

What are the effects of culture and institutions on classification shifting in India?

Eric O. Boahen and Emmanuel C. Mamatzakis^b

Abstract

This study investigates the impact of culture, religion, and legal environment on classification shifting behavior in India. Using a sample of 30,361 firm-year observations from 2000 and 2015, we employ a panel regression analysis that accounts for heterogeneity across industries and time. We find that misclassification of expenses is present in India, and that religion helps moderate classification shifting. However, certain dimensions of culture such as individualism, power distance, uncertainty avoidance, and masculinity increase classification shifting, whereas long-term orientation mitigates it. We also examine various indirect channels involving interactions between the legal environment, religion, and various dimensions of culture and find variable results that suggest underlying complexities. In the weak Indian legal environment, religion does not appear sufficient to combat classification shifting practices. The findings have policy implications: we argue that strengthening the legal environment would complement religion in constraining managerial motivation to misclassify core expenses into special items to boost reported core earnings.

Keywords: Classification Shifting, National Culture, Legal Environment, Religiosity.

JEL: G3, M41, K42, Z12

^aCollege of Professional Services, School of Business and Law, University of East London, E15 4LZ, UK. e.o.boahen@uel.ac.uk. ^bDepartment of Management, Birkbeck College, University of London, London WC1E 7HX, UK. e.mamatzakis@bbk.ac.uk.

1. Introduction

This study focuses on the impact of culture, religion, and legal environment on classification shifting, a form of earnings management that is widely considered unethical but has been largely overlooked in India. To the best of our knowledge, there are only a few studies on earnings management in India (e.g., Nagar & Sen, 2016).¹ Nagar and Sen (2016) find that the magnitude of classification shifting is much greater in India than in the United States (US) and East Asian countries, particularly for financially distressed firms, because India has weaker corporate governance and investor protections. Following Nagar and Sen (2016), we shed new light on classification shifting in India by examining the impact of culture, legal environment, and religion.

Despite the importance of religion in India, we know little about its impact on accounting practices. King (2013) indicates that India is a deeply religious and traditional society and that religion and culture have been crucial in the formation of its national identity. According to a recent Pew Research Center Survey (2018), India is home to 1.4 billion people – almost one-sixth of the world’s population – who belong to a variety of ethnicities and religions. While 94% of the world’s Hindus live in India, there also are substantial populations of Muslims, Christians, Sikhs, Buddhists, Jains, and adherents of other religious faiths. The important role of religion was also corroborated by the World Bank’s World Values Survey (WVS). Between 2000 and 2015, 88% of Indian respondents replied that they believed in religion, while only 8% reported that they were not religious or were atheists (the remaining respondents did not reply). Again, recent Pew Research Center study (2018) indicates that India’s constitution provides for freedom of conscience and the rights to profess, practice, and propagate religion. It also protects minorities against discrimination on the grounds of religion. India’s massive population includes not only the vast majority of the world’s Hindus, but also the second-largest group of Muslims within a single country, behind only Indonesia. The study further indicates that India is a religiously pluralistic and multi-ethnic democracy – the largest in the world with legal protections for religious groups and minorities.

¹ Classification shifting has been studied extensively in other countries. Classification shifting, accrual-based earnings management, and real-activities earnings management are not uncommon in the US (McVay, 2006; Roychowdhury, 2006; Cohen & Zarowin, 2010; Fan et al., 2010; Jarvinen & Myllymaki, 2016; Kothari et al., 2016; Zalata & Roberts, 2017). Haw et al. (2011) indicate that in East Asia, code law countries are associated with classification shifting behavior, but countries with strong legal institutions have a lower incidence of it. Similarly, Behn et al. (2013) examine the relationship between classification shifting, analyst following, and investor protection in 41 countries and observe that it decreases when analysts follow firms and investor protection is strong.

In the US context, Hilary and Hui (2009) underscore the importance of religious values to a firm's stakeholders and find that the absence of religiosity can potentially harm stakeholders and affect the quality of financial reporting and the organization's performance. The impact of religiosity on accrual-based and real-activities earnings management is reported to be significant in the US (Dyreng et al., 2012; McGuire et al., 2012). For example, McGuire et al. (2012) and Dyreng et al. (2012) find a negative relationship between religiosity and accrual-based earnings management, while they report a positive relationship between religiosity and real-activities earnings management. However, Callen et al. (2011) indicate that religious adherents view earnings management not as a devious managerial practice like tax evasion, but as a positive approach to signal firm performance. In a recent paper, Leventis et al. (2018) find that religiosity has an impact on auditing pricing in the US by reducing the costs of monitoring. Elnahas et al. (2017) find that religion affects mergers and acquisitions during the earnout period because contingent payment is against Islamic law.

Prior research has also indicated that religion affects individuals' behavior and that religiosity enhances individuals' ethical values and attitudes (Parboteeah et al., 2008; Tayler & Bloomfield, 2011; Vitell, 2009). This view is also supported by Shu et al. (2012), who find that one's level of religiosity is positively correlated with high ethical values. In this paper, we control for a plethora of other variables, but we focus on religiosity and culture. Indeed, the link between individuals' religious values and economic development has been extensively covered in the economics literature in India, but the links between religion, culture, and classification shifting have not been examined despite the importance of the religious spirit in Indian culture. We address this gap in the literature.

Some studies do show the existence of earnings management in India (Rajpal, 2012; Goel, 2014; Houque et al., 2017). For example, Goel (2014) observes that the pressure to meet earnings targets and analysts' forecasts and thereby derive private benefits is the driving force for earnings management in India, as in the US and UK. Mishra and Malhotra (2016) observe that in India, the flexibility to choose accounting policies and treat accounting transactions in different ways has negatively affected shareholder wealth and portrayed a false picture of the company's actual performance to gullible current and prospective investors, who rely on the company's financial reports when making investment decisions. Thus, firm managers exploit this flexibility to opportunistically manipulate the available choices to influence the quality of financial reporting. Yet, Barth et al. (2008) argue that superior accounting quality is particularly important in emerging market economies like India, since investors need to be assured that they are protected from accounting frauds and deceptive financial reporting.

Another strand of the literature reveals that the legal environment has a negative impact on accrual-based earnings management (Leuz et al., 2003). However, Callen et al. (2011) observe that a country's legal environment is mediated by culture. In a related study, Haw et al. (2011) find that well-functioning legal institutions and the appointment of external auditors mitigate classification shifting behavior. This finding substantiates the observation of Francis and Wang (2008), who find that a country's legal environment affects auditing practices. Behn et al. (2013) find evidence of expenses misclassification in both weak and strong investor protection countries, with greater evidence of misclassification occurring in countries with weak protection. Prior studies (Behn et al., 2013; Nagar & Sen, 2016) observe that a weak legal environment undermines investor protection and quality of financial reporting. Interestingly, however, no study examines the impact of religiosity on classification shifting while controlling for the legal environment and culture. It is also worth noting that there is no general consensus in the literature on the impacts of religion and legal framework on classification shifting.

We also focus on culture. Doupnik (2008) argues that culture has a significant effect on earnings management models. Hoque et al. (2017) observe that in a globalized business environment, national culture has a direct influence on accounting manipulations through business decision making and an indirect influence through country-specific characteristics (i.e., laws and regulations). Han et al. (2010) show that there is a negative relationship between uncertainty avoidance and accruals earnings management. Furthermore, Callen et al. (2011) argue that individualism is negatively related to accruals management.

Thus, we address the following main question: what is the effect of religion and culture on classification shifting in the presence of a weak legal environment in India? The goal of this study is to explore the extent to which culture and religion interact with the legal environment to affect managerial opportunistic classification shifting in India.

We contribute to the literature in several ways. First, we assemble a comprehensive dataset for India. The financial data come from Compustat Global Database. The full sample consists of 30,361 firm-year observations for the period between 2000 and 2015. In line with previous studies (Desender et al., 2011; Ahern et al., 2015; Beugelsdijk et al., 2015) we use measures of cultural dimensions from the WVS. The WVS provides survey questions that capture over time all of the cultural dimensions examined in Hofstede et al. (2010) and Beugelsdijk et al. (2015). The legal environment scores are collected from the International Country Risk Guide (ICRG), consistent with prior studies (La Porta et al., 1998; Leuz et al., 2003). The ICRG employs 22 variables to measure risk in three main areas: political,

financial, and economic. We also use religiosity datasets from the WVS database between 2000 and 2015. The variables, national culture and religion in the WVS database show time variability, as they vary from survey to survey and from wave to wave. Second, given that analysts and market participants focus on core earnings, we investigate the extent to which the shifting of core expenses into special items is affected by the national culture, religion, and legal environment in India. In addition, we investigate the extent to which specific components of national culture affect the misclassification of core expenses into special items. Third, we study underlying interactions among the principal variables of our empirical modeling. That is, we investigate the nexus between the legal environment, religion, and national culture in relation to classification shifting. Finally, we conduct a robustness analysis to assess whether the main results hold under different measurements of classification shifting.

Several important findings emerge. First, we find that expenses misclassification occurs in India. Second, consistent with McGuire et al. (2012), we find that religiosity directly reduces managers' classification shifting behavior in India, but its interaction with special items shows that this effect is reversed. Third, we find that the direct impact of legal environment on expense misclassification is negative, but there is considerable variability across various interactions. Fourth, when we decompose culture into individualism, power distance, masculinity, and uncertainty avoidance, we find that all have a positive effect on managers' classification shifting, but the cultural dimension of long-term orientation mitigates expense misclassification. We explore various indirect channels that suggest underlying complexities. Interestingly, the negative impact of religion on classification shifting in India can no longer be demonstrated in the presence of weak legal environment.

The paper proceeds as follows. Section 2 presents the literature and hypothesis development, while Section 3 describes the data, sample selection, and descriptive statistics. Section 4 explains the identification, research design, and empirical methodology. Section 5 presents the empirical results, Section 6 offers a robustness check, and Section 7 concludes.

2. Literature Review and Hypotheses Development

Classification shifting involves the shifting of core expenses into non-recurring ones (McVay, 2006; Zalata & Roberts, 2017; Botsari & Meeks, 2018). Previous studies (McVay, 2006; Athanasakou et al., 2009; Behn et al., 2013; Zalata & Roberts, 2016; Zalata & Roberts, 2017) indicate that non-recurring expenses are by definition infrequent or transitory; consequently, financial statement users are unable to understand their nature and effect on income statements. Indeed, Bradshaw and Sloan (2002) corroborate this and observe that managers might be motivated to inflate their core earnings by shifting core expenses into non-recurring items. Haga et al. (2018) and Nagar and Sen (2016) also document that managers prefer misclassification of recurring expenses into non-recurring ones over accrual-based and real-activities earnings management because it does not affect future earnings, as there are no accruals reversals in the following periods or lost revenue from forgone opportunities.² Moreover, it does not change GAAP net income, which makes it less likely that auditors and external regulators will subject the financial statements to thorough scrutiny (McVay, 2006; Behn et al., 2013; Zalata & Roberts, 2017; Leventis et al., 2018). Again, the earnings management literature in India pays little attention to classification shifting; most previous studies have focused on accrual-based and real-activities earnings management (Kapoor & Goel, 2016; Houqe et al., 2017; Vishnani et al., 2019).³ The accruals-based earnings management involves managers' incentive to borrow past and future earnings to improve the current period's reported earnings or financial performance (Behn et al., 2013; Kothari et al., 2016).⁴

² Prior research shows that managers of US firms engage in core expenses misclassification to meet or beat predetermined earnings benchmarks or analyst forecasts (McVay, 2006; Barua et al., 2010; Fan et al., 2010). These studies argue that classification shifting is consistent across firms and is not subjected to auditor or regulatory scrutiny. For example, McVay (2006) observes that core expenses are misclassified as special items to increase core earnings, since investment decisions in the US are influenced by the level of these earnings. Fan et al. (2010) investigate the quarterly financial results of US firms and report that in the US, classification shifting occurs mostly in the fourth quarter, when the incentive to manage earnings is greater, when accrual-based earnings manipulation is inhibited, and managers need to meet quarterly earnings benchmarks.

