International Accounting Standardization and Classification: The Case of USA

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ABSTRACT: In this study we aim to investigate the international accounting system of USA and its position within other accounting systems. The data were analyzed via hierarchical cluster analysis. Our results indicate that the seven countries of the study were classified into three groups. The first group referred as "European Systems", the second group referred as "Mixed (Transition) Systems" and the third group which was consisted of two countries: the USA and Australia. The specificity and uniqueness of the accounting systems of both countries prevented them from being included in either the first or the second group. **KEYWORDS:** Accounting, International Accounting, Classification, USA

Date of Submission: 07-05-2018 Date of acceptance: 21-05-2018

I INTRODUCTION TO ACCOUNTING - HISTORICAL DATA

In 3000 BC., the first accounting items were appeared and their usage was to display the counting of the goods produced and consumed. After 3000 BC evidences were appeared in many countries such as Judea, South America and Egypt. They used them to manage the property of temples, states and kings according to the status of each country. The indications have shown us that in Ancient Athens they used the accounting data in order to have the ability to monitor the managers of Public Money. Accounting data began to appear in Finland and Italy during the 13th and 14th century. Through these data they monitored trade transactions. Later, the Roman merchants used a fund book which it was the basis for their tax obligations (Touw W., 2006).

The first accounting rules were published in 1494 by the Franciscan monk Luca Paciolo in his book "Summa de Aritmetrica Geometria Proportinalita". Then the Italian merchants have spread the new accounting method in other countries, although the role of accounting remained limited due to the prevailing feudal system which prevented the development of trade transactions. The project of Paciolo was followed by many others and as a result the Italian Accounting became known in the 16th century.

Several years later, accounting became a necessity due to the industrial revolution of the 19th century and that was the start point for accounting explosion. The rapid growth of the Financial Statements resulted in accounting research not only in cash and transactions but also for property and financial results (Christiaens J., 2006).

II OBJECTIVES OF ACCOUNTING STANDARIZATION - BENEFITS

The end product of accounting science is the preparation of the financial statements as they result from each type of transactions that the entity has made at a given point in time. The most important object of accounting is to provide information to users for making business decisions. The users draw relevant information from the financial statements that companies draw up. The information provided by the Accounting, whether directed at the management or third parties should be comparable over time within and outside the enterprise, with data from similar businesses in the industry.

Accounting Standardization aims to ensure the collection of homogenous and accurate data and information on assets, liabilities, financial position, and production and trading activity of all economic units in the country, by sector and in total.

This standardization and comparability, however, does not stem only from the accepted accounting principles. The arbitrariness of many accountants, the improvisation in many cases, without contradicting the accounting principles, destroys the comparability of the data. The establishment of International Accounting Standards (IAS), the International Financial Reporting Standards (IFRS), the National General Accounting Plans and the International Public Sector Accounting Standards (IPSAS) achieves standardization, uniformity and harmonization of accounting margins both at international, national and transnational levels. The importance of information for decision-makers becomes more important when they can be comparable over time within both the business itself and between enterprises in different sectors of the economy and between states. (Chalmers et al. 2007)

In order to achieve the comparability of accounting information, companies should apply the same accounting principles and methods. It is therefore necessary to standardize the whole range of the accounting process in order to capture and monitor the business activity of the entity. All this must be done in order to ensure the collection of homogeneous, reliable and correct data and information about their asset structure, the financial situation and their activity.

Most of the time there were phenomena where company balance sheets belonging to the same sector varied considerably due to their different ways of compilation. This contributed to the lack of time tracking of the company itself, as well as making cross-sector comparisons impossible. Over time and with the development of different accounting practices to meet various needs we have led to the current evolution of accounting. The factors which influenced the differences in accounting between countries are:

- **1.** The degree of concentration of each economy,
- 2. The nature of economic activities,
- **3.** The level and rate of economic growth.

