

Gambling Culture and Earnings Management: A Novel Perspective

ABSTRACT

Do gambling preferences affect earnings management in a corporate context? We examine this potential link and find a positive and significant association between local gambling culture, as proxied by faith and firm-level earnings management. The results are robust to potential endogeneity tested through relocation of corporate headquarters and change regressions. We also show that the impact of local gambling preferences on earnings management is stronger when firms are more risk-taking as proxied by higher earnings volatility. Further, this positive association between gambling preferences and earnings management is mitigated by closer monitoring through institutional investors and takeover threats.

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1. Introduction

A growing body of research investigates the impact of locally held attitudes on corporate behavior (Hilary & Hui, 2009; Kumar et al., 2011; Callen & Fang, 2015; Ding et al., 2019, Alharbi et al., 2022). Based on social identity literature, the values of sharing an identity and having a sense of group membership exert substantial influence on individual behavior (Tajfel, 1978; Abrams & Hogg, 1988; Chan & Chui, 2016). In reality, firms interact with their surrounding environments through local employees, local customers, and local suppliers. Ultimately, managers and employees are likely to conform to the norms of the local culture. We extend the literature on individual beliefs' impact on firm behavior by examining the role of local attitudes toward gambling on corporate earnings management.

Recent studies identify numerous factors that influence corporate earnings management such as: corporate governance (Cornett et al., 2009; Huang & Wang, 2015); audit committee (Badolato et al., 2014); unemployment insurance (Dou et al., 2016); CEO and CFO equity incentives (Jiang et al., 2010; Cheng & Warfield, 2005); CEO tenure (Ali & Zhang 2015); leverage buyouts (Mao & Renneboog, 2015); CEO turnover (Hazarika et al., 2012); female directors (Srinidhi et al., 2011; Fan et al., 2019); geographical dispersion (Shi et al., 2015); culture (Han et al., 2010); and grammatical structure of languages (Kim et al., 2017). We extend these studies by examining whether geographical variation in religion-induced gambling norms affect a firm's earnings management.

We hypothesize that there is a positive association between local gambling attitudes and the firm's earnings management. Our reasoning is based on the fact that firms located in areas where local residents are prone to gambling (less religious) are more likely to invest in risky investment (Hilary & Hui, 2009; Shu, et al., 2012; Chen, et al., 2014; Adhikari & Agrawal, 2016). As well, individual investors in faith-based local gambling areas hold lottery-type stocks (Kumar et al., 2011) and trade lottery-like stocks more actively (Kumar et al., 2016). The major

implication of these studies is that firms in less religious areas exhibit higher earnings volatility than businesses in more religious areas.

In light of the fact that local gambling preferences tend to promote risky investments and lead to greater earnings volatility, it is possible that managers may utilize earnings management techniques to reduce uncertainties and even out their earnings. This is supported by previous research indicating a positive relationship between earnings volatility and the practice of earnings management, as shown by Graham et al. (2005) and Bens et al. (2012). Dhole et al. (2016) also support this notion, as they demonstrate that CEOs with higher inside debt exhibit less demand for earnings management and are inclined to adopt less risky corporate policies and investment strategies that result in less volatile earnings. Consequently, in regions with high local gambling preferences, managers may be more likely to engage in earnings management practices to mitigate earnings volatility that results from their high-risk investments.

Using a county's *Catholics-to-Protestants* ratio as a proxy for local gambling preferences, we investigate the possible link between local gambling preferences and earnings management in U.S. settings from 1980 to 2010¹. The main independent variable is the degree of local gambling preferences in the headquarters county of the firm. Following Kumar et al. (2011), we measure the local gambling preference as the natural logarithm of the ratio of the Catholic and Protestant population (*LNCPR*). We utilize three earnings management measures: firstly, the discretionary accruals based on the modified Jones model (*EM_JONES*); secondly, the performance matched discretionary accrual (*EM_KOTHARI*) based on Kothari, Leone, and

¹ The sample stops at 2010 since this study obtains data regarding religious adherence from the Association of Religion Data Archives (ARDA). This organization updates data on religious adherence based on census data. 2010 is the latest census year on Religion Data Archives.

