

# Identifying the Classification of EU Countries by an Alternative Variable: The “Stakeholders’ Perception”

Marco Sorrentino (Corresponding author)

Department of Economic and Legal Sciences

Pegaso University, Naples, Italy

E-mail: marco.sorrentino@unipegaso.it

Benedetta Gesuele

Department of Economic and Legal Sciences, Pegaso University, Naples, Italy

Massimiliano Farina Briamonte

Department of Economics, Parthenope University, Naples, Italy

Fabio Fiano

Department of Economics, Second University of Naples, Capua (CE) – Italy

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## Abstract

Since the first part of 20th century, there was a strand of literature that analyzes international differences in financial accounting practices and uses these differences to classify countries into groups having similar characteristics. For a long time, the two main accounting systems that have been analyzed in these studies were the Anglo-Saxon accounting system and the Continental Europe one. Notwithstanding the last decades have been characterized by a widespread harmonization process through an extensive and often compulsory adoption of IAS/IFRSs, the situation did not changed so much, because there are still a lot of relevant differences in applying IAS/IFRSs. The aim of this research is to contribute to the literature in theme of countries classification using a different type of variable: the “stakeholders’ perception” instead of “accounting practices”. Using a quantitative statistic methodology, the

cluster analysis, we identify a three-group classification of the EU countries based on the answers about the costs and benefits of IFRS implementation issued in EU public Consultation, launched ten years after their mandatory application.

**Keywords:** IFRS, costs and benefits, country classification, cluster analysis.

## 1. Introduction

Since the first part of 20th century, there was a strand of literature that analyze international differences in financial accounting practices and use these differences to classify countries into groups having similar characteristics (Lourenço et al., 2015).

For a long time, the two main accounting systems that have been analyzed in these studies were the Anglo-Saxon accounting system and the Continental Europe one (Nobes & Stadler, 2013). Notwithstanding the last decades have been characterized by a widespread harmonization process through an extensive and often compulsory adoption of IAS/IFRS, the situation did not change so much. Contrary to what one might suppose, many empirical analyses found that there are still a lot of relevant differences in applying IAS/IFRS. It is substantially due both to their principles-based approach that could allow various options and ambiguous interpretations (Ball, 2006; Kvaal & Nobes, 2010, 2012; Nobes, 2006, 2008, 2011, 2013; Stadler & Nobes, 2014; Forst & Salerno, 2016) and to the presence of firms that adopt them more in name (“label firms”), than as a part of a strategy to increase their commitment to transparency (“serious firms”) (Daske et al., 2013).

For all these reasons, it is reasonable to assert that trying to classify countries by their accounting systems is still a valuable practice in order to: 1) explain the differences of IAS/IFRS application in different countries; 2) predict the convergence process from domestic standards to IAS/IFRS; 3) identify countries where IAS/IFRS root better (Nobes, 2008).

Starting from these premises, we would like to contribute to the theme of country classification using a different variable to classify the countries: the “stakeholders’ perception” instead of “accounting practices”.

In August 2014, just after ten years of IAS/IFRS mandatory application, the European Commission launched a public consultation in order to collect the perceptions from different countries stakeholders on the experiences of IFRS implementation.

Within this background, the aim of this research is to identify a classification of the EU countries based on the costs and benefits of IFRS implementation perceived by European stakeholders who responded to the consultation. In particular, the research addresses whether stakeholders from different European countries and who have different legal, bureaucratic and cultures traditions (Fox, Hannah, Helliari, & Veneziani, 2013) have different views on the IFRS implementation process in terms of costs and benefits perceived. During the research, using a quantitative statistic methodology, the cluster analysis, we make use of a specific set of queries of the EU public consultation questionnaire, in order to highlight the stakeholders’

perceptions and identify a European country classification.

Our paper contributes to the literature giving a new evidence in the countries classification studies using a different discriminant variable.

The paper continues as follows. Section 2 describes the literature about accounting classification. Section 3 describes briefly the European Union public consultation, underlining its principal findings, and outlines the methodology of the study. Section 4 presents the relevant results of the study and the research practical findings. Section 5 concludes the paper, describing the implication and future research perspectives.

