Reliability of earnings figures and conservatism in transitional economies

Sanna Tilli
Lappeenranta University of Technology, School of Business
P.O. Box 20, FI-53851 Lappeenranta, Finland
sanna.tilli@lut.fi

Draft: Please do not quote

May, 2007

Reliability of earnings figures and conservatism in transitional economies

Abstract

Conservatism is one of the attributes of accounting quality. Conservatism is also one of the major reasons for international differences in financial reporting. The objective of this paper is to examine earnings quality proxied by earnings conservatism in transitional economies of Central and Eastern Europe, where financial reporting environment and accounting legislation has been changing rapidly. Previously financial reporting in these emerging market economies was addressed mainly to state, but after the change from a planned economy to a market oriented economy a great challenge for firms was to offer reliable and high quality accounting information to be able to attract non-governmental sources of finance. Reliability of financial reporting has been and still is a severe problem in these countries. Financial reporting practices have been closer to continental tradition, but lately accounting standards have been developed towards International Accounting Standards to meet the information needs of foreign investors. Several studies have documented problems that have arisen in implementation and enforcement of new accounting standards. This study contributes to the existing literature by examining earnings quality in transitional economies and especially, by focusing on the extent to which the stage of economic and political transition affects earnings quality. Our empirical results of analyzing listed companies in transitional economies of Central and Eastern Europe during the period from 1999 to 2005 show that there are differences in the degree of conservatism between countries at different stage of transition process.

JEL classification: M41; P20

Keywords: earnings conservatism, financial reporting quality, transitional economies

1. INTRODUCTION

Accounting in Central and Eastern Europe has undergone an enormous and rapid change since the late 1980s. The absence of privately owned enterprises and market-determined prices was characteristic for these countries before the economic transition from a centrally planned economy to a free market economy. During the command economy the main objective of accounting system was the provision of financial statistics in terms of quantities rather than values. Accountability that is a crucial element of a market-based economy did not have very significant role in a planned economy and the concepts of “fair presentation” or “true and fair view” did not exist. Financial reporting was addressed mainly to the state, and financial reports flow upwards through the administrative structure rather than outwards into the market (Nobes and Parker, 2006).

A great challenge for firms in these emerging market economies is the access of non-governmental sources of finance, both debt and equity. Given the low level of domestic savings, activity on the stock exchanges has been dominated by foreign capital. Especially, to attract the foreign investors these firms need to show high quality earnings and have a financial reporting system that is based on International Accounting Standards (Nobes and Parker, 2006; Alexander and Archer, 2003).

Former socialist countries have made an effort to advance the integration of the European continent. Eight of these countries have joined European Union in 2004 and two more joined in the beginning of year 2007. They had to amend their legislation to comply with EU Directives and require listed companies to prepare their consolidated financial statements according to International Financial Reporting Standards. However, the harmonization with EU accounting directives and adoption of IFRS is not fully completed. There are problems in the implementation and enforcement of new legislation and difficulties in following these regulations in practice. There are a growing number of studies documenting the problems that are faced in this legislative change and in education of accountants and auditors in the transitional economies. However, extant literature lacks empirical evidence of financial reporting quality in the emerging markets. The purpose of this paper is to examine earnings quality in transitional economies of Central and Eastern Europe. Especially the focus of interest is to investigate, in what extent transition process affects earnings conservatism. It is expected that financial reporting in countries that have progressed further in transition is of higher quality.

This paper contributes to the earlier cross-country literature on earnings quality in three main respects. Most importantly this paper continues the work of Bushman and Piotroski (2006) by examining the extent to which transition process affects earnings quality. Secondly, this paper complement the study by Jindrichovska and McLeay (2005) by providing evidence on earnings conservatism in transitional economies of Central and Eastern Europe. Finally, this paper contributes to Joos and Lang (1994) by examining the effect of EU membership on earnings quality. The rest of the paper is structured as follows. Section 2 describes accounting in transitional economies, transition process and literature on financial reporting quality. Data and methods are presented in Section 3. Empirical results are provided in Section 4 and Section 5 concludes the paper.