Wasley (2005); and thirdly, the abnormal level of discretionary expenses (*REM_RoyDisExp*) based on Roychowdhury (2006) as a measure of real earnings management.

We find that local gambling (*LNCPR*) is positively associated with both accruals-based earnings management, and real earnings management (*REM*). Our results hold after controlling for a broad set of firm-related characteristics, county-related characteristics, the inclusion of industry and year fixed effects, as well as using a battery of robustness checks and change regression. Moreover, we address the endogeneity concern using the firms' headquarters relocation as an exogenous shock to the local gambling preference. The shock results show that firms relocating from a county with lower gambling preferences to one with higher gambling preferences engage more accrual and real earnings management in the post-relocation period compared to firms that relocate their headquarters to a county with lower gambling preference.

Having established a positive association between local gambling and earnings management, we examine the underlying channel driving the positive association. One of the arguments for this observed relationship is that firms in areas with local gambling preferences pursue risky investments (Chen et al., 2014), and are more likely to generate higher earnings volatility (Mishra et al., 2010), which may have ramifications for subsequent earnings management. Therefore, we test whether high earnings volatility triggers higher earnings management. We find that the positive association between local gambling and earnings management is likely to be driven by the necessity to smooth earnings volatility induced by the risk-taking nature of a firm in the gambling area.

In the final set of results, we explore whether external oversight mechanisms moderate the positive association between local gambling and earnings management. Prior studies show that corporate governance deters earnings management (Chung, et al., 2002; Koh, 2003; Cornett et al., 2009, Alharbi et al., 2021). We, therefore, anticipate that good corporate governance should mitigate the positive relationship between local gambling and earnings management. Consistent with our expectations, we find that greater monitoring environment, in the form of

institutional investors, and takeover susceptibility, mitigate the positive association between local gambling preference and earnings management. The results, therefore, show that governance mechanisms are efficient in altering or weakening the positive impact of local gambling preference on earnings management. This is consistent with the notion that the ability of managers to manage earnings is contingent on the level of corporate governance and on how closely they are monitored.

Our research paper makes a significant contribution to three aspects of the literature. Firstly, we extend the existing local gambling literature and its economic outcomes. Previous studies have mainly investigated how local gambling affects a company's risk-taking behavior (Hilary & Hui, 2009; Shu et al., 2012; Chen, Podolski et al., 2014; Adhikari & Agrawal, 2016; Kumar et al., 2011; Kumar et al., 2016; Alharbi et al., 2022). However, we take a different approach by focusing on the distinct impact of local gambling on earnings management, which captures both the risk-taking behavior and earnings volatility of firms located in gambling-prone areas. Our findings expand our understanding of the effects of locally held beliefs, as proxied by religious convictions, on the decisions that firms make.

Secondly, we contribute to the earnings management literature. Prior research has identified various factors that influence earnings management, such as corporate governance, audit committees, unemployment insurance, CEO and CFO equity incentives, CEO tenure, leverage buyouts, CEO turnover, female directors, culture, and grammatical structure of languages (Cornett et al., 2009; Badolato et al., 2014; Dou et al., 2016; Jiang et al., 2010; Ali & Zhang, 2015; Mao & Renneboog, 2015; Hazarika et al., 2012; Fan et al., 2019; Han et al., 2010; Kim et al., 2017). In our study, we expand on this literature by highlighting the significance of local culture, specifically local gambling preferences, in shaping the practice of earnings management at the firm level. Our results demonstrate that such practices are strongly shaped by the prevailing attitudes to gambling in the local community. Additionally, we find that the

impact of local gambling on earnings management is mitigated by strong corporate governance practices.