## 2. Classification of Countries by Their Accounting Practices: A Literature Review

Several scholars propose summary tables, studies and analysis about accounting system classification, with different findings, using different samples and different classification methods (Lourenço et al., 2015). This topic become more and more important considering the great efforts of the international community to create a system shared accounting rules and universally accepted.

The earliest paper on international classification of accounting systems is one hundred years old. In the far 1911, Hatfield studied the accounting systems of four countries: France, Germany, the UK and the USA. His findings show that there are three-group classification where France and Germany are together and UK and USA formed two separated groups. Later, in 1967 Mueller, considering the major accounting backgrounds, found four groups. Differently from Hatfield, he put the USA and the UK in the same group. Other authors generate classifications using data regarding on accounting rules (Seidler, 1967; Mueller, 1968). Otherwise, other scholars (Gray, 1988; Roberts, 1995) used not only the data regarding the accounting rules but also the environmental factors.

In 1980, Nair and Frank made the classification of countries into groups based on their accounting practices, examining in depth the disclosure practices used in the groups identified (table 1).

Table 1. Nair and Frank classification (1980)

<b>Group I</b>	<b>Group II</b>	<b>Group III</b>	<b>Group IV</b>
Australia	Argentina	Belgium	Canada
Bahamas	Bolivia	France	Japan
Fiji	Brazil	Germany	Mexico
Jamaica	Chile	Italy	Panama
Kenya	Colombia	Spain	Philippines

Netherlands	Ethiopia	Sweden	United States
New Zealand	India	Switzerland	
Pakistan	Paraguay	Venezuela	
Republic of Ireland	Peru		
Rhodesia	Uruguay		
Singapore			
South Africa			
Trinidad and Tobago			
United Kingdom			

In 2008, considering their accounting proxies, Nobes classified the countries into two groups: the CLASS A as strong equity, commercially driven (Cyprus, Denmark, Ireland, Malta, the Netherlands, Normandy, UK) and CLASS B as weak equity, governmental driven, tax dominant (Austria, Belgium, Czech Republic, Estonia, Finland, France, Germany, Greece, Uruguay, Italy, Latvia, Lithuania, Luxembourg, Poland, Portugal, Slovenia, Slovenia, Spain, Sweden).

Three years later, considering only countries that had adopted IAS/IFRS, the same scholar (Nobles, 2011) identified a classification based on their accounting policy (table 2). Despite the common use of international accounting standards, his findings show that remain the two traditional groups: 1) Anglo-Saxon (Australia, UK) and 2) Continental European (Sweden, Germany, France, Italy, Nederland e Spain).

Table 2. Nobes Classification (2011)

<b>Anglo- Saxon</b>	<b>Continental European</b>
Australia	Germany
UK	France
	Italy

	Holland
	Spain

Later, also many other empirical analyses found that there are still a lot of relevant differences in applying IAS/IFRS (Nobes & Stadler, 2013) due both to various options and ambiguous interpretations (Kvaal & Nobes, 2010, 2012; Nobes, 2006, 2008, 2011, 2013; Stadler & Nobes, 2014) and to the presence of label serious firms adopters (Daske et al., 2013).

In 2015, Lourenço and colleagues, starting from the IFRS accounting systems classification proposed by Nobes in 2011, analysed the eventually existence of different accounting proxies. The results of this study allow us to identify four groups of countries: (1) Russia; (2) the UK; (3) Nordic countries: Sweden, Denmark, Norway and Finland and (4) other European countries: France, Netherlands, German, Switzerland, Italy, Poland, Belgium and Spain (table 3).

Table 3. Lourenço at other classification (2015)

<b>Group 1</b>	<b>Group 2</b>	<b>Group 3 (Nordic countries)</b>	<b>Group 4 (Other European countries)</b>
Russia	the UK	Sweden	France
		Denmark	Netherlands
		Norway	German
		Finland	Switzerland
			Italy
			Poland
			Belgium
			Spain

Finally, it is very interesting the study conducted by Forst and Salerno (2016). The authors classify the EU Member States into 3 different groups (Domestic Leaning; IFRS Leaning; IFRS Integrated), considering the similarities in their IFRS implementation choices allowed by the 2002 EU Regulation (table 4).