The maximum benefit which is accruing from Accounting Standardization is the comparability and transparency of international financial information. Comparability is about to eliminate existing misunderstandings and doubts about the reliability of foreign financial statements and to remove one of the major barriers to the free flow of international capitals. Investors and economic analysts will be able to read and interpret the consolidated financial statements, making useful comparisons of various international portfolios. This enhances the free movement of capital in the internal market and the Community companies can compete on equal terms to raise capital on European and international capital markets (Touw, 2006).

The greatest benefit, of course, from international accounting harmonization, arises for multinational companies. Accounting harmonization will free up time and funds spent so far to compile and interpret divergent financial information, as it is necessary to compile and publish different situations in order for companies to comply with different national laws and practices. The process of preparing the consolidated financial statements is also expected to be simplified, but significant benefits are expected to result from the clearer and easier flow of coded accounting information within an international group of companies. Finally, the cost of both the audit of multinationals companies and the cross-border movement and training of staff will be reduced.

- Accounting Standardization has direct contribution to both the national economy and to the social, economic and fiscal policy. The implementation of standardization accounting on a national and international scale achieves:
- 1. The provision of objective, correct, and clearly defined information to business decision makers in order to achieve a more rational investment of capital and increase productivity,
- 2. The definition of common terminology and common "accounting language" in the economic world,
- **3.** Accurate, homogeneous, objective and accurate calculation of the data on the financial position and results of business units,
- 4. Managing, tax, market and bank controls,
- 5. Facilitating the development of economic analyzes and studies not only at sectoral but also and at cross-sectoral level or level of general importance in other sectors of the economy,
- 6. Facilitate the implementation of modernized methods of carrying out accounting work with modern computerized and electronic systems, resulting in the reduction of operational costs and provision of information in a short period of time,
- 7. Complete and correct costing and determination of the analytical results of the company by segment or by activity are achieved.
- 8. A single type of financial statement with homogeneous content is established which allows:
- The study and comparison of the company over time, sectoral and interdisciplinary,
- The provision of the banks with correct data for the credit rating of the firm,
- The provision to professional organizations of objective and homogeneous data for sectoral and collective agreements,
- The easier tax audit of the business because of the tax auditor's knowledge of the content of each account and because the standardized account provides data for the determination of taxable income.

III CLASSIFICATION OF THE ACCOUNTING MODELS

In the Western world, two basic accounting models have been developed (Nobes, C. 1998, 2011):

The French-German model

It first appeared in France in the 17th century with state initiative and found a special appeal in countries where there is significant state intervention in the economy, such as the continental European countries. The model

aims to regulate the relationship between the state and the business and contributes to the determination of taxable amount and to apply the principle of conservatism for business viability based on historical cost and the use of depreciation.

> The Anglo-Saxon model

It first appeared in Great Britain in the 19th century. It was mainly developed in countries where the relationship of the business with the investors has a leading role in the economy, while the state does not play an important role. The model, therefore, focuses on comparability, coherence, correct and in-depth information for decision-makers (Gray, S.J., 1988).

IV ACCOUNTING STANDARDIZATION OF USA – THE FIRST STEPS

After the stock market crisis of 1929, there was a clear need to establish a body that would ensure the smooth operation of the market and to set rules for the reliability and comparability of financial statements. The lack of accounting standards was not considered a cause of the crisis, but it was deeply rooted in the belief that the introduction of accounting principles and rules was prerequisite for the smooth and efficient operation of the financial system.

The first attempts to standardize the accounting information began in the decade of 1930s in the United States of America. In 1934, the Securities and Exchange Commission (SEC) was set up. The SEC was a state organization aimed at accounting standardization but did not have the financial capacity to allocate large funds for research and operation of the concerned institutions. In 1938 the SEC gave its competence to the private sector, which could secure funds, but also would be given the independence of decisions and choices required in such circumstances (Ampofo, A. & Sellani, R. 2005).

One of the first attempts was made by the American Institute of Certified Public Accountants (AICPA), which has set up a special committee to cooperate with the New York Stock Exchange in order to achieve the goal of establishing standards for accounting procedures. The Committee on Accounting Procedure (CAP) proposed five rules on the Stock Exchange but the limited resources of the committee and the lack of research efforts to support its proposals were questioned in the late 1950s. The answer was the replacement of CAP with Accounting Principles Board (APB). The Accounting Principles Board has been operating for fourteen years but finally it has ultimately failed to offer anything more effective than the Committee of Accounting Procedure.