Thirdly, our findings complement prior research which examines how social norms influence misreporting (McGuire et al., 2012; Dyreng et al., 2012; Christensen et al., 2018). Our study differs from these studies in several ways. Prior research examines the role of religious adherence on financial restatement and financial misrepresentation. We examine the unique influence of risk-taking norms on accruals and real earnings management. There are clear differences in the literature between financial misreporting and earnings management. Earnings management is a broader concept than misreporting and covers a wider array of reporting practices than financial misreporting (Nelson et al., 2002). Moreover, fundamental legal differences exist between them. While financial misreporting is fraudulent, earnings management is not. Furthermore, companies with restatements experience a higher rate of bankruptcy, delisting, and significant labor market penalties (Palmrose & Scholz, 2004; Srinivasan, 2005). However, such consequences are not common for earnings management. In fact, Dichev et al. (2013) argue that earnings management is difficult for outside observers to unravel. Hence, managerial and incentives to engage in financial misreporting and earnings management are different.

Additionally, while previous studies did not distinguish the influence of risk-taking norms from general ethics/honesty norms, this study is able to better isolate and investigate the unique influence that risk-taking norms have on earnings management. Furthermore, prior studies deploy the level of religious adherence (i.e., whether they are religious or not), as a measure of gambling, whereas we concentrate on the religious composition of the county (Catholics vs. Protestants) as a proxy for religious gambling norms instead of religiosity per se.

Our research results have the potential to benefit a variety of groups such as regulators, accounting experts, investors, and stakeholders. This is because we have identified the characteristics of companies that are more likely to engage in earnings management practices.

It is important to have a better understanding of social norms in order to develop appropriate financial standards, as highlighted by Sunder (2005). Levitt (1998) has also acknowledged the deterioration of norms as one of the causes of financial statement manipulation, which has been recognized by regulators.

The remainder of this paper is structured as follows. Section 2 presents the theoretical background and hypothesis. Section 3 describes the empirical tests and discusses the univariate analysis. Section 4 presents the baseline results. Section 5 highlights the different effects on accruals and real earnings management. Sections 6 and 7 discuss the role of earnings volatility and governance, respectively, on the link between gambling and earnings management. Section 8 concludes this paper.

2. Theoretical Background and Hypotheses

2.1 Local Gambling Attitudes, Risk-taking Behavior, and Earnings Management

Local culture is a dominant social agent that shapes individual and institutional behavior and establishes social norms and boundaries regarding what is acceptable and what is not. Prior literature shows that when deciding to hire executives, the extent to which local lifestyles fit with executive lifestyles plays a crucial role in finding an appropriate fit for the organization (Rivera, 2012). Recently, Yonker (2017) reports that firms are five times more likely to hire a CEO who grew up in the local area. Local customers are another connection with local culture since customer engagement behavior presents possible challenges and opportunities for the firm to succeed in the marketplace (Van Doorn et al., 2010). The value in sharing an identity and having a sense of being in a particular group has a substantial influence on individual behavior (Tajfel, 1978; Hogg & Abrams, 1988; Nguyen et al., 2018). Ultimately, managers and employees are likely to conform to the norms of the local culture around the headquarters of firms, and this will affect the culture of the organization (Cialdini & Goldstein, 2004; Orihara & Eshraghi, 2022).

Different cultures have varying attitudes towards a company's willingness to take risks. For instance, highly religious cultures tend to associate businesses with a lower level of risk exposure, as noted by Hilary and Hui (2009). Conversely, according to Kumar et al. (2011) and Chen et al. (2014), companies operating in gambling-oriented cultures tend to undertake riskier ventures. These firms invest more in innovation and experience greater levels of innovative output, as demonstrated by Chen et al. (2014). Shu et al. (2012) have also found that mutual funds located in areas with low-Protestant or high-Catholic populations are more likely to take risks. Overall, the literature suggests that companies situated in gambling-prone regions are more likely to engage in excessive risk-taking and aggressive investment.

The influence of local gambling preferences on a company's propensity for aggressive investments can also provide insight into other high-risk decisions, such as the decision to engage in earnings management to mitigate the uncertainty associated with such investments. There are two straightforward but compelling reasons for this. First, in the real world, the success or failure of high-risk investments is evenly distributed, meaning there is no guarantee that a risky investment will result in a positive outcome. When firms invest in projects that have the potential for high performance variability, they are more likely to experience negative shocks in their reported performance. Additionally, management teams that exhibit a tendency toward risk-taking behavior tend to downplay the investment risk while overstating the value of risky investments (Hirshleifer et al., 2012). Furthermore, most external investors are hesitant to finance firms with uncertain investments. Brown et al. (2009) discovered that innovative firms experience higher capital costs and prefer internal funding for their innovative projects. Consequently, risk-taking behavior is often linked to higher earnings volatility. In order to mitigate this volatility and remove uncertainty, managers may resort to earnings management, using both accruals and real earnings management.

