Sociocultural IFRS value analysis in Estonia, Latvia and Lithuania

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Abstract

Estonia, Latvia and Lithuania form the Baltic region of the Central and Eastern European countries (CEEC). These countries share a past linked with variety of countries including Scandinavian countries like Sweden and Finland, Germany and Poland and a common fate of being economies emerging from several decades under the domination of the Soviet Union. This paper examines the sociocultural potential of each country to establish and sustain sufficiently high quality financial reporting to support continued economic growth and an appropriate allocation of international capital. The analysis is based on previous research into cultural accounting value methods. That research examined Hofstede cultural value dimensions and corresponding Gray accounting value dimensions to develop country specific accounting value profiles that are compared with a posited ideal IFRS favorable accounting value profile. Other research has quantified a country's sociocultural IFRS orientation using a Composite IFRS Orientation Index and an Expanded IFRS Orientation Index, the latter incorporating additional sociocultural factors of perceived corruption, political risk, educational level, and regulatory business orientation. Based on this analysis, opportunities for the improvement of financial reporting and the financial reporting infrastructure of these countries are discussed.

Introduction

Estonia, Latvia and Lithuania are connected culturally in many ways. All are within the Baltic region where their neighbors are the Scandinavian countries and Russia to their north, and Germany and Poland to their immediate west. Historically, the major port cities in these countries including Tallinn, Riga and Vilnius, were connected economically and culturally through the Hanseatic League which operated from the MiddleAges. The league was dominated by Lübeck (Germany)and,earlier, Visby (Sweden). The three Baltic States experienced strong Russian influence during various periods. All three countries were annexed into the Russia Empire where they remained until World War I. At that time each formed a constitutional democracy which was ended by the imposition of Soviet Russian annexation at the onset of World War II itself terminating in the 1990s. Large Russian minority populations can still be found, particularly in Latvia and Estonia. Linguistically, Latvia and Lithuania speak closely related languages within the Balto-Slavic language group. Estonian, on the other hand, is in the Finno-Ugric language family, connecting Estonia with Finland and, by association, the other Scandinavian countries of the Baltic.The predominant religious affiliation in Estonia and Latvia is Lutheran protestant reflecting North German and Scandinavian historical and cultural connections. Both were annexed by the Swedes on various occasions in their early history. Lithuania is predominantly Roman Catholic, reflecting its ties with Poland dating back the dual monarchies of Poland-Lithuania (Polish Lithuanian union 1385-1569 and Polish Lithuanian Commonwealth 1569-1795).

In the 1990s, freed from Communist domination, these countries took on the status of emerging economies transitioning from state dominated command economies to democratic capitalism. Fifty years of war and Communism by-passed several generations in these countries that had no direct experience of modern capitalist democracy. At the same time, seeds sown between the two wars can be assumed to have left some mark in these cultures as has their more distant common past.

Advancement of Accounting and IFRS in modern Estonia, Latvia and Lithuania has been closely aligned with the successful transition of these countries into members of the European Union (EU). All are now member states and, Lithuania recent inclusion, all are Euro-zone currency participates.From 2005, adoption of IFRS for financial reporting of large public companies has been a requirement for EU members and an important milestone for obtaining EU membership for the E-block countries. All of the countries require all listed consolidated companies to use IFRS for financial reporting. (PWC, 2013)

Statement of Purpose

This paper examines the relative potential of Estonia, Latvia and the Lithuania to establish and maintain sufficiently high quality financial reporting based on an evaluation using two quantitative measures: the Composite IFRS Orientation Index, andthe Expanded IFRS Orientation Index, developed by the author in a recent study. (Borker, 2014) These measures are determined by a quantitative analysis of each country's culturally derived accounting values as they relate to IFRS. Four of these accounting values are taken from Sidney Gray's accounting value dimensions --Conservatism, Uniformity, Professionalism, and Secrecy. To these,a fifth value dimension, Stewardship, is added by the author, based a set of selected sociocultural factors.The aim of the analysis is to understand the cultural ease with which these countries will adapt to IFRS relative to one another and to countries outside the Balticcountries, to gain regional and country specific insightsinto strengths and opportunities for improvement. In addition, this paper continues testing the measurement methodology by applying it to the specific regional and country contexts of the Baltic States.