Thus in 1973 the Financial Accounting Standards Board (FASB) was created. The Financial Accounting Standards Board (FASB) has its primary mission the exclusive creation, publication and improvement of accounting standards in order to reflect better the company's financial statements. The FASB is a private, nonprofit organization.

SEC has indicated FASB as the body responsible for setting the accounting principles GAAP (Generally Accepted Accounting Principles) for US public enterprises. The standards issued by the FASB are considered legitimate, as they are authorized by the Securities Exchange Commission (SEC), the American Institute of Certified Public Accountants (AICPA) and the Committee on Accounting Procedure (CAP). It consists of 8 members and a staff of 40 qualified people, engaged in the research and development of the organization's objectives and has an advisory group, the Financial Accounting Standards Advisory Council.

One other body which was established in 1984 to strengthen the FASB and to contribute to the recognition of current and emerging issues and to address implementation problems is the EITF (Emerging Issues Task Force). The advisory assistance provided by the EITF addresses important issues of immediate concern and priority. The EITF consists mainly of representatives of listed companies but also includes members who are familiar with specialized issues and practices that should be taken into account.

- The publication of the standards by the FASB includes the following four steps:
- The declaration of the standard,
- The vote of the members,
- The background and historical information on the pattern

• The basis for conclusions, alternatives proposals, advantages, disadvantages etc.

Sometimes there is also a fifth stage where examples are given on how the new standards should be applied in practice.

V US-GAAP (GENERALLY ACCEPTED ACOUNTING PRINCIPLES)

In the US the accounting standards that companies are required to apply are the American Accounting Standards or US - GAAP. The application of the above standards is also mandatory for all non - US companies that are listed on US stock exchanges. This mandatory implementation is determined by the SEC.

SEC is the most powerful member of the International Organization of Securities Commissions (IOSCO) as a dominant player in setting up rules, principles and policies to ensure the efficiency and transparency of financial markets. In the USA as USGAAP or simply GAAP, (Generally Accepted Accounting Principles) are called the accounting principles used by public, private, non-profit companies and organizations

to prepare and present their financial statements. Generally, GAAP includes locally applicable Accounting Frameworks related to accounting laws and regulations and accounting standards (Beck, et al. 2017).

Similarly with many other countries, (Hong, P. et al 2018) the US government does not directly set accounting standards in the belief that the private sector has better knowledge and resources. American standards are not written in law, although the US Securities and Exchange Commission (SEC) require them to be followed in the financial reports of public enterprises. Today FASB (Financial Accounting Standards Board) is the biggest principle in establishing generally accepted accounting principles for public, private and non-profit companies (Daske, H. 2006).

GAAP are interested in measuring the economic activity when such measurements are to be made and to be recorded, the disclosures about this activity and the preparation and presentation of the cumulative financial information in the form of financial statements. GAAP are developed when questions such as how to achieve the objectives, i.e the measurement, recognition time, disclosure or presentation are arising.

VI DATA AND METHODOLOGY

In our study we aim to classify various systems under examination by using statistical techniques, based on the similarities between the accounting rules set by 6 countries and the IASC. We have used the TRANSACC database (Transnational Accounting and A Reference Matrix) in order to obtain the data. The rules of each country have been established by accounting academics and experts. All the data that have been created were based on the rules related to preparation of balance sheets and statements of income, two basic concepts of an accounting system. These data have been classified under the titles of "accounting" (recording, classification, abstracting) and "valuation" (TRANSACC, 1995). The countries we have used in the study are: USA, Australia, Germany, Canada, Spain and IASC (International Accounting Standards Committee).