Another factor related to gambling culture is the tendency to disregard the legal repercussions of one's actions. Williams et al. (2011) reported a significant positive correlation

between gambling and criminal or fraudulent activities. Individuals who engage in gambling are more likely to commit repeat offenses and appear to be unconcerned about the legal and reputational consequences of their risky and illegal actions, as noted by Meyer and Stadler (1999). Consistent with the "cultural explanation," when a company operates within a specific geographical area, it may embody or represent the cultural characteristics of that region. We formulate our first hypothesis based on the foregoing discussions as follows.

H₁: Local gambling preference is positively related to earnings management.

We further argue that the effect of local gambling on earnings management will be greater for firms that exhibit higher risk-taking behavior. In line with our arguments, Chen et al. (2014) have demonstrated that companies influenced by a gambling-oriented culture are more likely to provide incentive contracts that encourage investment in high-risk projects. This has led to greater earnings volatility for companies operating in gambling-prone areas, as compared to those in regions with lower levels of gambling (Shu et al., 2012). Consequently, managers may resort to manipulating earnings to reduce uncertainty and smooth out their financial results. This is also consistent with previous research indicating there is a positive correlation between earnings volatility and earnings management (Graham et al., 2005; Bens et al., 2012). Dhole et al. (2016) noted that CEOs with higher levels of inside debt are less likely to engage in earnings management, as they adopt less risky corporate policies and pursue investment strategies that lead to more stable earnings (Kercheval, 2012). As a result, we propose the hypothesis that the positive impact of a gambling culture on earnings management will be stronger for companies exhibiting higher levels of risk-taking behavior.

H₂: The relationship between local gambling preference and earnings management is stronger when firms take greater risks.

3. Research Design

3.1 Data and Sample

We obtain our data from several sources. Local gambling preference measure is based on the county-level information regarding prevalent religious adherence obtained from the Association of Religion Data Archives (ARDA). Earnings management measures are calculated using Compustat data. We also use Compustat to collect all Accounting and Financial data. Institutional ownership data are derived from Thomson Reuters Institutional Holdings (13F) Database. We use the Institutional Brokers' Estimate System (IBES) database to obtain analyst coverage measure. Our final sample covers the years 1980–2010.² We follow prior studies and exclude companies with SIC 4900 to 4999 (regulated utilities) and firms with SIC 6000 to 6999 (financial industries). We also remove observations when the share price is less than \$1, and when common shareholders' equity, total assets, and sales are less than 1 million USD. This generates a final sample of 19,116 firm-year observations.³ We lag all independent variables by one year relative to the dependent variables (liquidity measures) to ensure the results are not driven by reverse causality. We winsorize the continuous variables at the 1% and 99% levels to control for outliers. Detailed descriptions of variables can be found in the Appendix.

3.2 Earnings Management Proxies

We use three measures of earnings management. The first measure is discretionary accruals based on the modified Jones model (*EM_JONES*) suggested by Dechow, Sloan, and Sweeney (1995). The model takes the following form, with the ε_{it} representing accruals.

$$\frac{TA_{it}}{A_{it-1}} = \beta_0 \left(\frac{1}{A_{it}} \right) + \beta_1 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{A_{it-1}} \right) + \beta_2 \left(\frac{PPE_{it}}{A_{it-1}} \right) + \varepsilon_{it} \quad (1)$$

² The ARDA data is collected from surveys on religious affiliation once every decade (1971, 1980, 1990, 2000, and 2010). We stopped at 2010 because the data is not available after this year.

³ The number of observations for real earnings management is 16,876 due to the data availability of the variables from Compustat Database to calculate this measure.

where TA_{it} are the total accruals of firm i in year t , defined as the difference between earnings and operating cash flows, A_{it-1} represents the total assets of firm i at the beginning of year t , ΔREV_{it} is the change in revenue from the preceding year, ΔREC_{it} denotes the change in net accounts receivable from the preceding year, and PPE_{it} stands for gross value of property, plant and equipment.