³The real earnings management literature is related to the classification literature. For real-activities earnings management, previous research (Ewert & Wagenhofer, 2005; Graham et al., 2005; Roychowdhury, 2006; Cohen & Zarowin, 2010; McGuire et al., 2012; Jarvinen & Myllymaki, 2016) indicates that the amount of revenue is influenced by adjusting discretionary expenses to meet current earnings targets, and that this is achieved through the acceleration of sales to customers, over-production to reduce the cost of sales, and delaying or reducing costs such as repair, maintenance, advertising, and research and development expenses.

⁴Athanasakou et al. (2009) find that UK firms are more likely to misclassify core expenses into non-recurring ones than to engage in real activities or manage accrual transactions to meet analyst benchmarks or expectations. In a related study, Zalata and Roberts (2016) report that the ability to deliberately misclassify core expenses to inflate core earnings is not homogeneous across firms and that internal governance mechanisms could mitigate classification shifting. Furthermore, previous studies (Elliot & Shaw, 1998; Ali & Zhang, 2015) observe a relationship between CEO tenure and earnings management. These studies document evidence that new CEOs

Interestingly, while classification shifting is prevalent among US firms (McVay, 2006; Fan et al., 2010; Botsari & Meeks, 2018), only a few studies have investigated classification shifting in India and other international settings. For example, Nagar and Sen (2016) examine earnings management in India and observe that given its environment of comparatively weak corporate governance and investor protection, the magnitude of classification shifting is much greater in Indian firms than in firms in the US and East Asian countries. They also observe that the practice of netting income-increasing special items against core expenses to inflate core earnings is associated with financially distressed firms in India.

2.1 The Impact of Religion on Classification Shifting

Callen et al. (2011) examine the relationship between religious background, culture, and four metrics of accrual-based earnings management in 49 countries. They observe that proxies for this type of earnings management are unrelated to a country's level of religiosity or specific religious denominations, but they find that Hofstede's (1980, 1991) cultural dimension variables do influence accrual-based earnings management.⁵ These studies also observe that religiosity is negatively related to accrual-based earnings management, but positively related to proxies of real-activities earnings management. McGuire et al. (2012) investigate whether the religious social norms of the environment affect the financial reporting practices of firms located in that area. In a related study, Dyreng et al. (2012) observe that firms with foreign subsidiaries in countries with weaker rule of law have more foreign earnings management. While these studies address religion and earnings management, they attribute the heterogeneity of accounting manipulations across countries or countries to endogenous differences in legal origin and enforcement. They do not consider the unique or specific country characteristics in India. This study addresses the gaps in the literature by examining the relationship between religious practices (which broadly constitute the fundamental building blocks of India's legal and institutional environments) and opportunistic classification shifting behavior. India has a high degree of religiosity and

are likely to misclassify or overstate the expenses/losses of their firms in their first year of service to discredit the previous CEOs and take credit for the resulting higher profits in subsequent years.

⁵ Dyreng et al. (2012) and McGuire et al. (2012) examine the relationships between religiosity and financial reporting irregularities, between religiosity and accrual-based earnings management, and between religiosity and real-activities earnings management in the US. They find that firms located in areas with high religious social norms exhibit lower incidences of financial reporting irregularities, especially where external monitoring is low.

unique religious practices and background. How, then, does religiosity interact with the legal and institutional arrangements to influence classification shifting behavior in India? Drawing on the above discussion, we form our hypothesis regarding the effects of religious practices on opportunistic classification shifting behavior in India as follows:

H1: There is a negative association between religion and classification shifting behavior in India.

2.2 The Impact of Culture on Classification Shifting

Prior studies (Doupnik, 2008; Han et al. 2010; Desender et al. 2011; Callen et al. 2011; Hoque et al. 2017) have examined the impact of culture on accruals earnings management. Doupnik (2008) argues that culture has a significant effect on earnings management models.⁶ Han et al. (2010) use firm-level data in 32 countries to investigate the relationship between accruals earnings management and culture. They find a positive relationship between individualism and accruals earnings management. In contrast, Desender et al. (2011) find that countries associated with high individualism and egalitarianism have low incentive to manage accruals or engage in real-activities earnings manipulation. In a study involving 49 countries, Callen et al. (2011) find that individualism (uncertainty avoidance) is negatively (positively) related to accruals management. Hoque et al. (2017) observe that in a globalized business environment, national culture has a direct influence on accounting manipulations through business decision making and an indirect effect through country-level characteristics (laws, regulations, and market development).

Despite India's rich cultural background, the impact of culture on managerial opportunistic behavior such as classification shifting has not been investigated directly (Nagar & Sen, 2016; Hoque et al. 2017). Yet, Hofstede et al. (2010) find that there is very high-power distance (POWDIS) in India (77) relative to Finland (33), Denmark (18), UK (35), USA (40), and Japan (54). In contrast, there is low individualism (INDIV) in India (48) compared with Finland (63), UK (89), and USA (91). India's uncertainty avoidance (UNCAVO) is low (40), like that of UK (35) and USA (46). Herrmann-Pillatha et al. (2014) observe that countries that are associated with high uncertainty avoidance (UNCAVO) are

⁶ There are some studies that look into the effect of culture on tax compliance. Doupnik (2008) and Richardson (2008) investigate the relationship between tax evasion and culture. These studies show a positive relationship between tax evasion and both uncertainty avoidance and power distance, but a negative relationship between tax evasion and both masculinity and individualism.

risk averse and tend to plan everything carefully to avoid unpredictable outcomes. India's masculinity (MASCU) score is 56, whereas the UK's is 66 and the USA's is 62. Similarly, India's long-term orientation (LONGTEO) is 51, while the UK's is 54 and the USA's is 26. India has a prevalence of conglomerate business groups that are characterized by common ownership and management by family members. The firms in these groups have separate legal entities with different shareholders, but family members control the strategic direction and firm transfers (Douma et al., 2006; Estrin & Prevezer, 2011). Therefore, India differs from other countries in the type and level of formal institutions that regulate and facilitate opportunistic managerial behavior (Kapoor & Goel, 2016).

It is worth noting that Beugelsdijk et al. (2015) find that the cultural dimensions of a specific country change over time, even though no changes are observed across countries. Moreover, Beugelsdijk et al. (2015) find that country-specific national culture around the world changes over time as society becomes more individualistic. This change has been absolute and is not relative across countries. Thus, cross-country cultural differences (i.e., cultural distances) are relatively stable. In other words, cultural changes are country specific over time and not relative to other countries. The country-specific study of the impact of culture on classification shifting is therefore justified, as there is variability in India's culture over time. Indeed, the Hofstede dimensions are not immune to changes brought by modernization and globalization, as they relate to economic development levels (Hofstede, 2001; Tang and Koveos, 2008; Zaheer et al., 2012). To fill the gap in the literature, we examine the effect of time-varying cultural components on classification shifting in India. Our hypothesis regarding the effects of culture on opportunistic classification shifting behavior is as follows:

H2: Certain cultural dimensions (i.e., masculinity, individualism, and power distance) increase classification shifting behavior in India.

2.3 The Interaction between Legal Environment, Religion, Culture, and Classification Shifting

Finally, prior studies show that a strong legal environment boosts investor confidence and mitigates accruals management (La Porta et al., 1998; Leuz et al., 2003; Callen et al., 2011; Behn et al., 2013). For example, La Porta et al. (1998) find that strong legal enforcement indicates the presence of an active and well-functioning judiciary system that can protect investors and curtail fraudulent managerial practices. Using a "*law and order*"

variable measured as the aggregate of the efficiency of the judicial system, contract repudiation by government, corruption, rule of law, and risk of expropriation to assess the extent to which the legal enforcement in countries affects investor protection, they observe that common-law countries exhibit stronger investor protection than civil-law countries. Leuz et al. (2003) also examine the relationship between proxies for accruals management and investor protection. They find that strong investor protection as evidenced by a well-functioning legal system is associated with lower levels of accruals management. By contrast, prior studies (e.g., Nabar & Thai, 2007; Douppnik, 2008) analyze earnings smoothing and earnings discretion separately and find that legal environment is not significant once culture is included in earnings management models. In a related study, Callen et al. (2011) control for culture and religion and observe no relationship between legal environment and accruals earnings management. Behn et al. (2013) corroborated the findings of La Porta et al. (1998) and observe that classification shifting is common in both weak and strong investor protection countries, but they are quick to indicate that classification shifting is more prevalent in weak investor protection countries because of their loose legal enforcement systems. Despite the above findings, Callen et al. (2011) and Douppnik (2008) observe that legal environment is not significant when culture is included in earnings management models.

Following the above discussions, an unanswered question remains: does the interaction between legal environment and religion or culture affect managerial classification shifting in India? In this study, we attempt to establish the relationship between legal environment, religion or culture, and classification shifting in India, for several reasons. First, Behn et al. (2013) did not control for the culture and religiosity of the countries sampled for their study. Second, Callen et al. (2011) found no relationship between accrual-based earnings management and legal environment when culture and religion were used as control variables. Third, to the best of our knowledge, no study has examined the relationship between the legal environment and classification shifting by controlling for culture and religion in India. We attempt to address this gap. Given the above discussions and the fact that India's legal environment, culture, and religion can shape firm managers' behavior, we test the following hypothesis:

H3: The interaction between legal environment and certain cultural dimensions and the interaction between legal environment and religiosity negatively affect managers' classification shifting behavior in India.

3. Data and Descriptive Statistics

3.1. Measuring Religiosity in India

This study utilizes religious datasets from the WVS of the World Bank database between 2000 and 2015. We use these datasets to create a proxy for religiosity in India. Since 1989, the WVS has collected survey data every four years. Its datasets vary from wave to wave, indicating variability in the religion data over time. The WVS is a global network of social scientists studying changing values and their impact on the social and political life of countries. It has conducted the largest set of investigations around the world on religion, beliefs, attitudes, and values. The survey also aims to help policy makers and academics understand changes in the values, beliefs, and motivations of people around the world and how these changes affect business and economic decisions. It asks representatives of over 143 countries and territories about the frequency of their attendance at religious services, weekly participation in religious activities, and the level of importance individuals place on religious activities performed on a daily basis. The results are based on surveys conducted via telephone and face-to-face interviews between 2000 and 2015 with a minimum of 8,000 adults in India.

In this paper, we follow the definition of religion in Callen et al. (2011) and Stack and Kposowa (2006). This definition is based on the level of involvement in religious practices from the WVS, consistent with Stack and Kposowa (2006). The religiosity index is measured as the frequency of attendance at religious services, weekly participation in religious activities, and the level of importance individuals place on religious activities. Responses were coded on a seven-point scale from 0 to 6 and then averaged. The higher the religiosity measure, the more religious the country is deemed to be, and vice versa.

3.2. Measuring India's National Culture

We collect datasets on the national dimensions of culture from the WVS database between 2000 and 2015. The WVS database has questionnaires that measure all six Hofstede

cultural dimensions. Each cultural dimension has a unique set of survey questions and datasets. In line with Beugelsdijk et al. (2015), we derive each of the five Hofstede cultural dimensions from the WVS database. The datasets from WVS vary from wave to wave, showing time variability in the variables. We derive the following Hofstede cultural dimension variables: power distance scores (POWDIS), individualism scores (INDIV), uncertainty avoidance scores (UNCAVO), masculinity scores (MASCU), and long-term orientation scores (LONGTEO), consistent with prior studies (Ahern et al., 2015; Beugelsdijk et al., 2015).

Following prior studies (Ahern et al., 2015; Beugelsdijk et al., 2015), we identify WVS questionnaires that describe and measure each of the five Hofstede cultural dimensions used in our study. Hofstede (2001) links individualism to autonomy and self-orientation, the right to a private life, weak family ties, less conformity in behavior, and individual incentives. Beugelsdijk et al. (2015) identify four questionnaires in the WVS database that are consistent with how Hofstede describe the meaning of the Individualism dimension. These include (i) the extent to which the respondents agree that private ownership of business should be increased, (ii) the percentage of individuals who disagree that one of the main goals in life is to make one's parents proud, and (iii) the extent to which abortion and (iv) homosexuality are justifiable.