Table 4. Forst &amp; Salerno classification (2016)

<b>Domestic Leaning</b>	<b>IFRS Leaning</b>	<b>IFRS Integrated</b>
Austria	Czech Republic	Bulgaria
Belgium	Denmark	Croatia
France	Finland	Cyprus
Germany	Ireland	Estonia
Hungary	Luxembourg	Greece
Poland	Netherlands	Italy
Spain	Portugal	Latvia
Sweden	Romania	Lithuania
	United Kingdom	Malta
		Slovakia
		Slovenia

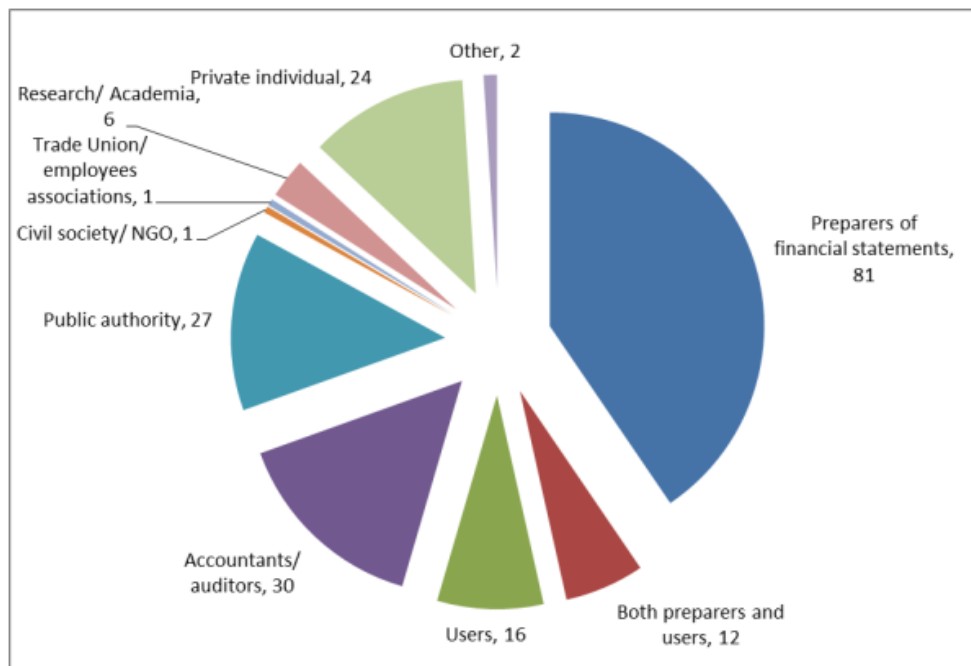
### 3. Methodology

In this section, we briefly describe the European Consultation Draft and above all the set of questions used to arrange our statistical analysis. Then we describe the methodology performed during the analysis.

#### *3.1 The EU Public Consultation on IAS/IFRS Implementation at a Glance*

The EU public consultation on the impact of IAS/IFRS after ten years of their mandatory application was launched by European Commission in August 2014 and was kept open until November of the same year. The consultation received 200 contributions (figure 1).

Figure 1. Stakeholders who responded to EU public consultation on the impact of IFRS



Source: European Commission (2015). *Evaluation Of Regulation (Ec) N° 1606/2002 Of 19 July 2002 On The Application Of International Accounting Standard.*

The main findings of the consultation are the following (European Commission, 2015, p. 4):

- “The Commission found that the IAS Regulation has increased the transparency of financial statements through improved accounting quality and disclosure and greater value-relevance of reporting, leading to more accurate market expectations including analysts’ forecasts. It also led to greater comparability between financial statements within and across industries and countries although some differences persist”;
- “The Commission found evidence of improved capital market outcomes: higher liquidity; lower costs of capital; increased cross-border transactions; easier access to capital at EU and global level; improved investor protection and maintenance of investor confidence. However, as noted above, the effects of IFRS could not be isolated from other changes affecting capital markets”.