The second measure of earnings management is the performance matched discretionary accrual measure ($EM_KOTHARI$) proposed by Kothari, Leone, and Wasley (2005):

$$TA_{it} = \lambda_0 + \lambda_1 (1/ASSETS_{it-1}) + \lambda_2 (\Delta SALES_{it}) + \lambda_3 PPE_{it} + ROA_{it-1} + \varepsilon_{it} \quad (2)$$

where TA_{it} is the total accruals of the firm i in year t , $ASSETS_{it-1}$ represents the total assets of firm i at the beginning of year t , $\Delta SALES_{it}$ denotes the change in revenue from the preceding year, PPE_{it} is the gross property, plant, and equipment, and ROA_{it} is the return on assets for the year.

Our third measure is based on real earnings management ($REM_RoyDisExp$), which is the abnormal level of discretionary expenses suggested by Roychowdhury (2006) and computed as:

$$DEXP_{it}/A_{it-1} = \mu_0 + \mu_1 (1/A_{it-1}) + \mu_2 (R_{it-1}/A_{it-1}) + \varepsilon_{it} \quad (3)$$

Where $DEXP_{it}$ is the discretionary expenses summing together $R\&D$, advertising, and selling, general and administrative expenses of firm i in year t . If data for SG&A expenses is available, and data for $R\&D$ and advertising expenses are missing, these two expenses are set to zero (Ali & Zhang, 2015). A_{it-1} is the total assets of firm i at the beginning of year t , R_{it-1} is the sales revenue of firm i at the beginning of year t . Following Ali and Zhang (2015), we estimate Eqs. (1), (2), and (3) separately for each two-digit SIC industry-year group, requiring at least 10 observations for each industry-year group. The residuals from the above three models are employed as measures of discretionary accruals and abnormal discretionary expenses.

3.3 *Local gambling preferences measure*

We collect US “Churches and Church Membership” data from ARDA that captures county-level geographical variation. The data file contains county-level statistics including information about the number of Catholic and Protestant communities and their respective church adherents at county level. The latest such census with data in the public domain occurred in 2010. Following previous studies, we linearly interpolate the Catholic and Protestant population data in the intermediate years for each county and use the natural logarithm of Catholic-Protestant ratios (*LNCPR*) as a measure of local gambling preferences at the county level (Kumar et al., 2011; Chen et al., 2014; Alesina & La Ferrara, 2002; Hilary & Hui, 2009). This measure is built on prior evidence showing that Catholics, on average, gamble significantly more, while Protestants are typically fervently opposed to all forms of gambling (Kumar, 2009). Moreover, the *LNCPR* of a geographical region is significantly positively related to both participation in state lotteries and the holding of stocks with lottery-type features (ibid).

The main justification for using *LNCPR* as a measure of local gambling preference is that the Protestant movement since has historically shown strong moral opposition to gambling and lotteries. Protestant philosophy strongly judges against gambling while Catholic philosophy is somewhat more accepting of it (Hoffmann, 2000). This difference is clearly reflected in the practices of the two faiths (Halek & Eisenhauer, 2001; Kumar et al., 2011). The superiority of this measure over alternative measures of gambling preference (such as age, income, education, and gender) is that empirical studies provide clear evidence of a link between diverse religious beliefs and attitudes towards gambling.⁴

Figure 1 presents the distribution of Catholic and Protestant ratios across various counties in the USA. It shows that people of similar religions, faiths and sects are likely to live in similar clusters. We also follow previous research and define a firm’s location as the site of

⁴ Another proxy for local gambling preferences could be the number of poker machines or lottery sales per capita per county. Unfortunately, this data is not readily available at the county level for our sample period.

its headquarters – derived from the Compustat Company Location Code - to match the county information with each firm (Coval & Moskowitz, 1999; Pirinsky & Wang, 2006).