We have used the TRANSACC database which includes the accounting rules pertaining to group accounts. In other words, this part compiles accounting rules on consolidation for the Corporations in each country. We are following the methodology of the study of d'Arcy (2000). However, Nobes (2004) suggested that some of the accounting rules on consolidation were compiled in the wrong way. Moreover, consolidation procedures are carried out mainly to inform investors, while accounting of enterprises not subject to consolidation not only provides information to investors but also serves multiple purposes such as taxation (Sellhorn & Tomaszewski, 2006). As a result, in light of the concerns listed above, accounting rules on consolidation have not been included in the data set used in the present study.

VARIABLES	AUSL	CA	FR	GER	IASC	SP	USA
ACCOUNTING							
Basic principle (True and fair view) yes/no	No	Yes	Yes	No	No	No	No
Current Assets							
Intangible Assets							
Establishment and organization costs	Ι	Ι	Ι	Y	Ι	G	G
Capacity increase and re-organization costs	G	Ι	Ι	Ι	G	G	G
Research Costs	Y	Y	Y	Y	Y	İ	Y
Development Costs	Y	Ι	Ι	Y	G	Ι	Y
Purchase of patent, license and etc.	G	G	G	G	G	G	G
Self-production of patent, license and etc.	Ι	G	Y	Y	G	G	Ι
Purchase of goodwill	Ι	G	Ι	Ι	G	G	G
Self-production of goodwill	Y	Y	Y	Y	Y	Y	Y
Tangible Assets							
Difference between current and fixed assets	G	G	G	G	G	G	G
In financial leasing, the capacity of the lesser to	Y	Y	Y	Y	Y	Y	Ι
make an entry in the asset							
In financial leasing, the capacity of the lessee to	G	G	Y	G	G	G	G
make an entry in the asset							
In activity leasing, the capacity of the lesser to	G	G	G	G	G	G	G
make an entry in the asset							
In activity leasing, the capacity of the lessee to	Y	Y	Y	Y	Y	Y	Y
make an entry in the asset							
Costs of coming months/years, Costs paid in	I	G	G	G	G	G	G
cash				-	-	-	
Advance Payment for Placed Orders	G	G	G	G	G	G	Y
Deferred tax assets	G	I	Ι	Ι	Ι	G	G
Passives							
Legal Reserves (Liability to create legal	No	No	Yes	Yes	No	Yes	No
reserves) yes/no							
To create reserve for bad debts to arise from			C		C		
general commercial transactions or legal	Y	I	G	G	G	G	I
requirements							

 Table 1: Variables of the study

To create reserve for possible loss to arise due to uncompleted transactions **	Y	G	G	G	G	G	G
	N/	C	I	I	C	G	C
To create reserve for expenditures (possible	Y	G	1	1	G	G	G
expenditures-losses)	G	C	C	T	G	G	G
Advance payments of placed orders Deferred revenues **	_	G	G	-	-	-	-
	G	G	G	G	G	G	G
Government Incentives	I	I	G	I	I	I	I
VALUATION						_	_
Valuation of Assets	~	~		-	~	-	-
Amortization of capacity increase and re- organization costs**	G	G	#	I	G	I	I
Amortization of research and development costs **	G	G	#	G	G	G	#
Amortization of self-production, patens, right and etc. (<i>ves/no</i>)	Yes	Yes	No	No	Yes	Yes	Yes
Amortization of goodwill	G	G	I	G	G	G	G
Direct first material costs*		G	G	G	G	G	G
Direct production costs *	G G	G	G	G	G	G	G
VARIABLES	AUSL	CA	FR	GER	IASC	SP	USA
Use or appropriate rate for the costs of required general materials	G	I	I	I	G	G	G
Use or appropriate rate for the costs of required general production	G	I	I	I	G	G	G
Amortization of tangible assets	G	I	I	I	G	G	G
Capitalization of general management costs	G	Ι	Y	Ι	Y	Y	G
Capitalization and recording of - social- purpose expenditures	G	Y	G	Ι	G	Y	Y
Capitalization of loan interests	I	Ι	Ι	Ι	Ι	Ι	G
Capitalization of marketing sales and distribution costs**	Y	Y	Y	Y	Y	Y	Y
Costs of renewal of tangible assets and similar costs	G	G	G	G	G	G	G
Extraordinary amortization in tangible assets	G	G	G	G	G	G	G
Devaluation of the book value of fixed assets	G	Y	G	G	G	G	Y
Valuation of Liabilities					1		
Valuation of equities (Nominal or Real Value) N/R	N	R	N	N	N	Ν	N
Valuation of long-term debts (Recorded or Discounted) R/D	R	D	R	R	D	R	D
Valuation of short-term debts (Recorded or Discounted) R/D*	R	R	R	R	R	R	R

Source: d'Arcy, (2000).