### 3.2 The analysis

The aim of this research is to identify the accounting classification of the EU countries based on the costs and benefits of IFRS implementation perceived by the European stakeholders who responded to the consultation.

In order to answer our research question we made use of a specific set of queries in the European Consultation draft in order to highlight the stakeholders’ perceptions. In the following table, we describe the queries chosen (table 5).

Table 5. Questions of EU public consultation used for the empirical analysis

N. of the question	Text of the question	Type of answer
14	Has the application of IFRS in the EU helped create a level playing field for European companies using IFRS, compared with the situation before mandatory adoption?	<ol style="list-style-type: none"> <li>1. <i>Yes</i></li> <li>2. <i>No</i></li> <li>3. <i>No Opinion</i></li> </ol>
16	In your experience, has the application of IFRS in the EU had a direct effect on the overall cost of capital for your company or the companies you are concerned with?	<ol style="list-style-type: none"> <li>1. <i>Cost has fallen significantly</i></li> <li>2. <i>Cost has fallen slightly</i></li> <li>3. <i>No effect</i></li> <li>4. <i>Cost has risen slightly</i></li> <li>5. <i>Cost has risen significantly</i></li> <li>6. <i>No opinion</i></li> </ol>
17	In your view, has the application of IFRS in the EU improved protection for investors (compared with the situation before mandatory adoption), through better information and stewardship by management?	<ol style="list-style-type: none"> <li>1. <i>Yes, to a great extent</i></li> <li>2. <i>Yes, to a small extent</i></li> <li>3. <i>It had no impact</i></li> <li>4. <i>No, protection for investors has worsened</i></li> <li>5. <i>No opinion</i></li> </ol>
18	In your view, has the application of IFRS in the EU helped maintain confidence in financial markets, compared with the likely situation if it had not been introduced?	<ol style="list-style-type: none"> <li>1. <i>Yes, to a great extent</i></li> <li>2. <i>Yes, to a small extent</i></li> <li>3. <i>It had no impact</i></li> <li>4. <i>No, confidence in financial markets has decreased</i></li> <li>5. <i>No opinion</i></li> </ol>
19	Do you see other benefits from applying IFRS as required under the IAS Regulation?	<ol style="list-style-type: none"> <li>1. <i>Yes</i></li> <li>2. <i>No</i></li> <li>3. <i>No Opinion</i></li> </ol>



20	In your experience, on balance and at global level, how do the benefits of applying IFRS compare to any additional costs incurred – compared with the situation before mandatory adoption, bearing in mind the increasing complexity of businesses that accounting needs to portray?	<ol style="list-style-type: none"> <li>1. <i>Benefits significantly exceed the costs</i></li> <li>2. <i>Benefits slightly exceed the costs</i></li> <li>3. <i>Benefits and costs are broadly equal</i></li> <li>4. <i>Costs slightly exceed the benefits</i></li> <li>5. <i>Costs significantly exceed the benefits</i></li> <li>6. <i>No opinion</i></li> </ol>
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Source: *our elaboration*

We choose in the Consultation the questions that, in our opinion, better describe the costs and benefits perceived by the respondents. Totally, the voluntary respondents to these specific questions have been 191. They represent the universe for our analysis. From this number, we have eliminated all the answers given by subjects that came from non-UE countries or that replied only to one of the selected questions (statistically not significant). Finally, we selected 110 subjects divided in Civil society organization/non-governmental organization, Auditing firm, Association, Company preparing financial statements, Public authority and Private authority.

The sample is very heterogeneity both as home country (table 6) and as type of stakeholders (table 7).