2. TRANSITION PROCESS AND EARNINGS QUALITY

2.1. The role and reliability of accounting in transitional economies

Bailey (1995) describes accounting change in the former socialist countries in Europe in their early steps in transition. Accounting in the transitional economies of Central and Eastern Europe has undergone considerable changes and significant changes will still occur over the coming years, especially in implementation and enforcement of International Accounting Standards. These countries formerly under Soviet domination were primarily state-planned economies. Now they are moving towards market-based economic system with privately owned assets and market-determined prices. Inevitably there is a conflict between the purpose of communist accounting as an instrument of state economic administration in a command economy and the informational role of accounting in market economy.

During communist accounting financial reporting had a minor, unsophisticated role. Basically accounting was standardized, simplified and routinized recording. Characteristics for accounting were inflexibility and unresponsiveness to market innovations. Despite the legislative changes many aspect of accounting in a command economy are still prevalent in the current accounting practices of transitional economies. Accounting system that is originally created to serve the need of the centrally planned economy, has been modified but neither radically reformed nor abandoned. Financial reporting and accounting cannot be reformed simply by adoption of European Union laws and practices. Generally, it is questionable whether Western accounting practices suit the needs of transition economies. There is also a shortage of the capacity for retraining accounting personnel and auditors combined with conflicting concepts of the role of the accountant, as well as the auditor (Alexander and Nobes, 2006).

Progress in transition process has varied greatly from country to country. Those who have entered European Union have advanced their economy in the last years, but some others are still struggling with the establishment of basic market concepts. Transition process includes changing and creating of institutions (particularly private enterprises); changes in the role of the state and thereby, the creation of fundamentally different governmental institutions; and the promotion of private-owned enterprises, markets and independent financial institutions. Essential components of a market economy are profit seeking owners of privately owned enterprises and well-functioning market as trading platform, source of information and creator of competition. Financial institutions have a central role in a market economy. They are responsible for the allocation of resources over time, for the distribution and assessment of risks and for the enforcement of financial discipline. The different stages of economic development are in relation to the demands on the insolvency regime and may require amendments to the insolvency law. Insolvency laws might be seen from a debtor or from a creditor perspective. Legislators are charged with balancing the different interests of debtors and creditors (Falke, 2002). Table 1 provides information on political conditions of transitional economies.

(Insert Table 1 about here)

The immaturity of new institutional arrangements and the presence of illegitimate business activities may lead to ill-understood accounting principles and practices.

Especially corruption deteriorates the integrity and relevance of financial statements. Reliability of financial reporting is a severe problem in transitional economies. How useful are the statutory financial statements for investors, creditors, managers and other parties contracting with the firm during the transition period? It has been observed that "an enterprise viable at market prices might have negative net assets… administratively adjusted book values may have no necessary relationship to the market value of the capital assets". Statutory financial statements cannot be expected to be useful until well-functioning and stable market economies, effective corporate governance, and efficient capital markets are established. Foreign invertors prefer unstatutory financial statements reworked by an international accounting firm to be in accordance with IAS. Stock markets are turbulent and annual financial information is heavily discounted, insider information is the source of information that matters. In addition, there is a general resistance towards transparency in financial reporting (Archer and Alexander, 2003). In this paper financial reporting quality is measured by timeliness in financial statement recognition of economic losses - a single, but important attribute of earnings quality. Timely loss recognition increases the usefulness of financial statements. According to Schipper and Vincent (2003) the quality of financial reporting affects the use of financial reports for contracting purposes, for investment decisions and assessment of the quality of accounting standards indirectly through financial reporting.