In addition, we measure and derive the Power Distance dimension using three WVS questionnaires in line with Beugelsdijk et al. (2015). All three WVS questionnaires are related to Hofstede's description of Power Distance (Hofstede et al. 2001, 2010). The first WVS questionnaire is a measure of the shift from materialist to post-materialist values based on Inglehart's Materialism index. The second questions whether or not one must always have respect and love for one's parents, and the third seeks to know whether employers should prioritize nationals over immigrants when jobs are scarce.

Again, in line with Beugelsdijk et al. (2015), we calculate the Uncertainty Avoidance dimension using WVS questions that fit Hofstede's (2001, p. 169) description of Uncertainty Avoidance. The first question asks respondents to indicate the level of confidence they have in their country's political parties and justice system. The next question asks respondents whether the country is run by a few selfish individuals who look out for their own interest or for the benefit of all the people and whether most people can be trusted or not. With regards to Hofstede's cultural dimension of Masculinity, Beugelsdijk et al. (2015) observe that there is only one corresponding question from the WVS database. It asks respondents whether or

not they agree that the wife must always obey her husband. This question is strongly related to Hofstede's description of the cultural dimension of Masculinity.

In line with Hofstede et al. (2010) and Beugelsdijk et al. (2015), we use WVS questionnaires to measure the Long-term Orientation dimension based on responses to the following questions: the importance of teaching qualities of sacrifice, service and unselfishness to children; the importance of teaching qualities of thrift, saving money, and saving things to children; and the degree to which respondents are proud of their nationality.

As in Beugelsdijk et al. (2015), we examine the face validity of the WVS by conducting a factor analysis and a reliability analysis. Following Ahern et al. (2015) and Beugelsdijk et al. (2015), we ensure that our factor analysis of the WVS questionnaires used to measure a specific Hofstede dimension has only one Eigenvalue larger than one and thus fits into one overall dimension. Similar to Beugelsdijk et al. (2015), we ensure that the estimated Cronbach's alphas for each of the cultural dimensions have an optimal score and cannot be increased further by leaving out one or more questions. Again, we ensure that each cultural dimension consists of a unique set of WVS questions, and no question is used to calculate more than one of Hofstede's cultural dimensions.

3.3. Measuring Legal Environment Scores

In line with previous research (La Porta et al., 1998; Leuz et al., 2003), we collect legal environment scores from the ICRG database for the period of the study. The ICRG provides legal environment scores, political risk, financial risk, and economic risk ratings for 140 countries on a monthly basis, and for an additional 26 countries on an annual basis. Therefore, there is time variability in the ICRG legal environment datasets. The ICRG identifies the strength of the legal enforcement or environment as the mean score across three main variables: (i) the efficiency of the judicial system, (ii) the appraisal of the rule of law, and (iii) the level of corruption. The strength of the legal environment ranges between zero and 10 for all three main variables. As in La Porta et al. (1998) and Leuz et al. (2003), we use the measure of the strength of the legal environment from the ICRG. In addition, we also collect from the ICRG country-specific variables such as the annual per capita Gross Domestic Product (GDP), inflation, economic risk, and political risk to control for differences in countries for all years.

3.4. Accounting Data and Sample Selection

We collect financial data from the Compustat Database to estimate abnormal core earnings and determine the extent of classification shifting in India. The full sample consists of 30,361 firm-year observations for the period 2000 to 2015. In line with previous studies (Behn et al., 2013), we require a minimum of 10 firm-year observations to qualify for inclusion in the sample. All firms and variables with missing firm-year observations are also deleted. Furthermore, to effectively use sales as a deflator for the majority of the variables and to avoid the creation of outliers, we exclude any firm-year observation with sales revenue of less than \$5,000, in line with earlier studies (Haw et al., 2011; Nagar & Sen, 2016).

The variables (defined in Appendix A) are classified into those measuring reported core earnings (REP_CE); the dependent variable, which is unexpected core earnings (UNEXP_CE); independent variables, which include negative special items multiplied by level of religiosity (RELINTSPI); legal environment multiplied by negative special items (LEGASPI); and control variables (SIZE, ROA, MBV, LEV, BIG4, CAPINTEN, GROWTH, and GDP). As indicated above, earlier research (Haw et al., 2011; Behn et al., 2013) provides empirical evidence to demonstrate the links between these control variables and classification shifting. Consequently, we have also attempted to develop direct theoretical and empirical links between these control variables and classification shifting, consistent with previous studies.

Table 1 provides descriptive statistics. For each of the variables, the number of firm-year observations, the mean, the standard deviation, the minimum, and the maximum are reported. The mean and minimum sale values (in millions US \$) are 13,302 and 2,643, respectively, suggesting that wide variations in firm size exist among the Indian firms. In addition, the mean and minimum reported core earnings (REP_CE) are positive, at 0.2533 and 0.0283, respectively. Similarly, the mean of income-decreasing special items (SPITEM) is positive at 0.008, and the minimum is zero. The mean and minimum unexpected core earnings (UNEXP_CE) are equal to zero. This is consistent with previous studies (Haw et al., 2011; Behn et al., 2013; Nagar and Sen, 2016). Accruals are income-decreasing, as the mean is negative -0.2631.

(INSERT TABLE 1 ABOUT HERE)

The mean religiosity (RELINT) is 0.9075, the minimum is 0.1900, and the maximum is 1.2000. The mean religiosity figure of 0.9075 suggests that a higher proportion of the

population in India within the sample attend religious services frequently, participate in weekly religious activities and place a high level of importance on religious activities, according to the findings of the WVS. The mean legal environment (LEGALENF) of India in the sample is 5.5835, the minimum is 2.3997, and the maximum is 6.0574. The mean of 5.5835 also indicates that the legal environment in India is not very strong, which is consistent with the findings of La Porta et al. (1998) and Leuz et al. (2003). In addition, Table 1 reports the descriptive statistics for India's cultural variable of POWDIS (4.0592): INDIV (3.7756), MASCU (3.9105), UNCAVO (4.0490), and LONGTEO (3.9833). In India, high values for mean power distance, uncertainty avoidance, masculinity, and long-term orientation suggest that these four are the dominant cultural traits (Tang & Keveos, 2008; Hofstede et al., 2010; Beugelsdijk et al., 2015). Table 2 provides the Pearson and Spearman correlation coefficients. To ensure that there is non-multicollinearity problem, we run both the Pearson and Spearman correlation coefficients for all the variables in the regression model. It is worth noting that the directions of both the Pearson and Spearman correlation coefficients are generally similar, an indication that there is a non-multicollinearity problem within the data. Again, consistent with Green (2012) and Kennedy (2008), we conduct further tests to ensure that there are non-multicollinearity problems.

We also estimate the variance inflation factor (VIF) for the independent variables, and the highest VIF among all the independent variables is below 3.4. Green (2012) indicates that a VIF of 10 or less is a good sign that there are non-multicollinearity problems. The correlation coefficients support the validity of the model, and the multivariate regression results further confirm the relationship.

(INSERT TABLE 2 ABOUT HERE)

4. Research Design and Empirical Methodology

4.1. Measuring normal and expected core earnings to derive classification shifting

In line with previous studies (Fama & French, 1997; McVay, 2006; Fan et al., 2010; Haw et al., 2011; Behn et al., 2013; Nagar & Sen, 2016), we derive Normal/Expected Core Earnings (NOR_CE thereafter) from the following model.

$$NOR_CE = \beta_0 + \beta_1 CE_{t-1} + \beta_2 ATO + \beta_3 ACCRUALS_{t-1} + \beta_4 \Delta SALES + \beta_5 NEG_ \Delta SALES_t + \varepsilon_t, \quad (1)$$

The lagged core earnings (CE_{t-1}) are included in the model because earlier studies indicate that core earnings are persistent. An asset turnover ratio (ATO_t) is also included in the model because Nissim and Penman (2001) observe that asset turnover is inversely related to profit margin. Consistent with Behn et al. (2013) and Nagar and Sen (2016), we include lagged operating accruals ($ACCRUALS_{t-1}$) because earnings performance is associated with the accruals figure. Sloan (1996) observes that accruals have a significant effect on future performance. Therefore, careful consideration of the accruals figure will help circumvent the econometric problems noted by McVay (2006). Baker et al. (2009) indicate that cost increases are associated with changes in activity level. Therefore, we include change in sales $\Delta SALES$ (and negative change in sales $NEG_ \Delta SALES$) as in the McVay (2006) model. Detailed definitions of all variables are provided in Appendix A.

First, we run a preliminary test to assess whether there is evidence of classification shifting in India. When firms engage in classification shifting, unexpected core earnings (UNEXP_CE) increases. McVay (2006) and Baker et al. (2009) call these *unexpected* core earnings because they are higher than the reported core earnings (REP_CE). In most cases, unexpected core earnings include unexpected special items. Thus, to test whether or not there is classification shifting, we measure the unexpected core earnings (UNEXP_CE) as the difference between reported core earnings (REP_CE) and expected core earnings (NOR_CE) for each firm. As reported in model (2), UNEXP_CE is unexpected core earnings, and SPITEM is income-decreasing special items multiplied by minus one. β_1 is the coefficient of interest. When β_1 is positive and significant, it indicates that firms engage in misclassification of core expenses into special items, which also suggests that reported core earnings have been influenced or manipulated to exceed expectations. On the other hand, when the coefficient β_1 is negative and significant, it indicates that there is no evidence of classification shifting.

4.2. Modeling unexpected core earnings, classification shifting, and the role of religion

Having derived unexpected core earnings (UNEXP_CE), we explore the role of religion on classification shifting. We test for Hypothesis 1 by employing the following model:

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 RELINT + \beta_3 RELINT \times SPITEM + \beta_4 SIZE + \beta_5 ROA + \beta_6 MBV + \beta_7 LEV + \beta_8 BIG4 + \beta_9 CAPINTEN + \beta_{10} GROWTH + \beta_{11} GDP + Year\ Fixed\ Effects + Industry\ Fixed\ Effects + \varepsilon_t \quad (2)$$

Religiosity (RELINT) is the measure of religiosity obtained from the WVS. RELINT x SPITEM is the interaction term between India's religiosity and income-decreasing special items. We expect the coefficient on the interaction term between religiosity and negative special items, RELINT x SPITEM (RELSPI), to be significantly negative if religiosity mitigates classification shifting in India firms.

In line with previous studies (Ashbaugh et al., 2003; Fan et al., 2010; Behn et al., 2013; Nagar & Sen, 2016), size and book to market value are included as control variables, in addition to other variables for year and country fixed effects. We also control for firm size (SIZE) because previous research (Ashbaugh et al., 2003; Callen et al., 2011) indicates that small firms are more likely than large firms to influence reported core earnings. Book to market value (BMV) controls for the effects of market capitalization. We employ leverage (LEV) because Zang (2012) shows that firms influence reported profit to meet debt covenants and to secure external financing. The presence of Return on Assets (ROA) tests whether earnings management is a function of firm performance (McVay, 2006; Cohen & Zarowin, 2010; Zalata & Roberts, 2017), as poorly performing firms are more likely to engage in classification shifting. As in Athanasakou et al. (2009) and Doyle et al. (2003), we control for growth (GROWTH) because an increase in working capital might be associated with higher growth, which might affect future cash flows. We also control for per capita GDP as in Leuz et al. (2003) so as to capture wealth effects. Finally, in line with previous studies (Fan et al., 2010; Behn et al., 2013; Nagar & Sen, 2016), we include levels of unexpected core earnings.