Table 6. Sample, distribution by home countries

Country	N. of Respondents
Austria	3
Belgium	5
Bulgaria	1
Czech Republic	4
Denmark	5
Estonia	1

Finland	1
France	18
Germany	27
Greece	2
Ireland	1
Italy	5
Luxembourg	2
Poland	2
Spain	6
Sweden	3
The Netherlands	1
United Kingdom	23
<b>Total</b>	<b>110</b>

Table 7. Sample, distribution by type of stakeholders

<b>Type</b>	<b>N. of replays</b>
Civil society organization / non-governmental Organization	10
Auditing firm	20
Association	21
Company preparing financial statements	22
Public authority	18

Private Authority	19
<b>Total</b>	<b>110</b>

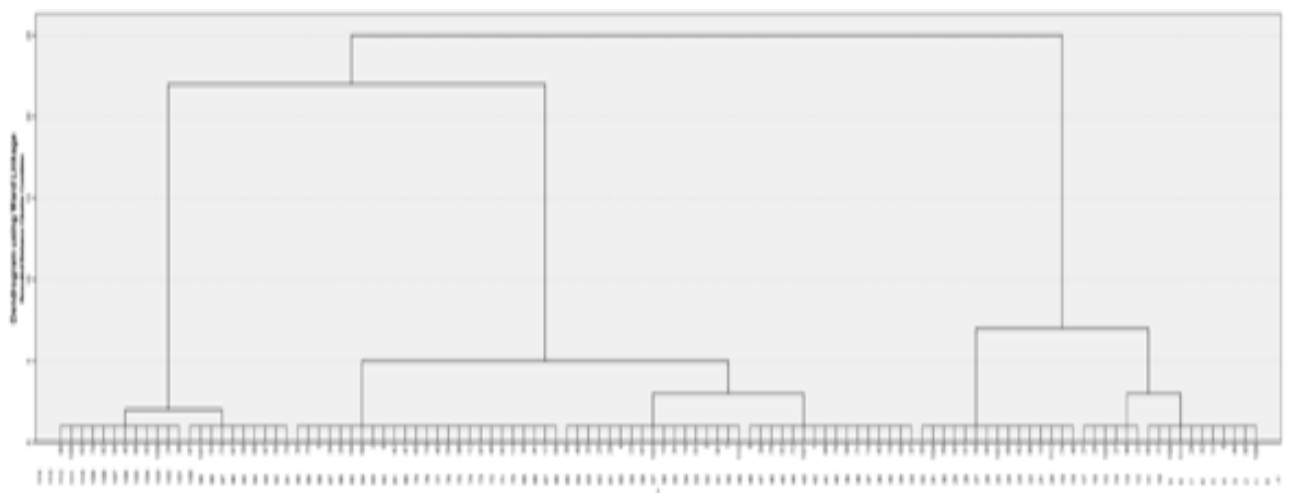
### 3.2.1 The Empirical Analysis

In the research, we use the cluster analyses, that is somewhat similar to that applied by Nobes (1983, 2011), d’Arcy (2001), Lourenco and colleagues (2015) and Forst and Salerno (2016). In this study, differently from the previous literature and consolidated studies, we choose to analyze not accounting data (Financial Statement data) but qualitative information collected using a set of queries of the questionnaire of EU public consultation. Considering that the data are collected by a survey we expected a presence of strong correlation between them, so we performed the correlation test.

In order to limit the effect of the strong correlation highlighted we performed the categorical factor analysis. Subsequently, we perform a cluster analysis in order to identify the most similar pairs of countries. The cluster analysis performed is the cluster K-MINS. It is able to identify the level of costs and benefits perceived in the sample as statistical value and, as consequence, to express different groups of countries whose stakeholders have similarities in terms of costs and benefits perceived.

Following Dendrogram (figure 2) describes the cluster formatted during our empirical evidences. In line with methodology used, we choose to keep out 5 countries that have only up to 1 respondent.

Figure 2. Dendrogram of three cluster solution



#### 4. Results and Findings

The results of this analysis allow us to identify three groups of countries: (1) Belgium, Denmark, Germany, Poland, Spain, Sweden and United Kingdom; (2) Austria, Czech Republic, France and Luxembourg; (3) Italy and Greece (table 8).