2.2. Earnings quality literature

The seminal paper by Basu (1997) started the stream of research on earnings conservatism. Such institutional factors as contracting, shareholder litigation, taxation, and accounting regulation are reported to affect the level of conservatism (Watts, 2003a; Watts, 2003b). Ball, Kothari and Robin (2000) examine the effect of institutional factors on accounting earnings and they present evidence that earnings are considerably more timely in common law countries than in code law countries due to greater earnings conservatism. Pope and Walker (1999) compare timeliness of gain and loss recognition between UK and USA. Giner and Rees (2001) study conservatism in UK, France and

Germany and Garcia Lara and Mora (2004) in eight developed European countries. Raonic *et al.* (2004) examine the effect of institutional and market complexity on timeliness of income recognition by using cross-listed firms. Bushman and Piotroski (2006) have extended earlier cross-country research by examining the influence of legal and political institutions on accounting conservatism. Their results indicate that after controlling for legal origin, conservatism is significantly related to a variety of other country-level institutions.

Most of the earnings quality literature focuses on the world's largest capital markets. There is a lack of empirical research on earnings quality in transitional economies. However, Jindrichovska and McLeay (2005) have studied timeliness of good and bad news in the Czech Republic and they find no evidence of earnings conservatism. They explain the absence of conservatism by the economic transition and regulatory conditions that limit market influences on accounting. They also state that the Czech Republic is close to stakeholder corporatism where conservatism is less important because of fewer managerial incentives to bias earnings.

3. DATA AND METHODS

A sample of listed non-financial companies in transitional economies is derived from Amadeus database offered by Bureau van Dijk. Countries with less than 100 firm-year observations were excluded. The data consist of firms domiciled in Bulgaria, Croatia, Czech Republic, Latvia, Lithuania, Romania, Russia, Serbia, Slovakia, and Ukraine. Research period is between 1999 and 2005. Total number of observations is 10190 firm-years. Observations with one or more missing variables were truncated. Two extreme percentiles of observations of each accounting variable are deleted to eliminate the effect of possible outliers.

Country level data on transition process is publicly available from European Bank for Reconstruction and Development (EBRD). There are several indices describing the stage of transition process annually in each country. These have been used to track reform developments in all countries since the beginning of transition. Progress is measured against the standards of industrialized market economies, however, recognizing that there is neither a “pure” market economy nor a unique end-point for transition. The measurement scale for the indicators ranges from 1 to 4+, where 1 represents little or no change from a rigid centrally planned economy and 4+ represents the standards of an industrialized market economy (European Bank for Reconstruction and Development, 2007). Indicators of interest in this study are 1) banking reform and interest rate liberalization, 2) Securities markets and non-bank financial institutions and 3) governance and enterprise restructuring.

The market-independent approach of Ball and Shivakumar (2005) is applied to measure earnings conservatism in this paper. Their principal measure is based on changes in income. It measures timely gain and loss incorporation as the tendency for increases and decreases in accounting income to reverse. The following model is estimated to identify transitory gain and loss components in accounting income:

$$\Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} \times \Delta NI_{t-1} + \varepsilon_t, \quad (1)$$

where ΔNI_t is change in income from fiscal year t-1 to t (defined $NI_t - NI_{t-1}$) scaled by total assets in the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0 and ε is an error term. Untimely recognition of economic gains implies gains to be recognised as persistent positive components of accounting income that tend not to reverse. Conversely, timely recognition of economic losses implies that they are recognised as transitory income decreases. More timely recognition of economic losses than gain implies that α_3 is negative.

Ball and Shivakumar (2005) state that timeliness of loss recognition is a favourable attribute of financial reporting. It increases the usefulness of financial statements, particularly in corporate governance and debt agreements. There is less demand for timely gain recognition than for timely loss recognition. Therefore, similarly to Ball and Shivakumar (2005), we do not focus on timely gain recognition in this study.