The variables which are using in this study were collected through nominal (categorical, classifying) measurements. Specifically, as we can see in table 1 we have triple variables where (G) is Required, (Y) is Prohibited and (I) is Permitted. Also we have used dual variables (yes/no). The most important function of these values is to define the variables. Therefore, since we the four operations we have cannot be performed using these numerical values, it is impossible to calculate their arithmetic averages as well (Nakip, 2003). There are three statistical analyses that can be applied and these analyses are "factor analysis", "discriminate analysis" and "cluster analysis". The statistical analysis was performed with SPSS.

VII RESULTS

In table 2 we are presenting the results of our study. It is obvious that the two countries with the most similar accounting systems are Spain and International Accounting Standards Committee with similarity rate of 0.851 (85%). This result is not too surprising because the standards which have been developed were complyed with the qualitative qualifications included in the conceptual framework of the FASB in the USA. The set of countries with the second most similar accounting systems were Germany and France with a similarity rate of 82%. The systems with the least similarity (54%) are France and the USA. This result is in parallel with the findings reported by d'Arcy (2001) and Mugan and Akman. (2005).

France was the first country in Europe to prepare and implement the Commercial Code, which was later by the Continental Europe. France is the place of birth of the accounting system of Continental Europe (Novas, et al. 2017). This accounting system is based on the precautionary principle, which aims to protect creditors. On the other hand in USA we have a capital market-oriented Anglo- Saxon accounting system but which differs from other countries which have adopted the same system.

Table 2: Similarities between countries.							
Countries	Australia	Canada	France	Germany	IASC	Spain	USA
Australia	1.000	0.618	0.667	0.733	0.788	0.689	0.731
Canada	0.618	1.000	0.676	0.730	0.749	0.730	0.729
France	0.667	0.676	1.000	0.819	0.731	0.712	0.542
Germany	0.733	0.730	0.819	1.000	0.712	0.698	0.630
IASC	0.788	0.749	0.731	0.712	1.000	0.851	0.715
Spain	0.689	0.730	0.716	0.698	0.851	1.000	0.695
USA	0.731	0.729	0.542	0.630	0.715	0.695	1.000

Table 2. Similarities between countries

Figure 1 summarizes the classifications of the accounting systems of the countries we are studying. The results were obtained through the cluster analysis.

Figure 1: Classification of the study countrie	Figure 1:	Classification	of the	study	countries
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EUROPEAN SYSTEMS	MIXED SYSTEMS	USA- AUSTRALIA SYSTEMS
GermanyCanadaFrance	 IASC Spain	 USA Australia

According to our analysis we found three groups: (i) the USA and Australia group; (ii) the group of mixed systems and separate from the European group; (iii) the European group. From one side we have the group adopting the European system and at the other site with the USA at the other end. The first group is referred to as the European Systems have played an important role in the development of the Continental European accounting system, which occupies a large proportion of the literature. In this scope, it can be concluded that this group represents -although relatively- the accounting system of Continental Europe.

CONCLUSION VIII

In our research we have tried to present the USA account system and to compare the accounting practices of 7 countries, including, Australia, Canada, France, Germany, IASC, Spain and the USA in order to classify them accord to their similarities. In this context, we have obtained 44 accounting implementations of the 7 countries from the TRANSACC database.