4.3. Modeling the impact of national dimensions of culture on classification shifting

In this section, we test Hypothesis 2 on the effect of national culture on classification shifting. To this end, we decompose culture into its components: power distance (POWDIS), individualism (INDIV), uncertainty avoidance (UNCAVO), masculinity (MASCU), and long-term orientation (LONGTEO). We estimate the following panel regression models:

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 POWDIS + \beta_3 POWDIS \times SPITEM + \beta_4 SIZE + \beta_5 ROA + \beta_6 MBV + \beta_7 LEV + \beta_8 BIG4 + \beta_9 CAPINTEN + \beta_{10} GROWTH + \beta_{11} GDP + \beta_{12} RELINT + \text{Year \& Country Fixed Effects} + \varepsilon_t \quad (3)$$

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 INDIV + \beta_3 INDIV \times SPITEM + \beta_4 SIZE + \beta_5 ROA + \beta_6 MBV + \beta_7 LEV + \beta_8 BIG4 + \beta_9 CAPINTEN + \beta_{10} GROWTH + \beta_{11} GDP + \beta_{12} RELINT + \text{Year \& Country Fixed Effects} + \varepsilon_t \quad (4)$$

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 UNCAVO + \beta_3 UNCAVO \times SPITEM + \beta_4 SIZE + \beta_5 ROA + \beta_6 MBV + \beta_7 LEV + \beta_8 BIG4 + \beta_9 CAPINTEN + \beta_{10} GROWTH + \beta_{11} GDP + \beta_{12} RELINT + Year \& Country \text{ Fixed Effects} + \varepsilon_t \quad (5)$$

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 MASCUCU + \beta_3 MASCUCU \times SPITEM + \beta_4 SIZE + \beta_5 ROA + \beta_6 MBV + \beta_7 LEV + \beta_8 BIG4 + \beta_9 CAPINTEN + \beta_{10} GROWTH + \beta_{11} GDP + \beta_{12} RELINT + Year \& Country \text{ Fixed Effects} + \varepsilon_t \quad (6)$$

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 LONGTEO + \beta_3 LONGTEO \times SPITEM + \beta_4 SIZE + \beta_5 ROA + \beta_6 MBV + \beta_7 LEV + \beta_8 BIG4 + \beta_9 CAPINTEN + \beta_{10} GROWTH + \beta_{11} GDP + \beta_{12} RELINT + Year \& Country \text{ Fixed Effects} + \varepsilon_t \quad (7)$$

The above panel regression models also include interaction terms between the main explanatory variables.

This identification strategy allows us to disentangle the various channels through which culture and its components could affect classification shifting. If culture helps to mitigate classification shifting, we expect to see a negative and significant coefficient on the interaction term between cultural dimension variables and negative special items (that is, in the coefficients of POWDIS×SPITEM, INDIV×SPITEM, UNCAVO×SPITEM, MASCUCU×SPITEM, and LONGTEO×SPITEM).

4.4. Modeling the impact of the interaction between national culture and legal environment on classification shifting

Next, we provide the model to test Hypothesis 3 on the interaction between legal environment and culture, LEGALENF×CULTURE (LEGALCUL). We follow La Porta et al. (1998) and Leuz et al. (2003) to measure the legal environment in India. They define legal environment as the average score across three legal variables: (i) a corruption index, (ii) a rule of law index, and (iii) a judicial system efficiency index. Thus, we test the following model:

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 CULTURE + \beta_3 BCULTURE \times SPITEM + \beta_4 LEGALENF + \beta_5 LEGALENF \times SPITEM + \beta_6 CULTURE \times LEGALENF + \beta_7 SIZE + \beta_8 ROA + \beta_9 MBV + \beta_{10} LEV + \beta_{11} BIG4 + \beta_{12} CAPINTEN + \beta_{13} GROWTH + \beta_{14} GDP + \beta_{15} RELINT + Year \& Country \text{ Fixed Effects} + \varepsilon_t \quad (8)$$

where CULTURE denotes our proxies for the cultural dimension variables, RELINT is the country's level of religiosity, and LEGALENF is the average score across three legal variables as indicated above.

We predict a significant and negative relationship between classification shifting and the interaction between proxies of national culture and legal environment (CULTURE×LEGALENF). We include these interaction terms to investigate how legal environment affects classification shifting through special items.

4.5 Modeling the impact of the interaction between religion and legal environment on classification shifting

Lastly, and as an extension of Hypothesis 3, we examine the interaction between religion and legal environment. To this end, we augment model (8) to include the interaction term between religion and legal environment (*LEGALENF x RELINT*) as follows:

$$UNEXP_CE = \beta_0 + \beta_1 SPITEM + \beta_2 RELINT + \beta_3 RELINT \times SPITEM + \beta_4 LEGALENF + \beta_5 LEGALENF \times SPITEM + \beta_6 LEGALENF \times RELINT + \beta_7 LEGALENF \times RELINT \times SPITEM + \beta_8 SIZE + \beta_9 ROA + \beta_{10} MBV + \beta_{11} LEV + \beta_{12} BIG4 + \beta_{13} CAPINTEN + \beta_{14} GROWTH + \beta_{15} GDP + Year\ Fixed\ Effects + Industry\ Fixed\ Effects + \varepsilon_t, \quad (9)$$

where LEGALENF captures the legal environment in India, and LEGALENF x SPITEM is India's legal environment multiplied by negative special items. LEGALENF x RELINT is the interaction term between religion and legal environment in India.

4.6. Fixed effects (FE) models and preliminary misspecification tests

To account for variations in firm size, we follow prior literature (see Haw et al., 2011; Behn et al., 2013; Ntim et al., 2013; Elshandidy & Neri, 2015) and employ the fixed-effects panel regression model. Results of the Hausman test favor the fixed effects regression model, so we reject the alternative random effects regression model and adopt the fixed effects regression model. We also conduct normality tests using the Kolmogorov-Smirnov test of normality, Breusch-Pagan tests for the presence of heteroscedasticity, and checks for serial correlation or auto-correlation with a Wooldridge test for auto-correlation in panel data. The results of these preliminary tests indicate that the data meet the requirements of normality: there is no evidence of heteroscedasticity, serial effects, or auto-correlation.

5. Empirical Regression Results and Discussions

5.1. Testing for the Existence of Classification Shifting in India

In what follows, we employ panel fixed-effects regressions after conducting the Hausman specification test to account for differences and variations in firms' size, in line with previous studies (Haw et al., 2011; Behn et al., 2013; Ntim et al., 2013; Elshandidy & Neri, 2015). Consistent with prior studies (Garcia-Herrero et al., 2009; Dietrich & Wanzenried, 2014), we run a Wald test to omit insignificant variables and to estimate the model with only significant control variables to the maximum extent possible. Specifically, we estimate the Wald joint hypothesis test to determine whether certain variables are insignificant. That is, the null hypothesis is rejected if the p-value is less than 10% of significance. Note that we also include control variables. We run several Wald tests to reduce the number of insignificant control variables in the model until the remaining coefficients are equal to zero. This approach has the potential to reduce the number of variables to an efficient or minimum size.

(INSERT TABLE 3 ABOUT HERE)

If firms in India engage in classification shifting, then the coefficient on income-decreasing special items (SPITEM) should be positive and significant. Table 3 presents regression results for the sub-samples. First, we find a positive relationship between SPITEM and unexpected core earnings (UNEXP_CE) at the 1% significant level. In addition, we include the control variables in each model to examine the relationship between UNEXP_CE and SPITEM. The results indicate that the relationship between SPITEM and UNEXP_CE is positive and significant at the 1% or 5% level. These results are consistent with prior studies on classification shifting in both strong and weak investor protection countries (Behn et al., 2013; Nagar & Sen, 2016) and in eight East Asian economies (Haw et al., 2011), confirming the existence of misclassification in India.

Regarding the return on assets, the results indicate that ROA is negatively related to UNEXP_CE at the 1% significant level. The negative coefficient on ROA suggests that firms in India increase their reported core earnings through classification shifting as profits decrease; this finding is consistent with earlier findings from the US (see Athanasakou et al., 2009; Behn et al., 2013). The relationship between SIZE and classification shifting is

negative. Prior studies (Haw et al., 2011; Behn et al., 2013) show that small firms are more likely to engage in classification shifting to increase reported core earnings, though we do not find significance. The relationship between MBV and UNEXP_CE is negative but not significant. On the other hand, the coefficient on LEV is negative and significant at 1%, suggesting that firms do not engage in classification shifting to improve their reported core earnings in an effort to obtain external financing. In general, the level of significance in the variables is consistent with prior studies, but the signs seem to suggest that India is somewhat different from developed economies like the US (McVay, 2006; Fan et al., 2010; Haw et al., 2011; Behn et al., 2013; Zalata & Roberts, 2017). Clearly, classification shifting is pervasive management behavior in India.

5.2. Relationship between Religiosity and Classification Shifting

In line with Hypothesis 1, we examine the relationship between religiosity (RELINT) and unexpected core earnings (UNEXP_CE), as well as the interaction term between RELINT x SPITEM (RELINTSPI). Consistent with previous studies (McGuire et al., 2012; Behn et al., 2013), we run fixed effects regression model (2) to account for the variations in firm size. We expect to see a negative relationship between RELINTSPI and UNEXP_CE if the former reduces the latter by improving ethical considerations within the firm.

(INSERT TABLE 4a ABOUT HERE)

Tables 4a and 4b present the findings. Results indicate that SPITEM is positive and significant at 1% (see Table 4a), confirming that classification shifting is prevalent in India. The results in Table 4a indicate that RELINT is negatively related to UNEXP_CE at the 1% significance level, implying that the direct effect of religion on classification shifting is negative (see models 2 and 3). This result contradicts earlier findings in an international context by Callen et al. (2011) but supports the findings in the US context by McGuire et al. (2012). Note that Callen et al. (2011) observe that religiosity is unrelated to earnings management.

However, we also observe indirect effects as we interact religion with special items. The findings show that in the presence of special items, the impact of religion on UNEXP_CE is positive and significant at the 1% level, see the coefficient of interaction term RELINTSPI (RELINT×SPITEM). This suggests that religiosity might have little power to

combat classification shifting when special items are present, as the latter would prevail and enhance classification shifting overall.

(INSERT TABLE 4b ABOUT HERE)

The results in Table 4b supplement the above findings by including control variables. For the sake of brevity, we show only a few control variables. Again, we observe that RELINT is negatively related to UNEXP_CE at the 1% significance level, while RELINTSPI is positively associated with UEEXP_CE at the 1% significance level.

5.3. Testing the Relationship between National Culture and Classification Shifting

In line with Hypothesis 2, next we examine the effect of national culture on classification shifting. To test Hypothesis 2 on whether culture affects classification shifting, we employ scores for power distance (POWDIS), individualism (INDIV), uncertainty avoidance (UNCAV), masculinity (MASCU), and long-term orientation (LONGTEO).

Table 5a provides the regression results. Results indicate that POWDIS, INDIV, UNCAV, and MASCU are positively related to UNEXP_CE at the 1% significant level. Our findings contribute to the extant literature and support the notion that in power distance cultures, accounting systems are used to validate the decisions of top management and convey a favorable image (Han et al., 2010; Callen et al., 2011; Beugelsdijk et al., 2015).⁷ The positive and significant relationship between INDIV and UNEXP_CE suggests that India has a collective culture, and its low levels of individualism may increase misclassification. These results insinuate that the close family ties in India might pressure individuals to engage in misclassification of core expenses. In India, close family ties have also been associated with nepotism, bribery, and corrupt practices. Our findings are consistent with those of Callen et al. (2011) and Desender et al. (2011), who observe a negative relationship between high

⁷ Han et al. (2010) and Hofstede et al. (2010) confirm that power inequality exists in developing and emerging countries.

individualism and accruals management. However, they did not indicate that individualism has a positive impact on classification shifting in India.

Again, we assess the relationship between uncertainty avoidance and classification shifting. The variable of interest is UNCAV, and the results show that a positive relationship between UNCAV and UNEXP_CE exists. The results in Table 5a show that UNCAV is positive and significantly related to UNEXP_CE. Thus, the higher the uncertainty, the higher the misclassification of core expenses to boost reported core earnings. The results are consistent with those of Hofstede et al. (2010) and Richardson (2008), who find that uncertainty scores are higher in East European, Central European, and Latin countries but lower in English-speaking and Chinese culture countries.

(INSERT TABLE 5a ABOUT HERE)

To examine the relationship between masculinity score and classification shifting, we run the regression reported in column 3 of Table 5a. The variable of interest is MASCU, and the hypothesis predicts a positive relationship between MASCU and UNEXP_CE. The results in Table 5a indicate that there is a positive and significant relationship between MASCU and UNEXP_CE. Klasing (2013) indicates that high masculinity countries are associated with a masculine work role model emphasizing control, power, assertiveness, and a strong drive for achievement involving ego boosting and wealth recognition. In high masculinity cultures, firm managers have a strong incentive to engage in misclassification so as to gain further control, power, recognition, and wealth. The results indicate that masculinity is high in India, which is consistent with Hofstede et al. (2010).