We do following extension to Model (1) to investigate the effect of European Union membership to timely loss recognition.

$$\Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} \times \Delta NI_{t-1} + \alpha_4 EU_t + \alpha_5 D\Delta NI_{t-1} \times EU_t + \alpha_6 \Delta NI_{t-1} \times EU_t + \alpha_7 D\Delta NI_{t-1} \times \Delta NI_{t-1} \times EU_t + \varepsilon_t, \tag{2}$$

where, *EU* is a dummy variable taking a value 1 if a country is a member of European Union in that particular year, otherwise 0. All other variables are defined as earlier.

Furthermore, we use the following equation to investigate the extent to which the stage of transition process affects earnings quality.

$$\Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} \times \Delta NI_{t-1} + \alpha_4 IND_t + \alpha_5 D\Delta NI_{t-1} \times IND_t + \alpha_6 \Delta NI_{t-1} \times IND_t + \alpha_7 D\Delta NI_{t-1} \times \Delta NI_{t-1} \times IND_t + \varepsilon_t, \tag{3}$$

where, *IND* is a dummy variable taking a value 1 if the transition indicator of a country where a firm is domiciled is high in that particular year, otherwise 0. Transition indicators provided by EBRD are rescaled into dummy variables using following principle. Values between 1 and 2+ indicate low progress in transition process, whereas values equal to or greater than 3- indicate high performance in transition process. All other variables are defined as earlier.

4. EMPIRICAL RESULTS

4.1. Descriptive statistics and estimates across countries

Table 2 provides descriptive statistics for accounting variables used in this study. Table 3 reports results from country-specific estimations of regression (1). These results show that there are differences in timely loss recognition between transitional economies. The coefficient α_3 implying differential timeliness in recognition of gains and losses is significantly negative in several countries varying from -0,293 for Russia to -0,635 for Slovakia. The results suggest that conservatism exists in Bulgaria, Croatia, Lithuania, Poland, Romania, Russia and Slovakia at the conventional significance level and in Latvia only at 10 % significance level. The conservatism coefficient is not significant in

Czech Republic and Ukraine. This result is consistent with the findings of Jindrichovska and McLeay (2005) which indicate that conservatism does not appear in Czech Republic. Finally, the results concerning Serbia are surprising. The coefficient (0,203) for Serbia is significantly positive implying not conservative, but very aggressive attitude towards loss recognition. Table 3 presents also the number of observation per country.

(Insert Table 2 and 3 about here)

4.2. The effect of EU membership on earnings quality

To join the EU an applicant country must meet the following criteria:

- Stability of institutions guaranteeing democracy, the rule of law, human rights and respect for and protection of minorities.
- The existence of a functioning market economy as well as the capacity to cope with competitive pressure and market forces within the Union.
- The ability to take on the obligations of membership including adherence to the aims of political, economic and monetary union (European Union, 2001).

The membership criteria also include ability to transpose EU legislation into national legislation and implement it through appropriate administrative and judicial structures, which implies that they shall have effective systems of governance.

We hypothesize that firms in countries that have joined European Union are more likely to recognize economic losses on a timely basis than firms in countries that are not EU member states. The results from estimating Model (2) are presented in Table 4.These results are consistent with our hypothesis and show that the coefficient α_7 is negatively significant (-0,868) indicating incremental timeliness in loss recognition in European Union member states compared to those outside EU.

(Insert Table 4 about here)

4.3. The effect of transition process on earnings quality

Proceeding on transition process is measured with three different transition indicators.

1) Securities markets and non-bank financial institutions: High development in this area means at least substantial issuance of securities by private enterprises; establishment of independent share registries, secure clearance and settlement procedures, and some protection of minority shareholders; emergence of non-bank financial institutions and associated regulatory framework.
2) Banking reform and interest rate liberalization: high level progress in this area requires substantial progress in establishment of bank solvency and of a framework for prudential supervision and regulation; full interest rate liberalization with little preferential access to cheap refinancing; significant lending to private enterprises and significant presence of private banks.
3) Governance and enterprise restructuring: Significant and sustained actions to harden budget constraints and to promote corporate governance effectively (for example, privatisation combined with tight credit and subsidy policies and/or enforcement of bankruptcy legislation) are assumed at the minimum to perform on high level of transition process. To reach the maximum score in these three areas, countries are expected to show standards and performance typical of advanced industrial economies (European Bank for Reconstruction and Development, 2007).