The Literature Review

Geert Hofstede published his first book on worldwide cultural value dimensions in 1980. In that book he provided index scores for individual countries across four cultural dimensions: Power Distance (PDI), Individualism (IDV), Masculinity (MAS) and Uncertainty Avoidance (UAI). (Hofstede, 1980)Later, Hofstede developed additional cultural dimensions -Long-Term Orientation (LTO) and Indulgence vs. Restraint (IVR). (Hofstede, 2001)(Hofstede, et al., 2010) These dimensions are fully described in Hofstede's website. (Hofstede, 2013)

In response to Hofstede's first book on his cultural value dimensions, Gray wrote a paper in which he posits a relationship between Hofstede individual country cultural value dimensions and a set of accounting value dimensions. (Gray, 1988) Gray identified four accounting dimensions, Conservatism (opposite of Optimism), Uniformity (opposite Flexibility), Professionalism (opposite Statutory Control) and Secrecy (opposite Transparency). He related these accounting dimensions to Hofstede cultural dimension in four hypotheses:

1. The higher a country ranks in terms of individualism and the lower it ranks in terms of uncertainty avoidance and power distance then the more likely it is to rank highly in terms of professionalism.
2. The higher a country ranks in terms of uncertainty avoidance and power distance and the lower it ranks in terms of individualism then the more likely it is to rank highly in terms of uniformity.
3. The higher a country ranks in terms of uncertainty avoidance and the lower it ranks in terms of individualism and masculinity then the more likely it is to rank highly in terms of conservatism.

4. The higher a country ranks in terms of uncertainty avoidance and power distance and the lower it ranks in terms of individualism and masculinity then the more likely it is to rank highly in terms of secrecy. (Gray, 1988)

Gray qualifies his hypotheses with observations regarding the relative importance of various Hofstede dimensions in relation to his accounting dimensions. For example, in discussing Professionalism, Gray noted that Hofstede's IDV and UAI are strongly linked to his Professionalism value, while PDI is linked, but not as strongly, to the Professionalism value.

In recent years, Braun and Rodriguez quantified each of Gray's four accounting dimensions for individual countries by taking a simple average of scores for the corresponding Hofstede dimensions. (Braun & Rodriguez, 2008)In the case of scores for dimensions that have a negative or inverse relationship to a Gray accounting dimension, the Hofstede score is adjusted in the following manner. The mean score for that dimension for the total countries analyzed is subtracted from the specific country's score. Next, this value is multiplied by -1, and then added to the mean score. By using this conversion of negatively correlating Hofstede scores, they are able to create opposite positive scores for each Hofstede dimensional component of a Gray accounting dimension. By using a simple average in their computation, Braun and Rodriguez assume that all Hofstede dimensions that relate to a given Gray dimension should have an equal weight. This does not take into consideration Gray's observations regarding his hypotheses that certain Hofstede dimensions have a greater or lesser weight than others in relationship to the accounting dimensions. (Gray, 1988)

In a recent conceptual paper, Borker (Borker, 2013a)develops a revised description of the relationship between Gray accounting value dimensions and Hofstede cultural value dimensions that provides relative weightings based on Gray's indications in his original article. He also expands the model to include two Hofstede dimensions identified after Gray's article, specifically Long-term orientation (LTO) and Indulgence versus Restraint (IVR). Table 1 below summarizes the positive and negative relationships between Gray and Hofstede dimensions, using '+' to represent a lower weight positive correlation, '+ +' to represent a higher weight positive correlation, and '-' and '- -' to represent, respectively, lower versus higher weighted negative correlation relationships. Finally '?' is used to represented no, or an uncertain, relationship between the Gray and Hofstede dimension. The use of these symbols for the first four Hofstede dimensions (see shaded area in table) were intended to reflect Hofstede's own comments in his original article on the greater or lesser importance of certain Hofstede dimensions. The use of these symbols under Hofstede's two later dimensions, LTO and IVR, indicated Borker's assumed relationship between these two dimensions and Gray's four accounting dimensions based on an a common pattern of these value dimensions for the United States, the United Kingdom and five other Commonwealth countries.