In addition, we examine the relationship between long-term orientation and classification shifting. The variable of interest is LONGTSPI. The results, which appear in Table 5b, show a negative and significant relationship at the 1% significance level between LONGTSPI and UNEXP_CE. This suggests that the incentive to misclassify core expenses to boost reported core earnings would be subdued in the presence of long-term orientation. The results also suggest that firms in India are long-term oriented and are not motivated by short-term goals or performance to influence reported core earnings. These findings are in line with Han et al. (2010).

(INSERT TABLE 5b ABOUT HERE)

5.4. Testing the Relationship between Legal Environment, Religion, and Classification Shifting

This section tests Hypothesis 3. First, we examine the interaction between legal environment (LEGALENF) and special items (LEGALSPI) and the interaction between legal environment and classification shifting (UNEXP_CE). We then incorporate interactions between legal environment and religiosity (RELLEG).

Table 6 shows the results on the relationship between legal environment (LEGALENF) and UNEXP_CE. As indicated below, the relationship between legal environment (LEGALENF) and UNEXP_CE is negative and significant (see models 1 and 2). The results suggest that the legal environment subdues the misclassification of core expenses into special items in India. The findings from this study are consistent with earlier studies (La Porta et al., 1998; Leuz et al., 2003; Haw et al., 2011; Behn et al., 2013), which observe that a strong legal environment and strong investor protection mitigate classification shifting and accrual-based earnings management. However, the results contradict those of Callen et al. (2011), who find no relationship between legal environment and accrual-based earnings management.

We find that the interaction term between religion and legal environment, RELLEG, carries a positive sign and is significant. This result suggests that in the presence of a weak legal environment, religion enhances classification shifting. It is widely acknowledged that India's legal environment is not strong (La Porta et al., 1998; Leuz et al., 2003; Durnev & Han Kim, 2005; Nagar & Sen, 2016) and affects the underlying economic structure. It could be that India's weak legal environment is not acting as an impediment to the role of religion in combating classification shifting. This finding is a significant contribution to the literature on managerial opportunistic classification shifting behavior. It has policy implications as well: one might argue that strengthening India's legal environment would complement its religiosity to constrain managerial motivation to misclassify core expenses into special items to boost reported core earnings.

(INSERT TABLE 6 ABOUT HERE)

5.5. Further testing how legal environment, culture and religion affect classification shifting

In this section, we include the interaction terms of the religion, legal environment, and cultural dimension variables in the model and show the results in Table 7. First, we examine

the relationship between legal environment (LEGALENF) and unexpected core earnings while controlling for religion (see the interaction term RELLEG). As Table 7 shows, RELLEG is positive and significant, suggesting that the interaction term RELLEG does not mitigate misclassification of core expenses. In addition, the interaction between legal environment and culture (LEGCUL) is negative and significant at the 5% level. This suggests that India's national culture has a strong influence and could complement legal environment in constraining managerial incentives to misclassify core expenses into special items to boost reported core earnings. Note, though, that the interaction between legal environment, culture, and special items (LEGCULSPI) is also significant and negative at the 1% level.

(INSERT TABLE 7 ABOUT HERE)

Next, we examine the impact of the interaction term between the legal environment and national dimensions of culture on UNEXP_CE. The variables of interest are POWD×LEG×SPI, INDIV×LEG×SPI, MASCUL×LEG×SPI, and UNCAV×LEG×SPI. We estimate several panel regressions in Table 8. The results indicate that the coefficients on POWD×LEG×SPI and INDIV×LEG×SPI are negative (-0.913 and -0.924, respectively) and significant at the 1% level, suggesting that the presence of power distance or individualism coupled with legal environment reduces classification shifting behavior in India. Similarly, we document evidence of a negative (coefficient, -1.232) and significant relationship between MASCUL×LEG×SPI and UNEXP_CE, as well as for UNCAV×EG×SPI (coefficient, -1.091). Therefore, the individual positive impact of power distance, individualism, uncertainty avoidance, and masculinity we noted previously is no longer evident when these variables interact with the legal environment. The legal environment seems to play a mitigating role in the case of India, consistent with previous literature (Leuz et al., 2003; Behn et al., 2013), as it complements national culture in discouraging expense misclassification.

(INSERT TABLE 8 ABOUT HERE)

The above results suggest that the combined effects of individualism, masculinity, long-term orientation and strong legal environment have the potential to decrease classification shifting behavior in India. Thus, the legal environment in India complements the culture of individualism, long-term orientation, and masculinity to subdue classification shifting behavior. We also document evidence that in India, cultural dimension variables have a negative impact on classification shifting when they interact with the legal environment.

6. Robustness Analysis

6.1. Validity of the Expectation Model

First, as a robustness check, we replace total accruals (ACCRUALS) with working capital accruals (WC_ACC) from McVay's (2006) expectation model (1) to compute the normal core earnings (NOR_CE). The aim of replacing ACCRUALS with WC_ACC is to eliminate bias in the expectation model resulting from depreciation expenses and special items, in line with Athanasakou et al. (2009). We use WC_ACC in model (1) to compute the new UNEXP_CE. Everything remains the same in the model except that WC_ACC is used to compute NOR_CE and subsequently UNEXP_CE.

We use similar models as above with the re-estimated UNEXP_CE and present the results in Table 9, columns (1) to (4). The results show that the coefficient on SPITEM is positive and that on RELINT is still negative; they are significant at 1% and 5% level, respectively. This confirms that firms in India engage in expense misclassification to boost reported core earnings, as observed in previous research (Haw et al., 2011; Behn et al., 2013; Nagar & Sen, 2016). This evidence is consistent with earlier cross-country and national studies on classification shifting (McVay, 2006; Fan et al., 2010; Haw et al., 2011; Behn et al., 2013; Nagar & Sen, 2016), implying that firms in India have the incentive to engage in classification shifting. Barua and Cready (2008) argue that McVay's (2006) evidence of classification shifting is illustrative of model bias because of the inclusion of special items accruals. In response, Feng and McVay (2010) provide empirical evidence of expense misclassification without accruals in the model of normal core earnings. Consequently, we follow previous research (Feng & McVay, 2010; Haw et al., 2011) to exclude accruals from the expectation model (1). We re-run the regression models using working capital accruals and present the results in columns 1 and 2. The results without accruals appear in columns 3 and 4.

(INSERT TABLE 9 ABOUT HERE)

In short, the results of the regression models with and without working capital accruals suggest that the previously reported findings of expense misclassification based on McVay's (2006) expectation model are bias free. There is still strong evidence of expense misclassification into special items, as well as strong evidence that the interaction between legal environment and national culture has a significant negative impact on classification shifting in India.

7. Conclusion

We provide new evidence on classification shifting behavior in India. Our findings show the impact of culture, religiosity, and legal environment as well as a plethora of interaction terms on classification shifting behavior. We find strong evidence that the direct effect of religiosity is negative. However, the interaction between religiosity and special items has a positive impact on classification shifting in India. This finding contradicts the cross-country study by Callen et al. (2011) but supports the US-based findings of McGuire et al. (2012) and Dyreng et al. (2012).

Our findings suggest that the combined effects of individualism, masculinity, long-term orientation, and strong legal environment have the potential to decrease classification shifting behavior in India. Thus, the legal environment in India could complement the culture of individualism, long-term orientation, and masculinity to subdue classification shifting behavior. We also document evidence that in India, the impact of the cultural dimension variables on classification shifting is negative when they interact with the legal environment.

The positive and significant relationship between INDIV and UNEXP_CE suggests that the low individualism of India's collective culture could increase misclassification. These results insinuate that the close family ties present in India might pressure individuals to misclassify core expenses. In India, close family ties have also been associated with nepotism, bribery, and corrupt practices.

The interaction term between religion and legal environment, RELLEG, carries a positive sign and is significant. This result suggests that in the presence of a weak legal environment, religion could enhance classification shifting. It is widely acknowledged that India's legal environment is not strong (La Porta et al., 1998; Leuz et al., 2003; Durnev & Han Kim, 2005; Nagar and Sen, 2016). Therefore, it could be that India's weak legal environment is not amplifying the role of religion in combating classification shifting.

Our findings reinforce the role of religion and confirm the effectiveness of religious social norms and national culture in shaping the attitude and behavior of firm managers in corporate decision-taking. The findings show the complementary roles of India's religious social norms, national culture, and legal environment and emphasize the need to strengthen the legal environment. Indeed, knowing the extent to which religiosity and national culture interact with the legal environment to shape corporate financial reporting is essential to maintaining the quality and consistency of financial reporting. Although religion is rarely discussed in secular organizations, our findings are useful to regulators, external monitors,

and investors as they indicate that religion, culture, and the legal environment strengthen the internal monitoring mechanisms put in place by management to mitigate classification shifting behavior. Again, the findings from the study will help India to scrutinize the functioning of auditors, boards of directors, and audit committees, who are responsible for the sanctity of the financial reporting process. We recommend strengthening the legal environment to subdue classification shifting behavior; as one could argue that a stronger legal environment in India would complement religiosity in constraining managerial motivation to misclassify core expenses into special items to boost reported core earnings.

Acknowledgments

We would like to thank Professor Robert K. Larson and Professor Gaurav Gupta for their comments and feedback. Also, we would like to thank Mrs. Julie Steiff for her excellent assistance in editing the paper and an anonymous reviewer for comments and suggestions. All remaining errors are our own. We acknowledge financial research assistance from University of East London.

References

- Ahern, K. R., Daniele Daminelli, D., & Fracassic, C. (2015). Lost in translation? The effect of cultural values on mergers around the world. *Journal of Financial Economics*, 117(2), 165-189
- Ali, A., & Zhang, W. (2015). CEO tenure and earnings management. *Journal of Accounting and Economics*, 59(1), 60-79.
- Ashbaugh, H., Lafond, R., & Mayhew, B. (2003). Do non-audit services compromise auditor independence? Further evidence. *The Accounting Review*, 78(3), 611-639.
- Athanasakou, V.E., Strong, N.C., and Walker, M. (2009). Earnings management or forecast guidance to meet analyst expectations? *Accounting and Business Research*, 39(1), 3-35.
- Baker, T.A., Collins, D.L., & Reitenga, A.R. (2009). Incentives and opportunities to manage earnings around options grants. *Contemporary Accounting Research*, 26(3), 649-72.
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467-498.
- Barua, A., Lin, S., & Sbaraglia, A.M. (2010). Earnings management using discontinued operations. *The Accounting Review*, 85(5), 1485-1509.
- Barua, A., & Cready, W. (2008). Classification shifting and special items. Evidence of earnings management or research design consequence. *Working Paper*. Retrieved from SSRN: <https://ssrn.com/abstract=1139231>. Accessed March 14, 2020.
- Behn, B. K., Gotti, G., Herrmann, D., & Kang, T. (2013). Classification shifting in an international setting: Investor protection and financial analysts monitoring. *Journal of International Accounting Research*, 12(2), 27-50.
- Beugelsdijk, S., Maseland, R., & Van Hoorn, A. (2015). Are scores on Hofstede's dimensions of national culture stable over time? A cohort analysis. *Global Strategy Journal*, 5(3), 223-240.
- Botsari, A., & Meeks, G. (2018). Acquirers' earnings management ahead of stock-for-stock bids in 'hot' and 'cold' markets. *Journal of Accounting and Public Policy*, 37(5), 355-375.
- Bradshaw, M., & Sloan, R. (2002). GAAP versus the street: An empirical assessment of two alternative definitions of earnings. *Journal of Accounting Research*, 40(1), 41-66.
- Callen, J. L., Morel, M., & Richardson, G. (2011). Do culture and religion mitigate earnings management? Evidence from a cross-country analysis. *International Journal of Disclosure and Governance*, 8(2), 103-121.
- Cohen, D.A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1), 2-19.