Table 8. Cluster Analysis

Cluster 1	Cluster 2	Cluster 3
Belgium	Austria	Greece
Denmark	Czech Republic	Italy
Germany	France	
Poland	Luxembourg	
Spain		
Sweden		
United Kingdom		

The findings of this analysis are quite different from the results of the previous studies based on accounting practices. In this sense, the position of the UK is explanatory. It is placed in the first cluster with Belgium, Denmark, Poland, Sweden and, above all, with typical “continental countries” like Germany and Spain. Indeed, all the previous studies based on accounting practice classified the UK as a single cluster or together with other countries that have Anglo-Saxon accounting tradition (so called, Anglo-Saxon countries). On the contrary, the classification resulting by our analysis is much more similar to Forst and Salerno’s one, where countries influenced by Anglo-American accounting practice (namely, United Kingdom and Ireland) are not at the leading of IFRS adoption, but in the same group with different countries such as Czech Republic, Denmark, Luxembourg and even Portugal and Romania.

Analyzing table 4 and table 8, it is simple to notice that the countries located in the first two groups of our classifications (*Cluster 1* and *Cluster 2*) are overall in the first two groups of Forst and Salerno classification (*Domestic Leaning* and *IFRS Leaning*); while Italy and Greece belong to the third group in both classifications (table 9).

**Table 9.** A comparison between Forst & Salerno and our classification

<b>Country</b>	<b>Sorrentino &amp; Gesuele classification</b>	<b>Forst &amp; Salerno classification</b>
Belgium	<i>Cluster 1</i>	<i>Domestic Leaning</i>
Denmark	<i>Cluster 1</i>	IFRS Leaning
Germany	<i>Cluster 1</i>	<i>Domestic Leaning</i>
Poland	<i>Cluster 1</i>	<i>Domestic Leaning</i>
Spain	<i>Cluster 1</i>	<i>Domestic Leaning</i>
Sweden	<i>Cluster 1</i>	<i>Domestic Leaning</i>
United Kingdom	<i>Cluster 1</i>	IFRS Leaning
Austria	Cluster 2	<i>Domestic Leaning</i>
Czech Republic	Cluster 2	IFRS Leaning
France	Cluster 2	<i>Domestic Leaning</i>
Luxembourg	Cluster 2	IFRS Leaning
Greece	<b><i>Cluster 3</i></b>	<b><i>IFRS Integrated</i></b>
Italy	<b><i>Cluster 3</i></b>	<b><i>IFRS Integrated</i></b>

## 5. Conclusions, Limits and Future Research Perspectives

The main statistical technique used in the researches about countries classification is the cluster analysis, which had been used by d'Arcy (2001), by Nobes (1983 and 2011) and more recently by Lourenço and colleagues (2015) and by Forst and Salerno (2016).

The empirical evidence shows that a country classification based on the costs and benefits perception of IAS/IFRS implementation identifies three groups of countries: (1) Belgium, Denmark, Germany, Poland, Spain, Sweden and United Kingdom; (2) Austria, Czech Republic, France and Luxembourg; (3) Greece and Italy.

These results seem to be substantially in contrast with the previous primary country

classifications based on their accounting practice, but much more in line with the classification issued by Forst and Salerno (2016). In this sense, it would be possible to conclude that the perceptions of EU stakeholders in terms of (positive and negative) effects produced by IAS/IFRS implementation are coherent with the choices allowed by the 2002 EU Regulation that every EU country made.

The study has several limits as the heterogeneity of the sample. We underline that at the same time this heterogeneity could be considered as a “value added” of the sample characteristics, in fact thanks to this characteristic we have the possibility to know the point of view of different stakeholder types.

Another important limit of the study, in our opinion, is the type of European survey used for the classification that is a voluntary survey and so could be not so representative. We underline this aspect as limit but, at the same time, we emphasize that this aspect is a point in favor for the goodness of the answers, namely people to answer at the Consultation are really interested to the question and, for this reason, they might be very scrupulous to disclosure their opinion.

Our paper contributes to the literature giving an alternative approach to identify the countries classification using a different discriminant variable: the “stakeholders’ perception” instead of “accounting practices”.

For the future, we propose to repeat the study with a semi-structure interview at a preselected sample in order to limit the heterogeneity of the sample.

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