It is hypothesized that countries showing high progress in transition process show also higher quality earnings than those performing low in transition process. Our results support this hypothesis. The results from estimating Model (3) are reported in Table 5. Panel A gives results for Securities markets and non-bank financial institutions -indicator, Panel B for Banking reform and interest rate liberalization and Panel C for Governance and enterprise restructuring. The incremental coefficient α_7 of countries performing highly in transition process in respect to countries that perform low, is significantly negative for Securities markets and non-bank financial institutions (-0.351), for Banking reform and interest rate liberalization (-0.440) and for Governance and enterprise restructuring (-0.492). These results imply that firms in transitional economies closer to market economy recognize losses in more timely manner than the ones in countries still relatively near to command economy.

(Insert Table 5 about here)

5. CONCLUSION

This study extends the literature on earnings conservatism or asymmetric timeliness of gains and losses by investigating earnings conservatism in transitional economies of Central and Eastern Europe. Accounting legislation and practices are rapidly changing in these emerging market economies. Reliability of financial information has been problem in uncertain legal and economic situation. During command economy financial reporting was simple and addressed mainly to state. Now firms need to improve their financial reporting quality to attract non-governmental sources of finance. To fulfill the information needs of foreign investors they need to prepare their financial statement in accordance with International Accounting Standards.

Purpose of this study is to investigate earnings quality proxied by earnings conservatism and especially to focus on the extent to which the phase of transition process affects earnings quality. Our results show that losses are recognized in a timely manner in several transitional economies. However, we find no conservatism in Czech Republic and in Ukraine. In addition, financial reporting in Serbia seems to be very aggressive and of low quality. Furthermore, we compare earnings quality between new EU Member States and those transitional economies that are outside EU. Our results indicate that losses are recognized in significantly more timely fashion in countries that have joined to EU. Finally, and most importantly, we investigate the effect of phase of transition process on earnings conservatism. Our results suggest that in countries that have progressed well in transition process (i.e. transition indicator gives high value for progress) firms show significantly more timely loss recognition than in those whose transition indicator shows low progress. These results are helpful for all users of financial statement information to assess reliability and quality of earnings in transitional economies, especially in debt agreements and corporate governance.

References

Alexander, D. and Archer, S. (Eds) (2003) *European Accounting Guide* (New York, Aspen publishers).

Bailey, D. (1995) Accounting in transition in the transitional economy, *European Accounting Review 4(4), pp. 595-623.*

Ball, R., Kothari, S. P. and Robin, A. (2000) The effect of international institutional factors on properties of accounting earnings, *Journal of Accounting and Economics* 29(1), pp. 1-51.

Ball, R. and Shivakumar, L. (2005) Earnings quality in UK private firms: comparative loss recognition timeliness, *Journal of Accounting and Economics,* 39(1), pp. 83-128.

Basu, S. (1997) The conservatism principle and the asymmetric timeliness of earnings, *Journal of Accounting and Economics*, 24(1), pp. 3-37.

Bushman, R. M. and Piotroski, J. S. (2006) Financial reporting incentives for conservative accounting: the influence of legal and political institutions, *Journal of Accounting and Economics,* 42(1-2), pp. 107-148.

European Bank for Reconstruction and Development (2007) *Economic statistics and forecasts*, available at: http://www.ebrd.org/country/sector/econo/stats/index.htm.

European Union (2001) *Enlargement of the European Union: an historic opportunity - a general overview of the enlargement process and the pre-accession strategy of the European Union*. Brussels, Enlargement Information Unit.

Falke, M. (2002) *Community Interests: An Insolvency Objective in Transition Economies?* No 01/02, Frankfurter Institut für Transformationsstudien.