- Desender, K.A., Castro, C. E., & Escamilla, S. A. (2011). Earnings management and cultural values. *American Journal of Economics and Sociology*, 70(3), 639-670.
- Dietrich, A., & Wanzenried G. (2014). The determinants of commercial banking profitability in low- middle – and high-income countries. *The Quarterly Review of Economics and Finance*, 54(3), 337- 354.
- Douma, S., George, R., & Kabir, R. (2006). Foreign and domestic ownership, business groups and firm performance: Evidence from a large emerging market. *Strategic Management Journal*, 27(1), 637-657.
- Doupnik, T. S. (2008). Influence of culture on earnings management: A note. *Abacus*, 44(3), 317-340.
- Doyle, J., Lundholm, R., & Soliman, M. (2003). The predictive value of expenses excluded from pro forma earnings. *Review of Accounting Studies*, 8(3), 145-74.
- Durnev, A., & Han Kim, E. (2005). To steal or not to steal: Firm attributes, legal environment, and valuation. *Journal of Finance*, 60(3), 1461-1493.
- Dyreng, S. D., Mayew W.J., & Williams, C.D. (2012). Religious social norms and corporate financial reporting. *Journal of Business Finance and Accounting*, 39(8), 845-875.
- Elliot, J.A., & Shaw, W.H. (1998). Write-offs as accounting procedures to manage perceptions. *Journal of Accounting Research*, 26(3), 91-119.
- Elnahas, A.M., Hassan, M.K., & Ismail, G.M. (2017). Religion and mergers and acquisitions contracting: The case of earnout agreements. *Journal of Corporate Finance*, 42(1), 221-246.
- Elshandidy, T., & Neri, L. (2015). Corporate governance, risk disclosure practices and market liquidity: Comparative evidence from the UK and Italy. *Corporate Governance an International Review*. 23(4), 331-356.
- Estrin, S., & Prevezer, M. (2011). The role of informal institutions in corporate governance: Brazil, Russia, India, and China compared. *Asia Pacific Journal of Management*, 28(1), 41–67.
- Ewert, R., & Wagenhofer, A. (2005). Economics effects of tightening accounting standards to restrict earnings management. *The Accounting Review*, 85(4), 1303-1323.
- Fama, E.F., & French, K.R. (1997). Industry cost of equity. *Journal of Financial Economics*, 44(2), 153-193.
- Fan, Y., Barua, A., Cready, W.M., & Thomas, W. (2010). Managing earnings using classification shifting: Evidence from quarterly special items. *The Accounting Review*, 85(4), 1303-1323.
- Francis, J. R., & Wang, D. (2008). The joint effects of investor protection and Big 4 audit on earnings quality around the world. *Contemporary Accounting Research*, 25(1), 157–191.

- Garcia-Herrero, A., Gavila, S., & Santabarbara, D. (2009). What explains the low profitability of Chinese banks? *Journal of Banking and Finance*, 33(11), 2080-2092.
- Goel, S. (2014). The quality of reported numbers by the management: A case testing of earnings management of corporate India. *Journal of Financial Crime*, 21(3), 355-376.
- Graham, J. R., Harvey, C.R., & Rajgopal, S. (2005). The economics implications of corporate financial reporting. *Journal of Accounting and Economics*, 40(1), 3-73.
- Green, W.H. (2012). *Econometrics analysis*. (8th ed.). Pearson.
- Haga, J., Hoglunda, H., & Sundvika, D. (2018). Stock market listing status and real earnings management. *Journal of Accounting and Public Policy*, 37(5), 420-435.
- Han, S., Kang, T., Salter, S. and Yoo, Y.K. (2010). A cross-country study on the effects of national culture on earnings discretion. *Journal of International Business Studies*, 41(1), 123-142.
- Haw, M., Ho, S.M., & Li, A.Y. (2011). Corporate governance and earnings management by classification shifting. *Contemporary Accounting Research*, 28(1), 517-553.
- Herrmann-Pillath, C., Libman, A. & Yu, X. (2014). Economic integration in China: Politics and culture, *Journal of Comparative Economics*, 42(2), 470-492.
- Hilary, G., & Hui, K. W. (2009). Does religion matter in corporate decision making in America? *Journal of Financial Economics*, 93(3), 455-473.
- Hofstede, G., Hofstede, G., & Minkov, M. (2010). *Cultures and organizations: Software of the mind*. (3rd ed.). McGraw-Hill.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*. (2nd ed.). Sage Publications.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. (2nd ed.). McGraw-Hill.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. (2nd ed.). Sage Publications.
- Houqe, M., N, Ahmed, K., & Zijl, T. V. (2017). Audit quality, earnings management, and cost of equity capital: Evidence from India. *International Journal of Auditing*, 21(2), 177-189.
- Jarvinen, T., & Myllymaki, E.R. (2016). Real earnings management before and after reporting SOX 404 material weaknesses. *Accounting Horizon*, 30(1), 119-141.
- Kapoor, N., & Goel, S. (2016). Board characteristics, firm profitability and earnings management: Evidence from India. *Australian Accounting Review*, 27(2), 180-194.

- Klasing, M. J. (2013). Cultural dimensions, collective values and their importance for institutions. *Journal of Comparative Economics*, 41(1), 447-467.
- Kennedy, P. (2008). *A guide to econometrics*. (6th ed.). Blackwell Publishing.
- King, R. (2013). *Orientalism and religion: Post-colonial theory, India and "The Mystic East"*. (1st ed.). Routledge.
- Kothari, S.P., Mizik, N., & Roy Chowdhury, S. (2016). Managing for the moment. The role of earnings management via real activities versus accruals in SEO valuation. *The Accounting Review*, 91(2), 559-586.
- La Porta, R., Lopez-de Silanes, F., Shleifer, A., & Vishny, R.W. (1998). Law and finance. *The Journal of Political Economy*, 106(6), 1113-1155.
- Leuz, C., Nanda, D., & Wysocki, P. (2003). Earnings management and investor protection: An International Comparison. *Journal of Financial Economics*, 69(3), 505-527.
- Leventis, S., Dedoulis, E., & Abdelsalam, O. (2018). The impact of religiosity on audit pricing. *Journal of Business Ethics*, 148(1), 53-78.
- McGuire, T.S., Omer, T.C., & Sharp, N.Y. (2012). The impact of religion on financial reporting irregularities. *The Accounting Review*, 87(2), 497-523.
- McVay, S. (2006). Earnings management using classification shifting: An examination of core earnings and special items. *The Accounting Review*, 81(3), 501-531.
- Feng, M., & McVay, S. (2010). Analysts' incentives to overweight management guidance when revising their short-term earnings forecasts. *The Accounting Review*, 85(5), 1617-1646
- Mishra, M., & Malhotra, K.M. (2016). Earnings management practices in Indian companies: A cross-sectional analysis. *Journal of Modern Accounting and Auditing*, 12(6), 295-305.
- Nagar, N., & Sen, K. (2016). Earnings management in India: Managers' fixation on operating profits. *Journal of International Accounting, Auditing and Taxation*, 26(1), 1-12.
- Nissim, D., & Penman, S. H. (2001). Ratio analysis and equity valuation: From research to practice. *Review of Accounting Studies*, 6(1), 109-154.
- Ntim, C.G., Lindop, S., & Thomas, D.A. (2013). Corporate governance and risk reporting in South Africa: A study of corporate risk disclosure in the pre-and post – 2007/2008 global financial crises period. *International Review of Financial Analysis*, 30(1), 363-383.
- Parboteeah, K. P., Hoegl, M., & Cullen, J.B. (2008). Ethics and religion: An empirical test of a multidimensional model. *Journal of Business Ethics*, 80(2), 387–398.
- Pew Research Center. (2018). Pew Research Center Survey Retrieved from <https://www.pewresearch.org/>. Accessed April 18, 2020.

- Rajpal, H. (2012). Independent directors and earnings management - Evidence from India. *International Journal of Accounting and Financial Management Research*, 2(4), 9-24.
- Richardson, G. (2008). The relationship between culture and tax evasion across countries. Additional evidence and extensions. *Journal of International Accounting, Auditing and Taxation*, 17(2), 67-78.
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics*, 42(3), 335-370.
- Shu, T., Sulaeman, J., & Yeung, P.E. (2012). Local religious beliefs and mutual fund risk taking behaviors. *Management Science*, 58(10), 1779-1796.
- Sloan, R. G. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review*, 71(3), 289-315.
- Stack, S., & Kposowa, A. (2006). The effect of religiosity on tax fraud acceptability: A cross-national analysis. *Journal for the Scientific Study of Religion*, 45(3), 325-351.
- Tang, L. & Koveos, P.E. (2008). A framework to update Hofstede's cultural value indices: Economic dynamics and institutional stability. *Journal of International Business Studies*, 39(6), 1045-1063.
- Taylor, W.B., & Bloomfield, R.J. (2011). Norms, conformity and controls. *Journal of Accounting Research*, 49(3), 753-790.
- Vishnani, S., Agarwal, S., Agarwalla, R., & Gupta, S. (2019). Earnings management, capital management and signalling behaviour of Indian banks, *Asia-Pacific Financial Markets*, 26(3), 285-295.
- Vitell, S. J. (2009). The role of religiosity in business and consumer ethics: A review of the literature. *Journal of Business Ethics*, 90(2), 155 – 167.
- World Values Survey (2018). World values survey association. Retrieved from <http://www.worldvaluessurvey.org/WVSONline.jsp/>. Accessed February 15, 2018.
- Zaheer, S., Schomaker, M.S., & Nachum, L. (2012). Distance without direction: Restoring credibility to a much-loved construct. *Journal of International Business Studies*, 43(1), 18-27.
- Zalata, A., & Robert, C. (2017). Managing earnings using classification shifting: UK evidence. *Journal of International Accounting, Auditing and Taxation*, 29(1), 52-65.
- Zalata, A., & Robert, C. (2016). Internal corporate governance and classification shifting practices - An analysis of U.K. corporate behavior. *Journal of Accounting, Auditing and Finance*, 31(1), 51-78.
- Zang, A.Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *The Accounting Review*, 87(2), 675-703.

Appendix A. Variables Definitions

Variable Name	Variable Acronym	Definition
Reported Core Earnings	REP_CE	Estimated as sales – cost of goods sold (COGS) – selling, general and administration expenses (SG&A) scaled by sales. Consistent with Behn et al. (2013), where firms fail to disclose COGS and SG&A, REP_CE is calculated as (sales – total operating expenses)/sales.
Normal Core Earnings	NOR_CE	This is the core earnings that are expected to occur in the normal course of business activity, devoid of classification shifting as in Behn et al. (2013) and McVay's (2006).
Unexpected Core Earnings	UNEXP_CE	Calculated as the difference between expected core earnings (estimated from Model (1)) and reported core earnings by industry and fiscal year. A minimum of 10 firm-year observations per industry group is required.
Special Items	SPITEM	Income-decreasing special items scaled by sales.
Asset Turnover	ATO	Calculated as $Sales_t$ scaled by average net operating assets $[NOA_t + NOA_{t-1}]/2$; average NOA is required to be > 0 .
Net Operating Assets	NOA	Calculated as the difference between operating assets (OA) and operating liabilities (OL).
Operating Liabilities	OL	Calculated as total assets – total debt (debt in current liabilities + long-term debt) – book value of common and preferred equity – minority interests.
Operating Assets	OA	Calculated as total assets – cash and short-term investments.
Accruals	ACCRUALS _{t-1}	Calculated as in Francis and Wang (2008), as detailed above.
Total Accruals	TACC	Difference between earnings before extraordinary items and discontinued operations and the cash flow from operational activities scaled by lagged total assets, as in Behn et al. (2013).
Working Capital Accruals	WC_ACC	Calculated as a change in current assets net of a change in cash, minus a change in current liabilities net of a change in the current portion of long-term debt, similar to Behn et al. (2013).
Change in Sales	$\Delta SALES_t$	Calculated as $(Sales_t - Sales_{t-1})/Sales_{t-1}$
Neg. Change in Sales	NEG_ΔSALES _t	Indicator variable equal to 1 if change in sales < 0 , and 0 otherwise.
Religiosity	RELINT	Country level of religiosity measured by the World Values Survey (WVS) of the World Bank (Callen et al., 2011).
Religiosity X Special Items	RELINTSPI	Interaction term between income-decreasing special items and a country's level of religiosity.
Legal Enforcement/Environment	LEGALENF	ICRG legal enforcement score in line with La Porta et al. (1998) and Leuz et al. (2003).
Legal Enforcement/Environment X	LEGALSPI	Interaction term between legal

