equity companies achieving the harmonization level with the value of 0.4814 in 2006. However, the marginal increase in harmonization level for all the nine variables taken together was found to be higher in low equity companies than in high equity companies with their respective marginal increases of 0.2441 and 0.2419 by 2006 over the base year of 1997.

**(IV) SIGNIFICANCE TEST**

(1) From the viewpoint of accounting practices adopted by all the 104 respondent companies, it was evidenced that significant differences existed in harmonization levels from the viewpoint of inventory valuation method; inventory costing method; borrowing cost; taxation; investments; and foreign exchange transactions.

(2) No significant differences existed with regard to the treatment of depreciation; fixed assets; and research and development costs when all the 104 companies were considered.

(3) When each dependent variable was related to each independent variable, it was evidenced there were differences in harmonization levels across all dependent

variables in relation to age, performance, size, operation, sector and equity with regard to inventory valuation methods, borrowing costs, taxation items and investments.

(4) No differences existed in the harmonization levels in relation to all the independent variables in the areas of depreciation, fixed assets and research and development costs.

(5) Significant differences in the harmonization level were evidenced in older companies for the period of the study and no significant differences existed in younger companies.

(6) The harmonization level was significant in case of small companies and low equity base companies and no significance was evidenced in case of large companies and high equity base companies.

(7) Significant differences in harmonization level were evidenced in consumer durable goods industries and no significant differences were found in case of basic and capital goods and intermediate goods industries.

## TESTING OF THE HYPOTHESES

In the background of the above findings, the testing of the hypotheses has been given below in background of broader conclusions:

- (1) The harmonization level for all the 104 respondent companies with regard to nine independent variables revealed that the harmonization level increased from 0.2409 in 1997 to 0.4959 in 2006. Hence the hypothesis that mandatory accounting standards have increased the harmonization level in India stands

**ACCEPTED.**

- (2) Based on age status, it was found that the older companies achieved the higher harmonization level than the younger companies with the H-index values of 0.5357 and 0.4698 in 2006. Hence the hypothesis that there is a positive relationship between age of the companies and harmonization level stands

**ACCEPTED**

- (3) From the viewpoint of profit level of the sample respondent companies, it was observed that the harmonization levels stood at 0.5376 and 0.4679 in 2006 in high profitable companies and low profitable companies respectively. Hence the hypothesis that there is a positive relationship between financial performance measured in terms of profit level and harmonization level stands

**ACCEPTED.**

- (4) From the viewpoint of the pattern of ownership equity, represented as size of an enterprise, it was observed that the harmonization level was more in small companies than in large companies with their respective H-indices of 0.5712 and 0.4378 during 2006. Based on this evidence, the hypothesis that there is a positive relationship between ownership equity and harmonization level stands

**REJECTED.**

- (5) It was evidenced that the harmonization level was higher in multinational companies than in uni-national companies with their respective H-indices of 0.5596 and 0.4586 in 2006. Hence the hypothesis harmonization level is higher in multinational companies than uni-national companies stands

**ACCEPTED.**

- (6) The values of H-index in 2006 with regard to consumer durable goods industries, basic and capital goods industries and intermediate goods industries stood at 0.5088, 0.5075 and 0.4922. This indicated deviations in the patterns of H-index across three sectors. Hence the hypothesis that there is a positive relationship between type of industrial sectors and harmonization level stands

**REJECTED.**

## PROBLEM AREAS AND SUGGESTIONS

The study has identified the following problem areas:

- (i) Non-disclosure of an item is problematic, as it is not always clear whether the item is applicable to the company but it has failed to disclose, or whether the item is not applicable. Hence the companies should be directed disclose all the accounting policies followed by them.
- (ii) If events of some distinct kind are recognized in the annual accounts of an enterprise, while another enterprise does not recognize similar events in its accounts, comparability of information is impaired. Hence the companies should be made to follow the disclosure policy.
- (iii) Conflicts due to different rules such as SEBI rules, Income Tax rules, Companies Act rules etc. prevailing in India have kept the companies in a dilemma in the level of disclosure and measurement method to be adopted. In this direction, a unified effort is to be made to set the accounting policies for each individual accounting item in the rules promulgated under SEBI guidelines, Income Tax Act, 1961 and also the Companies Act, 1956.
- (iv) Classifying adopted accounting policies is very difficult. Hence the accounting alternatives for reporting items should be identified without ambiguity on one hand and hybrid accounting policy choices should be prohibited as early as possible so that the accounting policy choices fall into water tight compartments.
- (v) There is no yardstick to compare harmonization level. Only one can evaluate based on the trend changed over the years. Therefore, a benchmark of organizational level should be issued to be adopted by the enterprises.
- (vi) A general problem associated with using concentration measures to quantify harmony stems from their implicit weighting of clustering 'c' of companies around one or two of a number of available alternatives, against the number 'n' of those available alternatives. Intuitively, harmony should increase when 'c' increases, and decrease when n increases. However, it is difficult to predict how a particular harmony measure will react when both 'c' and 'n' change at the same time, and in different directions. Hence these conceptual ambiguities should be set right through an intensive conceptual research on harmonization.

- (vii) Though ICAI has already issued 29 standards, mere issuing of accounting standards will serve no purpose. Its enforceability is essential. Thus ICAI must compel the companies to ensure the compliance with these standards.

## **SCOPE FOR FURTHER RESEARCH**

Measuring the extent of harmony of accounting practices of companies in India is still very much at an exploratory stage. Consequently, there is substantial scope for further research. The following are the areas suggested for further research:

- (i) Because of the growing influence of accounting regulations on accounting practice and market indicators, formal accounting harmonization may be more carefully and extensively examined to make material harmonization effective.
- (ii) Spontaneous harmonization, as a consequence of developments abroad or evolution of practice, is another area for further research.
- (iii) A study that encompasses both measurement and disclosure practices may reveal still reliable evidence on harmonization.
- (iv) Industry-wise harmonization is yet another area requiring further research.
- (v) The changes of harmony over-time and the factors causing the changes in harmonization need to be studied.
- (vi) Multinational auditors play a vital role in accounting practice harmonization. Their nature and reasons for their support for harmonization need further investigation.
- (vii) Some categories of disclosures and measurement policies have more harmony and others have less harmony. A category-by-category examination of the level of harmony would provide the policy makers or standard setters with useful insights into the firm specific reasons for the harmonization situation of the company.

## **THE EPILOGUE**

The rapid expansion of global and regional market systems is making research in the area of harmonization of accounting standards and practices more pertinent. The need for such research is also becoming more critical as a result of the

proliferation of national accounting regulatory systems. Hence the present study mainly focused to measure the extent of harmonization of Indian accounting measurement practices and to explore ASBs accomplishment in reaching its perceived objective of harmonized financial statements. The broad conclusion, which can be drawn from the empirical study, is that there is relatively partial uniformity or close consensus in adoption of accounting methods. The results evidenced that harmony level has increased progressively after mandatory nature of accounting standards. This progress supports the view that the adoption of accounting standards and compliance with them over the years has significant impact on harmonization of accounting practices. This enhances the quality of financial statements thereby increasing the degree of comparability. With this, the usefulness of financial statements improves definitely. Hence the ICAI has to take stringent action to enforce compliance with the standards by the enterprises. In the long run, the endeavor of all institutions engaged in improving the quality of financial reporting is to discourage diversity and encourage uniformity.