[Insert Figure 1]

3.4 Regression model

To examine the relationship between gambling preference and earnings management, we employ the following regression model:

$$EM_{it} = \beta_0 + \beta_1 * LNCPR_{j,t-1} + \beta_2 * CONTROLS_{i,t-1} + \varepsilon_{i,t} \quad (4)$$

where EM_{it} denotes the earnings management measures EM_JONES , $EM_KOTHARI$, and $REM_RoyDisExp$ of firm i in year $t + 1$. $LNCPR_{t-1}$ is the Catholic to Protestant ratio, a measure of gambling preference where the firm is headquartered. Following prior studies, we control for leverage (LEV_{t-1}), firm size ($SIZE_{t-1}$), market-to-book ratio (MTB_{t-1}), return on equity (ROE_{t-1}), cash flow from operations (CFO_{t-1}), sales growth (SG_{t-1}), loss dummy ($LOSS_{t-1}$), firm age ($FAGE_{t-1}$), acquisition dummy (AQC_{t-1}), net operating assets (NOA_{t-1}), Sox-dummy (SOX_{t-1}), the Big Four auditors ($BIG4_{t-1}$), auditors opinion ($AUDOP_{t-1}$), and analyst following ($LNANALYST_{t-1}$) (Frankel et al., 2002; Cheng & Warfield, 2005; Ali et al., 2015; Ghosh et al., 2010; Chen et al., 2014).

Following previous studies, we control for county characteristics such as religiosity (REL_{t-1}), marital status ($MARSTA_{t-1}$), male-to-female ratio ($MTFR_{t-1}$), and proportion of minority population ($MINO_{t-1}$). We also included year and industry fixed effects in all models to control for unobserved time-invariant and industry-specific characteristics. All the dependent variables are measured at time year t , while the independent variables are measured at time $t-1$. Standard errors are clustered at the firm level.

3.5 Descriptive Statistics

Panel A of Table 1 shows the variables' descriptive statistics of our full sample. The average value of local gambling measure ($LNCPR_{t-1}$) is 0.90, similar to the average value reported in Chen et al. (2014). The average abnormal discretionary accruals of the Modified

Jones (*EM_JONES*) is 0.003 and discretionary accruals based on Kothari et al. (2005) (*EM_KOTHARI*) is -0.002 and for *RoyDisExp* is -0.1680. Leverage has an average of 0.273, and the mean firm size measured by the log of a firm's sales is 5.104. The mean value of growth opportunities measured by the market-to-book ratio (*MTB_{t-1}*) is 4.839. The standard deviation of *MTB_{t-1}* is 2.191 signifying that the sample firms exhibit significant divergence in their growth opportunities. Summary statistics of the remaining variables are consistent with prior literature (Ali & Zhang, 2015; Rajgopal et al., 2011; Chen et al., 2014; Kumar et al., 2011).

Insert Table 1 Here

In Panel B, we present the descriptive statistics for the dependent variables based on populations state-wide. The most populous Protestant states are those states where the size of the Protestant population is in the top quartile, whereas the most populous Catholic states are states where the size of the Catholic population is in the top quartile of the full sample.

The results in panel B show that the mean of earnings management in most Catholic states is substantially higher than the mean of earnings management in most Protestant states, indicating they are managing more earnings. For example, the mean of *EM_JONES*, *EM_KOTHARI*, and *RoyDisExp* is -0.002, -0.009, and -0.112, respectively, for the sample representing the most Protestant states. On the other hand, the mean of *EM_JONES*, *EM_KOTHARI*, and *RoyDisExp* is 0.008, 0.002, and -0.030, respectively, for the sample representing the most Catholic states. These differences in earnings management are statistically significant. Panel C presents the results using county, instead of state. The result also indicates that the mean of earnings management in the most Catholic county is significantly higher than the mean of earnings management in the most Protestant county. Overall, the above result suggest that firms located in more gambling-prone zones engage in higher earnings management activities, consisting with our expectation.