García Lara, J. M. and Mora, A. (2004) Balance sheet versus earnings conservatism in Europe, *European Accounting Review*, 13(2), pp. 261-292.

Giner, B. and Rees, W. (2001) On the asymmetric recognition of good and bad news in France, Germany and the United Kingdom, *Journal of Business Finance and Accounting*, 28 (9/10), pp. 1285-1331.

Jindrichovska, I. and McLeay, S. (2005) Accounting for good news and accounting for bad news: some empirical evidence from the Czech Republic, *European Accounting Review*, 14(3), pp. 635-655.

Joos, P. and Lang, M. (1994) The effects of accounting diversity: evidence from the European Union, *Journal of Accounting Research*, 32(3), pp. 141-168.

Nobes, C. and Parker, R. (2004) *Comparative International Accounting* (Gosport, Prentice Hall).

Pope, P. and Walker, M. (1999) International differences in the timeliness, conservatism, and classification of earnings, *Journal of Accounting Research*, 37(3), pp. 55-87.

Raonic, I., McLeay, S. and Asimakopoulos, I. (2004) The timeliness of income recognition by European companies: an analysis of institutional and market complexity, *Journal of Business Finance and Accounting* 31(1/2), pp. 115-148.

Shipper, K. and Vincent, L. (2003) Earnings quality. *Accounting Horizons* 17(1), pp. 97-110.

Transparency International (2007) *TI Corruption Perceptions Index*, available at: http://www.transparency.org/policy_research/surveys_indices/cpi.

Watts, R. L. (2003a) Conservatism in accounting, Part I: explanations and implications, *Accounting Horizons*, 17(3), pp. 207-221.

Watts, R. L. (2003b) Conservatism in accounting, Part II: evidence and research opportunities, *Accounting Horizons*, 17(4), pp. 287-301.

Table 1. Political characteristics of transitional economies.

Country	EU member	Legal origin	Quality of insolvency law	Secured transactions law	Quality of corporate gocernance law	Quality of securities market laws	Corruption Perception Index 2006 *)
Bulgaria	since 2007	code law	high	advanced	medium	high	4.0
Croatia	candidate	code law	high	inefficient	medium	very high	3.4
Czech Rep.	since 2004	code law	medium	inefficient	medium	high	4.8
Latvia	since 2004	code law	low	advanced	high	high	4.7
Lithuania	since 2004	code law	very low	advanced	high	high	4.8
Poland	since 2004	code law	medium	some defects	high	high	3.7
Romania	since 2007	code law	high	advanced	low	medium	3.1
Russia	no	code law	medium	mal-functioning	high	medium	2.5
Serbia	potential candidate	code law	high	some defects	medium	medium	3.0
Slovakia	since 2004	code law	medium	advanced	medium	high	4.7
Ukraine	no	code law	very low	some defects	very low	high	2.8

Notes:

Source: European Bank for Reconstruction and Development (2007). Selected transition developments snapshots highlight qualitative or institutional developments to describe progress in transition.
*) Source: Transparency International (2007).
Transparency International ranks annually more than 150 countries by their perceived levels of corruption. Index ranges between 10 (highly clean) and 0 (highly corrupted). Finland, Iceland and New Zealand share the top score of 9.6.

Table 2. Descriptive statistics.

	Mean	Median	Std.dev.	Min	Max
ΔNI_t (th eur)	0.0007	0.0011	0.0937	-0.36	0.46
NI_t (th eur)	9392	101	127603	-613188	7418677
TA_{t-1} (th eur)	132313	11620	1575975	1	78279567

Notes:
Table gives descriptive statistics for the sample used in Model (1) that is based on changes in income.

Model (1) $\Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \varepsilon$,

where ΔNI_t is change in income (NI) from fiscal year t-1 to t scaled by total assets (TA) in the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0.
The sample consists of observations derived from Amadeus 1999-2005. Firstly, all observations with missing values for one or more variables are eliminated. Secondly, two extreme percentiles of observations of each variable are eliminated.