Special Items		enforcement and income-decreasing special items
Size of Firms	SIZE	Natural log of market value of equity (Behn et al., 2013).
Return on Assets	ROA	Calculated as net income plus interest expenses scaled by total assets at the beginning of the period (Behn et al., 2013).
Market Book Value	MBV	Natural log of book value of equity scaled by market value of equity (Behn et al., 2013).
Leverage	LEV	Calculated as total liabilities scaled by total assets (Behn et al., 2013).
Big Four Auditors	BIG4	Indicator variable equal to 1 if the firm's auditor is a BIG4 audit firm and 0 otherwise.
Capital Intensity	CAPINTEN	Calculated as long-term assets scaled by total assets (Leuz et al., 2003; Behn et al., 2013).
Growth	GROWTH	Calculated as market value of outstanding shares at the end of the year scaled by book value of common equity at the end of the year, similar to Skinner and Sloan (2002) and Athanasakou et al. (2009).
Annual Per Capita Gross Domestic Product (GDP)	GDP	GDP per capita in US \$.World Development Indicators computed by the World Bank and International Monetary Fund (IMF).
Individualism	INDIV	INDIV is the individualism cultural dimension score from the WVS, similar to Beugelsdijk et al. (2015).
Power Distance	POWDIS	POWDIS is the power distance cultural dimension score from the WVS, similar to Beugelsdijk et al. (2015).
Masculinity	MASCU	MASCU is the masculinity cultural dimension score from the WVS, similar to Beugelsdijk et al. (2015).
Uncertainty Avoidance	UNCAVO	UNCAVO is the uncertainty avoidance cultural dimension score from the WVS, similar to Beugelsdijk et al. (2015).
Long-Term Orientation	LONGTEO	LONGTEO is long-term orientation cultural dimension score from the WVS, similar to Beugelsdijk et al. (2015).
Individualism X Special Items	INDIVSPI	Interaction between individualism and income-decreasing special items.
Power Distance X Special Items	POWDSPI	Interaction between power distance and income-decreasing special items.
Masculinity X Special Items	MASCUSPI	Interaction between masculinity and income-decreasing special items.
Uncertainty Avoidance X Special Items	UNCAVSPI	Interaction between uncertainty avoidance and income-decreasing special items.
Long-Term Orientation X Special Items	LONGTSPI	Interaction between long-term orientation score and income-decreasing special items.

Table 1. Descriptive Statistics
Accounting Variables

Variables	Obs	Mean	Std Dev	Min	Max
Sales (in millions of US \$)	30,361	13,302	938.14	263.8160	26,431
UNEXP_CE	30,361	0.0111	0.9117	-0.05841	0.1948
REP_CE	30,621	0.2533	1.0189	0.02833	1.0000
SPITEM	30,621	0.0082	0.0301	0.0000	0.1927
ATO	30,621	1.8049	26.6638	-1.3366	5.5607
ACCRUALS	30,621	-0.2631	0.1761	-0.0979	0.5932
ΔSALES	30,621	0.1661	0.3844	-0.0231	0.2763
NEG ΔSALES	30,621	0.1382	0.3643	-0.0124	0.2146

Control Variables

Variables	Obs	Mean	Std Dev	Min	Max
SIZE	30,621	7.3637	1.9780	2.1187	15.4339
ROA	30,621	0.0760	0.1008	0.8320	0.4012
MBV	30,621	2.8956	2.8469	4.9646	29.3908
LEV	30,621	0.5368	0.2541	0.0083	1.7318
GROWTH	30,621	0.1697	0.3411	0.0859	0.9735
BIG4	30,621	0.6911	0.3111	0.000	1.000
CAPINTEN	30,621	0.1503	0.3101	-0.0234	0.2763
GDP	30,621	2.7977	0.0029	2.7530	2.8154

Religion, Legal, Culture

Variables	Obs	Mean	Std Dev	Min	Max
RELINT	8,081	0.9075	0.0464	0.1900	1.2000
LEGALENF	8,081	5.5835	1.2354	2.3997	6.0574
POWDIS	8,081	4.0593	0.3660	2.8901	4.5542
INDIV	8,081	3.7756	0.4987	2.4849	4.4998
MASCU	8,081	3.9105	0.5653	1.6094	4.5539
UNCAVO	8,081	4.0490	0.4630	3.1355	4.5850
LONGTEO	8,081	3.9833	0.5206	2.5333	4.6000

Notes: All variables are defined in Appendix A.

Table 2. Pearson's (above) and Spearman's (below) Correlation Matrices

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1 REP_CE		0.21	0.08	0.01	-0.12	0.04	0.06	-0.14	-0.03	-0.05	0.08	0.05	-0.02	-0.05	-0.05	0.04	-0.11	0.05	0.01	-0.10
2 UNEXP_CE	0.21		0.09	-0.04	-0.02	-0.06	-0.01	-0.14	-0.20	-0.07	0.04	0.04	-0.03	-0.02	-0.02	0.03	-0.03	-0.04	0.00	-0.04
3 SPITEM	0.08	0.09		-0.01	-0.13	-0.04	-0.09	-0.21	-0.07	-0.02	0.03	-0.06	0.01	-0.02	-0.11	-0.08	0.17	-0.07	-0.01	-0.12
4 ATO	0.01	-0.04	-0.02		0.02	-0.01	0.00	0.02	0.00	0.03	0.07	-0.01	0.07	0.01	-0.01	0.00	0.00	0.00	0.00	0.02
5 ACCRUALS	-0.12	-0.02	-0.15	0.07		-0.01	-0.01	0.25	0.27	0.10	-0.23	0.01	0.18	0.08	-0.28	0.19	-0.28	0.08	-0.07	0.11
6 ΔSALES	0.04	-0.06	-0.06	-0.02	-0.07		0.17	-0.06	0.10	-0.02	-0.08	0.17	0.02	-0.07	0.08	0.04	-0.01	-0.01	-0.06	-0.04
7 NEG_ΔSALES	0.06	-0.05	-0.06	0.06	0.00	0.15		-0.01	0.22	0.00	0.02	0.16	-0.04	0.05	-0.05	0.05	-0.03	-0.01	-0.04	-0.01
8 SIZE	-0.14	-0.11	-0.23	0.08	0.24	-0.02	0.02		0.29	0.12	0.09	-0.04	0.19	-0.14	-0.18	-0.19	-0.40	0.27	0.10	0.39
9 ROA	-0.03	-0.21	-0.05	0.04	0.25	0.13	0.22	0.26		-0.02	-0.12	0.14	0.01	0.04	-0.17	0.13	-0.16	0.02	-0.01	0.11
10 MBV	-0.05	-0.10	-0.01	0.02	0.11	-0.01	0.05	0.13	-0.02		0.15	-0.02	0.23	-0.06	0.01	-0.02	0.02	0.01	0.02	0.07
11 LEV	0.08	0.04	0.06	0.07	-0.16	-0.05	0.01	0.10	-0.11	0.13		-0.07	0.27	-0.08	0.00	-0.02	0.06	-0.03	0.02	0.11
12 CAPITEN	0.05	0.06	-0.06	-0.02	0.07	0.14	0.19	-0.02	0.13	-0.01	-0.05		-0.02	0.07	-0.07	0.06	-0.03	-0.01	-0.06	-0.03
13 GDP	-0.02	-0.02	0.03	0.03	0.23	0.01	-0.03	0.24	0.01	0.23	0.26	-0.01		0.00	0.02	-0.03	0.08	-0.05	0.00	0.04
14 RELINT	-0.05	-0.02	-0.06	0.01	0.05	-0.09	0.07	-0.16	0.08	-0.08	-0.08	0.09	0.00		-0.30	0.20	-0.17	-0.01	-0.29	-0.28
15 LEGALENF	-0.06	-0.07	-0.11	-0.02	-0.37	0.12	-0.10	-0.23	-0.15	0.04	-0.01	-0.12	0.01	-0.32		-0.29	0.42	-0.18	0.42	-0.06
16 POWDIS	0.05	0.08	-0.06	0.01	0.29	0.02	0.12	0.13	0.15	-0.02	-0.04	0.06	-0.02	0.27	-0.32		-0.27	0.24	0.31	0.29
17 INDIV	-0.14	-0.12	0.26	0.01	-0.31	-0.06	-0.06	-0.50	-0.10	0.02	0.07	-0.06	0.08	-0.19	0.43	-0.30		-0.31	0.21	-0.27
18 MASCU	0.02	0.04	-0.06	-0.02	0.11	-0.02	-0.04	0.36	0.07	0.01	-0.02	-0.02	-0.06	-0.08	-0.12	0.18	-0.31		0.46	0.25
19 UNCAVO	0.04	0.02	-0.05	0.00	-0.12	-0.11	-0.07	0.14	0.05	0.02	0.04	-0.10	0.01	-0.33	0.37	0.31	0.24	0.42		0.14
20 LONGTEO	-0.12	-0.05	-0.14	0.02	0.11	-0.05	-0.02	0.50	0.06	0.07	0.13	-0.05	0.04	-0.31	-0.01	0.25	-0.30	0.25	0.15	

Notes: The final sample consists of 30,621 firm-year observations. The Pearson product-moment correlation coefficients appear above the diagonal, and the Spearman rank-order correlations coefficients appear below. All variables are winsorized at 1% and 99% and are defined in Appendix A.

Table 3. Testing for Misclassification in India

Dependent Variable: UNEXP_CE				
VARIABLES	(1)	(2)	(3)	(4)
SPITEM	4.066*** (6.820)	3.832*** (6.569)	3.783*** (6.576)	3.663*** (6.481)
ROA				-0.448*** (-3.351)
SIZE		-0.006 (-0.579)	-0.006 (-0.568)	-0.003 (-0.317)
MBV		0.000 (0.074)	-0.004 (-1.069)	-0.004 (-1.040)
LEV		-0.521*** (-5.011)	-0.638*** (-4.714)	-0.604*** (-4.461)
GROWTH			0.046 (1.529)	0.011 (0.338)
CAPINTEN			0.563 (1.112)	0.628 (1.207)
BIG4			-0.239*** (-2.590)	-0.252*** (-2.732)
GDP				-1.201 (-0.970)
Constant	0.062*** (12.873)	0.394*** (4.950)	0.396*** (5.030)	3.685 (1.069)
Observations	30,361	30,361	30,361	30,361
R-squared	0.022	0.033	0.035	0.037
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 4a. The Impact of Religiosity on Classification Shifting

Dependent Variable: UNEXP_CE				
VARIABLES	(1)	(2)	(3)	(4)
SPITEM	4.066*** (6.820)		3.967*** (6.736)	8.368*** (4.127)
RELINT		-3.535*** (-4.948)	-2.416*** (-4.487)	-2.461*** (-4.515)
RELINTSPI				7.083*** (2.721)
Constant	0.062*** (12.873)	-0.016*** (-2.951)	0.042*** (7.558)	0.035*** (6.624)
Observations	30,361	30,361	30,361	30,361
R-squared	0.022	0.003	0.023	0.025
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 4b. Regression of Religiosity and Classification Shifting