	Power Distance: PDI	**Individualism: IDV**	**Masculinity: MAS**	**Uncertainty Avoidance: UAI**	**Long-Term Orientation: LTO**	**Indulgence vs. Restraint: IVR**
Conservatism	+	-	-	+ +	+	-
Uniformity	+	- -	?	+ +	+	-
Professionalism	-	+ +	?	- -	-	+
Secrecy	+ +	- -	-	+ +	+	-

Table 1: Expansion of Hofstede-Gray Relationships (Borker, 2013a)

Also, Borker proposes an IFRS favorable accounting value profile based on Gray accounting dimensions. This profile assumed that the ideal IFRS accounting value profile for a country was one characterized by a low degree of the dimensions Conservatism, Uniformity and

Secrecy, and a high degree of the dimension Professionalism. This translates into a profile of Optimism, Flexibility, Professionalism and Transparency. Although only published in 2013, the concept of individual country dimensional profiles and an IFRS favorable profile are applied in several studies before and after publication. These include studies of the BRIC countries, emerging economies in Central and Eastern Europe and the 3G economies (Borker, 2012a)(Borker, 2012b)(Borker, 2013b)

Research Methodology

In a subsequent study, a methodology was developed for measuring the level of country's cultural IFRS orientation through two indices: the Composite IFRS Orientation Index, and the Expanded IFRS Orientation Index. (Borker, 2014) The first of these indices quantifies the level of fit between a given country's accounting cultural values and those of IFRS. The procedure involves first establishing a methodology for quantifying each of Gray's four cultural dimensions for a given country and then adjusting and combining these scores to derive a quantitative measure of the overall level of fit with the Gray values favorable to IFRS. In developing the Gray dimensional scores the study employed methods developed by Braun and Rodriguez discussed above. The study developed three alternative versions of Gray value indices, one based on a simple averaging of Hofstede dimensions, a second based on a weighted average of the Hofstede first four cultural dimensions as discussed by Gray and a third that incorporated two later developed Hofstede dimensions, LTO and IVR. Subsequent tests of these methods have led to the conclusion that the second version is most appropriate for scoring countries using the Composite IFRS Orientation Index.

Another index was developed from the IFRS Orientation Index that incorporated various socio-political factors thought to be associated with the accounting value of Stewardship, a value not included in Gray's original dimensions. This second index is the Expanded IFRS Orientation Index. It is determined by taking a weighted average of the Composite IFRS Orientation Index, weighted at 80% plus scores for four sociocultural indices each weighted 5%. The indices are: (a) The Corruption Perception Index (CPI) provided by Transparency International, (Transparency International, 2013), (b) an adaptation of AON's political risk ratings by which the higher a country's political risk, the lower the score it receives, (AON, 2013), (b) the United Nation's Education Index adjusted for inequalities, (Malik, 2013), and (d) the World Bank's Regulatory Index. (World Bank, 2013)

The present study applies the above methodology for determining a country's Composite IFRS Orientation Index and Expanded IFRS Orientation Index, discussed above, to each of the three Baltic countries.

Results and Analysis

Hofstede cultural dimension scores are provided for each of the four Central European countries and, for comparison purposes, with several neighboring countries and the United States in Table2.

	PDI	IDV	MAS	UAI	LTO	IVR
Baltic States:						
Estonia	40	60	30	60	82	16
Latvia	44	70	9	63	69	13
Lithuania	42	60	19	65	82	16
Neighboring States						
Sweden	31	71	5	29	53	78
Finland	33	63	26	59	38	57

Germany	35	67	66	65	83	40
Poland	68	60	64	93	38	29
Russia	93	39	36	95	81	20
Other Important States:						
United States	40	91	62	46	26	68

Table 2: Hofstede Cultural Values by Country

Gray accounting value dimensions scores are calculated for each country based on weightings that reflect Gray's own discussion of the four Hofstede dimensions. (Gray, 1988) These accounting dimension scores are provided in Table 3.