Table 3. Asymmetric timeliness of gains and losses across transitional economies of Central and Eastern Europe.

Model (1)

Country	α_2 (ΔNI)	p-value	α_3 (D*ΔNI)	p-value	α_3 (-)	Adj. R^2	N
Bulgaria	-0,016	0,736	-0,397	0,000	-	0,055	1422
Croatia	-0,136	0,001	-0,521	0,000	-	0,114	1286
Czech Republic	0,010	0,918	-0,183	0,429	-	-0,002	142
Latvia	-0,178	0,202	-0,339	0,089	-	0,116	129
Lithuania	-0,113	0,425	-0,423	0,033	-	0,069	180
Poland	-0,016	0,771	-0,605	0,000	-	0,055	790
Romania	-0,096	0,317	-0,372	0,004	-	0,086	384
Russia	0,102	0,001	-0,293	0,000	-	0,015	2211
Serbia	-0,351	0,000	0,203	0,000	+	0,097	3044
Slovakia	-0,143	0,140	-0,635	0,000	-	0,158	483
Ukraine	-0,254	0,041	0,124	0,581	+	0,019	119

Notes:
The estimated model is as follows:

Model (1) $\Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \varepsilon$,

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets in the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. The coefficients and p-values of the intercepts and dummy variables are not tabulated.

Table 4. The effect of European Union membership on earnings conservatism.

Model (2)

European Union membership		α_2/ α_6 (ΔNI)	p-value	α_3/ α_7 (D*ΔNI)	p-value	α_3/ α_7 (-)	Adj. R^2	N
	before	-0.129	0.000	-0.149	0.000	-		
	after	0.068	0.325	-0.868	0.000	-	0.050	10190

Notes:
The estimated model is as follows:

Model (2) $\Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1}$
$+ \alpha_4 EU + \alpha_5 D\Delta NI_{t-1} * EU + \alpha_6 \Delta NI_{t-1} * EU + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * EU + \varepsilon$,

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets in the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. *EU* is a dummy variable taking a value 1 if a country is a member of European Union in that particular year, otherwise 0. The coefficients and p-values of the intercepts and dummy variables are not tabulated.

Table 5. The effect of phase of transition process on earnings conservatism.

Panel A: Securities markets and non-bank financial institutions. Model (3)

		α_2/ α_6 (ΔNI)	p-value	α_3/ α_7 (D*ΔNI)	p-value	α_3/ α_7 (-)	Adj. R^2	N
Transition indicator	low	-0.160	0.000	0.182	0.000	+		
	high	-0.098	0.001	-0.351	0.000	-	0.054	10190

Panel B: Banking reform and interest rate liberalization. Model (3)

		α_2/ α_6 (ΔNI)	p-value	α_3/ α_7 (D*ΔNI)	p-value	α_3/ α_7 (-)	Adj. R^2	N
Transition indicator	low	-0.156	0.000	0.042	0.242	+		
	high	0.111	0.000	-0.440	0.000	-	0.049	10190

Panel C: Governance and enterprise restructuring. Model (3)

		α_2/ α_6 (ΔNI)	p-value	α_3/ α_7 (D*ΔNI)	p-value	α_3/ α_7 (-)	Adj. R^2	N
Transition indicator	low	-0.140	0.000	-0.070	0.017	-		
	high	0.099	0.005	-0.492	0.000	-	0.052	10190

Notes:
The estimated model is as follows:

Model (3)
$$\Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1}$$
$$+ \alpha_4 IND + \alpha_5 D\Delta NI_{t-1} * IND + \alpha_6 \Delta NI_{t-1} * IND + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * IND + \varepsilon,$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets in the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. IND is a dummy variable taking a value 1 if the transition index of a country where a firm is domiciled is high in that particular year, otherwise 0. The coefficients and p-values of the intercepts and dummy variables are not tabulated.