Dependent Variable: UNEXP CE				
VARIABLES	(1)	(2)	(3)	(4)
SPITEM		-3.783*** (-19.908)	-8.179*** (-10.712)	-8.097*** (-10.610)
RELINT	-2.917*** (-7.794)		-1.761*** (-4.278)	-2.055*** (-4.140)
RELINTSPI			7.099*** (5.962)	7.025*** (5.905)
SIZE	0.028*** (4.756)	-0.006 (-0.844)	-0.004 (-0.592)	-0.005 (-0.788)
ROA	-0.934*** (-2.899)	-0.481*** (-4.717)	-0.815*** (-3.789)	-0.719*** (-4.708)
MBV	-0.002 (-0.802)	-0.004* (-1.846)	0.000 (0.167)	-0.004* (-1.779)
LEV	-0.586*** (-16.869)	-0.638*** (-16.538)	-0.507*** (-14.658)	-0.621*** (-16.029)
GROWTH	0.050*** (3.503)	0.046*** (2.817)		0.031* (1.850)
BIG4	-0.195*** (-5.636)	-0.239*** (-6.526)	-0.213*** (-5.789)	-0.241*** (-6.600)
CAPINTEN	0.969 (2.011)	0.869 (1.082)	0.762 (1.019)	0.869 (1.071)
GDP				3.849 (1.608)
Constant	0.039 (0.853)	0.396*** (7.323)	0.350*** (6.419)	-10.407 (-1.554)
Observations	30,361	30,361	30,361	30,361
R-squared	0.015	0.035	0.035	0.038
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 5a. The Impact of Power Distance, Individualism, Uncertainty and Masculinity on Classification Shifting in India

Dependent Variable: UNEXP_CE				
VARIABLES	POWDIS	INDIV	MASCU	UNCAVO
SPITEM	0.484*** (5.721)	0.430*** (4.941)	0.423** (2.131)	0.431** (2.102)
POWDIS	0.021** (2.311)			
POWDSPI	0.081*** (4.123)			
INDIV		0.071** (2.014)		
INDIVSPI		0.064*** (3.751)		
MASCU			0.025*** (2.931)	
MASCUSPI			0.041*** (3.143)	
UNCAV				0.065** (3.717)
UNCAVSPI				0.235*** (3.419)
SIZE	-0.071*** (-5.161)	-0.082*** (-6.114)	-0.057*** (-3.285)	-0.024 (-1.152)
ROA	-0.095*** (-4.225)	-0.315*** (-3.864)	-0.481*** (-4.717)	-0.231*** (-2.603)
MBV	-0.001 (-1.323)	-0.001 (-1.06)	-0.001 (-1.238)	0.001 (0.317)
LEV	0.411*** (4.643)	0.138*** (4.915)	0.755*** (-3.971)	0.481*** (3.482)
BIG4	-0.032*** (-3.915)	-0.076*** (-3.562)	-0.049*** (-3.264)	-0.222 (-1.221)
CAPINTEN	0.321*** (5.941)	0.301*** (4.652)	0.511*** (3.424)	0.014 (0.426)
GROWTH	0.01*** (2.254)	0.076*** (3.772)	0.069*** (3.614)	0.032*** (3.421)
RELINT	-0.051** (-2.011)	-0.034*** (-2.689)	-0.082*** (-3.212)	-0.021*** (-2.671)
GDP	-0.212 (-0.381)	-0.748 (-0.901)	-0.721 (-0.026)	-0.215 (-0.511)
CONSTANT	0.762 (1.261)	0.518 (1.340)	0.323 (0.671)	0.479 (1.019)
Observations	30,361	30,361	30,361	30,361
R-squared	0.21	0.22	0.24	0.25
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 5b. Regression of Long-term Orientation Score and Classification Shifting

Dependent Variable: UNEXP CE		
VARIABLES	(1)	(2)
SPITEM	0.658*** (4.125)	0.534*** (4.432)
RELINT	-0.251*** (-4.329)	-0.203*** (-4.419)
LONGTEO	-0.093** (-3.408)	-0.121** (-3.215)
LONGTSPI	-0.425*** (-2.874)	-0.542*** (-2.815)
SIZE	-0.075*** (-4.458)	-0.013*** (-3.472)
ROA	-0.813*** (-2.789)	-0.822*** (-2.936)
MBV	0.013*** (3.143)	-0.01 (-1.231)
LEV	-0.712*** (-3.413)	-0.271*** (-3.487)
GROWTH	-0.021 (-1.160)	-0.001 (-1.911)
BIG4		0.534*** (3.621)
CAPINTEN		-0.762 (-1.018)
GDP		-0.977 (-1.216)
Constant	1.821*** (3.445)	3.641 (1.516)
Observations	30,361	30,361
R-squared	0.11	0.14
Industry FE	YES	YES
Year FE	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 6. The Impact of Religion and Legal Environment on Classification Shifting

Dependent Variable: UNEXP_CE						
VARS	(1)	(2)	(3)	(4)	(5)	(6)
SPITEM	3.846*** (20.647)	3.954*** (20.826)	3.865*** (20.306)	3.737*** (19.629)	8.129*** (10.648)	8.076*** (10.587)
RELINT	-4.098*** (-10.220)	-2.745*** (-6.036)	-33.069*** (-6.252)	-1.786*** (-3.823)	-28.665*** (-4.755)	-29.250*** (-4.761)
LEGALENF	-0.579*** (-3.386)	-0.314** (-2.656)		-0.179 (-0.942)	-0.327 (-1.494)	-0.577** (-2.075)
RELINTSPI					7.134*** (5.993)	7.069*** (5.945)
RELLEG			10.645*** (5.812)		9.451*** (4.447)	9.585*** (4.443)
SIZE				-0.004 (-0.573)	-0.002 (-0.346)	-0.004 (-0.556)
ROA				-0.775*** (-6.194)	-0.895*** (-3.327)	-0.625*** (-3.279)
MBV				-0.004* (-1.770)	0.000 (0.194)	-0.004* (-1.804)
LEV				-0.624*** (-16.108)	-0.492*** (-14.156)	-0.608*** (-15.679)
GROWTH				0.032* (1.943)		0.018 (1.051)
BIG4				0.450*** (3.152)	-0.315** (-2.204)	0.423*** (4.521)
GDP						4.787 (1.493)
CAPINTEN				0.142 (1.607)		0.248 (1.573)
Constant	1.509*** (3.349)	0.868* (1.740)	0.023*** (3.420)	0.833* (1.648)	-0.549 (-0.938)	-14.587 (-1.545)
Observations	30,361	23,550	23,550	23,550	23,550	23,550
R-squared	0.004	0.023	0.025	0.036	0.036	0.038
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 7. The Interaction of Legal Environment, Religion, and Classification Shifting

Dependent Variable: UNEXP_CE

VARIABLES	(1)	(2)	(3)
SPITEM	3.211*** (4.821)	16.471*** (6.753)	5.171*** (4.811)
RELINT	-0.514*** (-3.654)	-0.263*** (-6.753)	-0.380*** (-4.582)
TCULSPI		-5.198*** (-3.239)	-3.391*** (-3.139)
LEGALENF		-0.256** (-2.241)	-0.163** (-5.443)
RELLEG		0.209*** (6.909)	0.925*** (3.302)
LEGCUL		-0.061** (-2.224)	-0.061** (-3.122)
LEGCULSPI		-0.523*** (-5.400)	-0.433*** (-2.87)
SIZE	-0.031*** (-4.765)	-0.063*** (-7.268)	-0.113*** (-4.342)
ROA	-0.934*** (-2.899)	-1.255*** (-2.732)	-0.895*** (-3.327)
MBV	-0.03 (-0.872)	-0.002 (-1.639)	-0.01 (-1.033)
LEV	-0.518*** (-4.326)	-0.380*** (-3.095)	-0.415*** (-4.224)
GROWTH	-0.02 (-1.037)	-0.007 (-0.799)	-0.01 (-1.061)
BIG4	-0.216** (-5.329)	-0.869** (-2.118)	-0.315** (-2.204)
CAPINTEN	0.869 (1.01)	0.391 (1.155)	0.210 (1.211)
GDP	-0.416** (-4.291)	-2.703 (-0.536)	-1.215 (-1.031)
POWDIS	0.198*** (3.354)		
POWDSPI	1.334*** (3.067)		0.631*** (3.130)
POWDLEGSPI	-1.317*** (-4.182)		
INDIVSPI			0.811*** (4.073)
MASCUSPI			0.011 (1.216)
UNCAVSPI			0.896*** (4.801)
LONGTSPI			-0.099*** (-3.123)
INDIVSPI			1.211*** (3.234)
Constant	3.899 (1.112)	1.263 (0.031)	2.337 (0.185)
Observations	30,361	30,361	30,361
R-squared	0.034	0.022	0.028
Industry FE	YES	YES	YES
Year FE	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 8. Regression of Legal Environment and Classification Shifting

Dependent Variable: UNEXP CE				
VARIABLES	(1)	(2)	(3)	(4)
SPITEM	2.512*** (3.781)	0.991*** (3.461)	2.061*** (2.925)	3.254*** (5.662)
RELINT	-0.385*** (-4.456)	-0.411*** (-3.455)	-0.591*** (-5.475)	-0.325*** (-3.450)
LEGALENF	-0.312** (-3.201)	-0.912** (-3.260)	-0.876** (-3.215)	-1.314*** (-4.362)
POWDIS	0.41 (1.101)			
POWDSPI	0.894*** (3.987)			
POWDLEGSPI	-0.913*** (-4.901)			
INDIVSPI		-2.314*** (-4.615)		
INDIVLEGSPI		-0.924*** (-3.878)		
MASCUSPI			-1.322*** (-3.918)	
MASCULEGSPI			-1.232*** (-3.113)	
UNCAVSPI				-0.913*** (-4.352)
UNCAVLEGSPI				-1.091*** (-3.937)
SIZE	-0.125*** (-3.729)	-0.126*** (-3.727)	-0.05*** (-3.112)	-0.126*** (-3.423)
ROA	-0.625*** (-3.279)	-0.925*** (-3.273)	-0.826*** (-3.273)	-0.982*** (-3.210)
MBV	-0.01 (-1.171)	-0.01 (-1.101)	-0.01 (-1.057)	-0.01 (-1.031)
LEV	-0.231*** (-3.201)	-0.433*** (-4.203)	-0.81*** (-3.205)	-0.512*** (-4.203)
GROWTH	-0.01 (-1.074)	-0.03 (-1.171)	-0.03 (-0.801)	-0.001 (-1.072)
BIG4	0.731*** (5.121)	0.423*** (4.521)	0.450*** (3.152)	0.670*** (3.526)
CAPINTEN	-0.312 (-1.102)	-0.117 (-1.03)	-0.481 (-1.112)	-0.321 (-1.109)
GDP	-0.760 (-1.012)	-1.371 (-1.05)	-0.258 (-1.051)	-1.152 (-1.251)
Constant	2.131 (1.114)	2.211 (1.611)	2.611 (1.164)	2.351 (1.014)
Observations	30,361	30,361	30,361	30,361
R-squared	0.02	0.02	0.02	0.02
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.

Table 9. The Impact of Religion and Legal Environment on Classification Shifting

Dependent Variable: UNEXP_CE				
VARIABLES	(1)	(2)	(3)	(4)
SPITEM	3.034*** (4.797)	2.856*** (4.586)	2.833*** (4.548)	2.813*** (4.530)
RELINT	-4.225*** (-3.502)	-2.903** (-2.498)	-2.752** (-2.276)	-0.393*** (-3.303)
LEGALENF	-0.22** (-2.201)	-0.22** (-2.201)	-0.25** (-2.287)	-0.24** (-2.272)
ROA	-1.252*** (-27.190)	-1.251*** (-27.219)	-1.275*** (-26.194)	-0.326*** (-18.647)
SIZE		-0.006 (-0.484)	-0.007 (-0.583)	
MBV		-0.001 (-0.281)	-0.005 (-1.439)	-0.005 (-1.447)
LEV		-0.445*** (-3.916)	-0.562*** (-3.755)	-0.558*** (-3.726)
GDP				3.041 (0.617)
GROWTH			0.028 (0.801)	0.019 (0.551)
BIG4			-0.238** (-2.450)	-0.244** (-2.512)
CAPINTEN			-0.313 (-1.103)	-0.484 (-1.113)
Constant	0.027*** (2.921)	0.333*** (3.643)	0.351*** (3.792)	-8.168 (-0.593)
Observations	30,361	30,361	30,361	30,361
R-squared	0.014	0.023	0.025	0.025
Industry FE	YES	YES	YES	YES
Year FE	YES	YES	YES	YES

Notes: *, **, and *** indicate statistical significance at the 10%, 5%, and 1% level, respectively (two-tailed test). T-statistics are in parentheses and appear below the corresponding coefficient estimates. All variables are defined in Appendix A.