Our results indicated that these seven countries were classified into three groups using cluster analysis. The accounting systems of Germany, Canada and France were the first group. Considering the general characteristics of the group countries and the previous studies, this group was referred to as "European Systems", as it includes some of the main countries of the Continental Europe accounting system. The accounting systems of IASC and Spain formed the second group of the study. The examination of the historical course of the socio-economic factors constituting their various accounting systems suggests that the countries in the second group have not created an original system but a mixed structure, due to the influences of other countries' systems. Therefore, this group was named "Mixed (Transition) Systems". The third group was consisted of two countries: the USA and Australia. The specificity and uniqueness of the accounting systems of both countries prevented them from being included in either the first or the second group. Although the difficulties to conduct empirical studies (and the main problem is to obtain data) on the classification of accounting systems, it will be very useful and highly informative to repeat the present study using a larger number of countries and more data.

REFERENCES

- [1]. Ampofo, A. A., & Sellani, R. J. (2005). "Examining the differences between United States Generally Accepted Accounting Principles (US GAAP) and International Accounting Standards (IAS): implications for the harmonization of accounting standards". Accounting forum, Vol. 29, No. 2, pp. 219-231.
- Beck, A. K., Behn, B. K., Lionzo, A., & Rossignoli, F. (2017). "Firm Equity Investment Decisions and US GAAP and IFRS [2]. Consolidation Control Guidelines: An Empirical Analysis". Journal of International Accounting Research, Vol. 16(1), pp. 37-57. Chalmers K., Godfrey JM, Langfield-Smith I., Lu W., (2007). "Globalisation of Accounting Standards", Edward Elgar
- [3]. Publications, Cheltenham-UK.
- [4].
- Christiaens J., (2006), "International Public Sector Accounting Standards: First Experiences", E&Y, Berlin. d'Arcy, A. (2000). "The degree of determination of national accounting systems An empirical investigation". Schmalenbach [5]. Business Review, Vol. 52, pp. 45-67
- d'Arcy, A., (2001). "Accounting classification and the international harmonisation debate an empirical investigation". Accounting, [6]. Organizations and Society, Vol. 26, pp. 327-349.

- [7]. Daske, H. (2006). "Economic Benefits of Adopting IFRS or US GAAP- Have the Expected Cost of Equity Capital Really Decreased?", *Journal of Business Finance & Accounting*, Vol. 33, pp. 329-373.
- [8]. Gray, S.J., (1988), "Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally", Abacus;
 [9]. Hong, P. K., Paik, D. G., & Smith, J. V. D. L. (2018). "A Study of Long Lived Asset Impairment Under US GAAP and IFRS within the US Institutional Environment". *Journal of International Accounting, Auditing and Taxation*.
- [10]. Mugan, C. Ş. & N. H. Akman. (2005). "Convergence of International Financial Reporting Standards: The Case of Turkey". *International Journal of Accounting, Auditing and Performance Evaluation*, Vol. 2, Issue 1/2.
- [11]. Nakip, M. (2003). "Marketing Research Techniques and Applications Supported by SPSS". Seckin Yayıncılık, Ankara.
- [12]. Nobes, C. (1998) "Towards a General Model of the Reasons for the International Differences in Financial Reporting. Abacus, Vol. 34, Issue 2, September 1998.
- [13]. Nobes, C. (2004) "On Accounting Classification and International Harmonisation Debate." Accounting Organization and Society, Vol.29, Issue 2, February 2004.
- [14]. Nobes, C., (2011), "IFRS Practices and the Persistence of Accounting System Classification", Abacus, vol.47,nr.3;
- [15]. Novas, J.C., Alves, M.D.C.G. and Sousa, A., (2017). "The role of management accounting systems in the development of intellectual capital". *Journal of Intellectual Capital*, Vol 18 (2), pp.286-315.
- [16]. Sellhorn, T. & S. Tomasexski. (2006). "Implications of the IAS Regulation for Research into the International Differences in Accounting Systems". Accounting in Europe, Vol.3, Issue 1.
- [17]. Touw W., (2006) "International Public Standards Accounting Standards", KPMG, Netherlands.

Stylianou Tasos." International Accounting Standardization and Classification: The Case of Usa "International Journal of Business and Management Invention (IJBMI), vol. 07, no. 05, 2018, pp. 88-94