Gray Dimension Scores Based on Weighted Average of 4 Hofstede Dimensions				
	Conservatism	**Uniformity**	**Professionalism**	**Secrecy**
Baltic States:				
Estonia	51	43	71	46
Latvia	55	41	73	48
Lithuania	56	46	68	50
Neighboring States :				
Sweden	40	25	89	35
Finland	50	40	74	44
Germany	44	42	72	39
Poland	63	62	52	59
Russia	79	76	38	77
Other Important States:				
United States	33	25	89	29

Table 3: Gray Accounting Values by Country

Composite IFRS Scoresarethen calculated for each country based the Gray dimension scores above, adjusted for dimensions with a negative relationship to IFRS orientation, and presented in Table4 below.

Composite IFRS Orientation Index Derived per Formula					
	Conservatism	**Uniformity**	**Professionalism**	**Secrecy**	**Composite IFRS Orientation Index**
Baltic States:					
Estonia	64	70	71	65	67
Latvia	60	72	73	63	67
Lithuania	59	67	68	62	64
Neighboring States:					
Sweden	75	88	89	76	82
Finland	53	58	59	55	56
Germany	71	72	72	73	72
Poland	52	51	52	53	52
Russia	36	37	38	35	36
Other Important States:					
U.S.	82	88	89	83	85

Table 4: IFRS Composite Index by Country

Table 5 provides and ranked list of countries for the Composite IFRS Orientation Index**.** Baltic countries are highlighted in white and non-Baltic countries in grey.These scores show the Baltic countries to be cluster together below the United States, Sweden and Germany and above Finland, Poland and Russia.

Rank		**Composite IFRS Orientation Index**
1	United States	85
2	Sweden	82
3	Germany	72
4	Estonia	67
4	Latvia	67
5	Lithuania	64
6	Finland	56
7	Poland	52
8	Russia	36

Table 5:Composite IFRS Orientation Index Scores by Magnitude

The Composite IFRS Index is combined with four additional sociocultural factors to produce the Expanded IFRS Orientation Indexpresented in Table 6. These factors are listed under the headings "Corruption," "Political Risk," "Education," and "Regulation Index" with each factor having a 5 percent impact weighting for a total of 20% with the value of the Composite IFRS Index having an 80% weighting.

Expanded IFRS Orientation Index based on Weighted Average of Composite IFRS Orientation Index and Four Additional Factors						
	Composite IFRS Orientation Index	Corruption	Political Risk	Education	Regulation Index	Expanded IFRS Orientation Index
Weightings	80% wgt	5% wgt	5% wgt	5% wgt	5% wgt	100%
Baltic States:						
Estonia	67	69	90	89	88	71
Latvia	67	53	90	84	85	69
Lithuania	64	58	90	83	85	67
Neighboring Sates:						
Sweden	82	95	90	93	94	84
Finland	56	97	90	86	96	63
Germany	72	85	90	93	89	75
Poland	52	62	90	77	63	56
Russia	36	30	50	78	21	38
Other Important States:						
US	85	78	90	94	101	86

Table 6:Expanded IFRS Orientation Index by Country/Category

Table 7 provides a ranked list of countries for the Expanded IFRS Orientation Index. Baltic countries are highlighted in white and non-Baltic countries in grey.

Rank	Country	Expanded Composite IFRS Index
1	United States	86
2	Sweden	84
3	Germany	75
4	Estonia	71
5	Latvia	69
6	Lithuania	67
7	Finland	63
8	Poland	56
9	Russia	38

Table 7:Expanded IFRS Orientation Index Scores by Magnitude

The score rankings in Table 7 reflect the same pattern of clustering seen in Table 6.

Discussion

On the Composite IFRS Orientation Index (CIOI), all three Baltic countries are within 3 points of one another. Estonia and Latvia share equal scores of 67 while Lithuania's score is three points lower. Individual Grey dimension components are all less favorable for Lithuania than Estonia and Latvia, but the range from highest to lowest does not exceed 5 points. Although Estonia and Latvia have equal CIOI scores, Estonia is most favorable for secrecy and conservatism (accounting values associated with measurement and disclosure), while Latvia is most favorable for professionalism and uniformity (values associated by Gray with issues of governance). This is consistent with Latvia's highest ranking on the Hofstede dimension of Individualism, -- 10 points above Estonia and 20 points above Latvia. Individualism is the Hofstede dimension most associated by Gray with Professionalism.

On the Expanded IFRS Orientation Index (EIOI), where other socio-cultural characteristics are added to Gray based accounting values, the three Baltic countries remain with a narrow range of 4 points between the highest and lowest scores. All countries' scores are increased on the expanded index by 3-4 points over the CIOI. Estonia ranks highest, followed by Latvia and Lithuania.Estonia has a significantly more favorable score on corruption, surpassing Latvia and Lithuania by 16 points and 11 points, respectively. Furthermore, Estonia scores highest on all of the socio-cultural factors except for political risk, where it is tied with Latvia and Estonia, all of which have no significant political risk.

All three Baltic countries have Expanded IFRS Index scores that are closer to Germany, Sweden and Finland, as opposed to Russia. Highest ranked Estonia is only 4 points below Germany, while Lowest ranked Lithuania is 29 points higher than Russia.This is in spite of the relatively long period of Russian Soviet economic and political domination. Even Poland, which is 11 points lower than Lithuania, is a full18 points higher than Russia. All three Baltic States have scores on political risk, education and regulatory environment that are relatively close to Germany. The difference is much greater for corruption. Estonia, with the most favorable score among the Baltic States for corruption, is still 16 points lower than Germany and 26 points lower than Sweden. Baltic corruption scores may reflect at least in part some of the legacy of the Baltic States' Soviet affiliation. The corruption scores for the Baltic States range from 53 to 69, at least 23 points higher than Russia (30) and comparable to post E-Block Poland (63).

These results may reflect the closer historical tiesof the Baltic countries with Germany dating back to the Hanseatic League and religious and cultural ties between Estonia and Sweden.The Hanseatic League centered in Lübeck and included many Baltic cities, including

Tallinn, Estonia and Riga, Latvia. Königsberg (now Kaliningrad,Russia)was formerly East Prussia. Visby, Sweden was also an important member of the League. Also, from a linguistic perspective,Finish and Estonian are close members of the Finno-Ugric language family.

The Baltic States' closer accounting values to those of Germany and Scandinavia may indicate the opportunity for an easier transition to IFRS than is faced by Russia and many otherformer Soviet republics.Baltic scores are consistently closer across all of Gray's accounting value dimensions.However, in the area of corruption, there is some room for improvement in comparison with Sweden, Germany and the U.S. The key to improvement is to identify potential weaker areas based on socio-cultural analysis and to utilize available educational and professional training resources from the IASB, Big Four Accounting organizations and other organizations to improve the orientation of local company accountants and auditors and students.

Conclusion

This paper supports the value of quantifying of Gray accounting value dimensions to study and compare individual countries and for qualitative judgments about the closeness of individual country profiles to an IFRS favorable profile argued in previous literature.(Borker, 2014)(Borker, 2013a)

In the case of the Baltic States the IFRS indices provide a more objective basis for characterization of each country's IFRS orientation, as compared with an earlier study of Central and East European accounting culture and IFRS (Borker, 2012b)The data suggests a relatively strong IFRS orientation, especially given that these were former republics of the Soviet Union. There is clearly a stronger cultural divide between the Baltic States and Russia, one based on cultural and accounting values that reflect these states strong historic and cultural connections with Germany and the Scandinavian countries.

Emphasis should be placed on providing high level professional training to students and existing accountants with strong emphasis on professionalism and high ethical standards. The quantitative component breakdown provided in the determination of the Composite IFRS Orientation Index and the Expanded IFRS Orientation Indexfacilitate the identification of particular areas of strength or weakness that may need to be addressed in this process.

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