3.6 Correlations

Table 2 presents the correlation matrix. The correlation between $LNCPR_{t-1}$ and EM_JONES is 0.0390 ($p < 0.05$) and the correlation between $LNCPR_{t-1}$ and $EM_KOTHARI$ is 0.0406 ($p < 0.05$) and $RoyDisExp$ is 0.0641 ($p < 0.05$). Earnings management are thus positively and significantly related to $LNCPR_{t-1}$. This initial correlation is the first sign of a possible positive relationship between the local gambling preference and earnings management. The $LNCPR_{t-1}$ is also negatively related to firm size ($SIZE_{t-1}$), leverage (LEV_{t-1}), market-to-book ratio (MTB_{t-1}), return on equity (ROE_{t-1}) and net operating assets (NOA_{t-1}), and positively correlated with loss dummy ($LOSS_{t-1}$), firm age ($FAGE_{t-1}$), Sox-dummy (SOX_{t-1}), the big four auditors ($BIG4_{t-1}$), and auditors opinion ($AUDOP_{t-1}$), religiosity (REL_{t-1}), and minority population ($MINOR_{t-1}$).

Insert Table 2 Here

4. Empirical Results

4.1 Baseline Regressions

To examine the relationship between local gambling preference ($LNCPR_{t-1}$) and earnings management (EM_JONES , $EM_KOTHARI$, and $REM_RoyDisExp$), we conduct an OLS regression with three specifications for each dependent variable and report the findings in Table 3. In the first specification, we regress earnings management measures on local gambling but without any control variables. In the second specification, we include all firm-level control variables, together with industry and year fixed effects. In the third specification, we include all the firm-level control variables, as well as some corporate governance variables, together with industry and year fixed effects. This is to ensure that the link between $LNCPR_{t-1}$ and earnings management does not capture governance or other firm-level characteristics.

Insert Table 3 Here

Columns (1) to (6) of Table 3 report regression results of accruals earnings management using *EM_JONES* and *EM_KOTHARI*. Columns (7) to (9) report regression results of real earnings management using *REM_RoyDisExp*. The results in Table 3 demonstrate that local gambling preferences ($LNCPR_{t-1}$) are significantly and positively related to all measures of earnings management. Specifically, we find that across all model specifications, the coefficient estimates on local gambling ($LNCPR_{t-1}$) are positive and statistically significant at the 1% level. These outcomes provide support for our proposition that local gambling culture of a firm's headquarters significantly magnifies managers' intentions to manage earnings. The coefficients of several control variables are also significant. The coefficient of LEV_{t-1} is positive and significant, consistent with Kim and Zhou (2017). The coefficient of $SIZE_{t-1}$ is negative and significant. This indicates that firms with higher sizes tend to manage earnings less. This is consistent with the findings of Yu (2008). The coefficient on MTB_{t-1} is positive and significant and this is similar to Ali and Zhang (2015). Results of the remaining variables are consistent with prior studies such as Ali and Zhang (2015) and Barton and Simko (2002). Overall, we find that a local gambling preference has a positive and significant effect on earnings management.

4.2 Addressing Endogeneity

In this subsection, we attempt to establish causality by following Hasan et al. (2017) and utilizing firm relocation as a plausibly exogenous shock to local gambling preference. While reverse causality is not the main issue in our setting since there is less belief that earnings management determines the level of local gambling preference, it is possible that unobserved variables are mutually correlated with local gambling and earnings management. So far, our study provides evidence that the local gambling preferences surrounding a firm's headquarters contribute to earnings management. If this relationship is not purely coincidental, then one

would expect that the earnings management of a firm would decrease (increase) if the firm relocates its headquarter to a county with lower (higher) local gambling preference.

We identify firms that have undertaken relocation decisions and compare how earnings management behavior changes after changes in location. If a firm moves their headquarters to an area of higher (lower) local gambling preference, the predicted the earnings management will increase (decrease). We use corporate headquarter addresses as reported in a firm's 10-K filings to identify relocation decisions. If a firm reports headquarters addresses in two different counties in its 10-K filings in two successive years, we consider this to be a relocation decision. Using SEC filings on mandatory electronic addresses, our study identifies 68 firms with a single headquarters relocation. Of these, 41 firms relocated to a county with high gambling preference areas, and 27 firms to a county with low gambling preference areas. Also, the sample consists of 91 firms with a Multiple headquarters' relocation. Of these, 51 firms have a gambling preference-increasing relocation, and 40 firms have a gambling preference for reducing relocation. Based on a sample of 1437 firm-year observations for one move and 1694 firm-year observations for Multiple moves, the following regression model is estimated:

$$EM_{i,t} = \alpha_0 + \beta_1 * AFTER_{i,t-1} + \beta_2 * INCREASE_{i,t-1} + \beta_2 * AFTER_{i,t-1} * INCREASE_{i,t-1} + \beta_i * CONTROLS_{i,t-1} + \gamma_i * YEAR + \delta_i * INDUSTRY + \varepsilon_{i,t-1} \quad (5)$$

where $AFTER_{t-1}$ is a binary variable that equals one for the period after the relocation; otherwise zero. $INCREASE_{t-1}$ is a binary variable that equals one if a firm relocated its headquarters to a county with a higher level of gambling preference; otherwise, zero for relocation with a lower level of gambling preference. In our regressions, we use the most robust model specification, one that includes all controls for firm-level characteristics, county-level characteristics, and industry and year dummies. We present our results in Table 4.

Insert Table 4 Here

Panel A presents the findings of the above regressions. Given the empirical settings, the coefficient of the interaction term ($AFTER_{t-1} * INCREASE_{t-1}$) provides an estimate of the difference in the change over time of corporate earnings management. Our results show that across both models and all measures of earnings management, the coefficients on the interaction variable are all positive and statistically significant across, confirming that businesses moving to locations with increased gambling preference see an increase in their overall earnings management. This implies that the results are robust to an exogenous shock in local gambling preferences and supportive of the main regression result.

4.3 Change Regressions

This section examines the link between local gambling preferences and earnings management using change regression to further substantiate the causal inferences. Specifically, we use the first difference value of all the left- and right-hand side variables. The change value of the right-hand side variables ($LNCPR_{t-1}$ and other controls) is the difference between year $t-1$ and $t-2$ while the difference in the values of the left-hand side (e.g., earnings management) variables is between year t and $t-1$. This change, particularly for $LNCPR_{t-1}$ represents a purely exogenous shock that is a result of the more Catholic population relative to Protestant population moving to a county or leaving a county and has nothing to do with the earnings management of the firm. In the change analysis, firm-level cross-sectional variations are differenced away, which allows us to focus on the time-series variation. Consequentially, the change regression alleviated the causality and omitted variable bias. Using the change regression and controlling for both year and industry effects, the results in Panel B of Table 4, show that $\Delta LNCPR_{t-1}$ has a positive and significant effect on ΔEM_JONES and $\Delta EM_KOTHARI$ and $\Delta REM_RoyDisExp$. These results support our main results in Table 3.

4.4 Additional Robustness Tests

We run several robustness checks to support the baseline findings. *First*, we present the result using different proxies for local gambling preference in Panel A. Specifically, we use the

ratios of Catholics to Protestants (CPR) without taking the natural log, the actual ratio of the Catholic population to total population in the county of the firm's headquarters (*CATH*), the actual ratio of Protestant population to total population in the county of the firm's headquarters (*PROT*), and lottery per capita calculated as total lottery spending in the state scaled by the population in the state-level where the firm is headquartered (*HighPerCapLottery_{t-1}*). The results in the rows labelled (1), (2), and (4) of Table 5 indicate that the coefficient on different proxies of local gambling is positive and significant for the three measures of earnings management. The coefficient on *PROT* in row (3) is negative and significant which is consistent with Kumar (2009). The above findings show that our documented results in Table 3 are not sensitive to the specific measure of local gambling.

Insert Table 5 Here

Second, we present the results using various models and estimation techniques in Panel B. To overcome the look-ahead bias that is associated with linear interpolation, we use the actual data (only the survey year sample) rather than projected data (Chen et al., 2014), and report the results in row (5). Because the local gambling measure is a county-level one, we correct the standard errors for clustering at the county level rather than the firm-level that is used for the baseline results and report the results in row (6). In the rows labelled (7) and (10), we use random effect regression and Fama-MacBeth regression, which incorporates dynamicity and minimizes endogeneity concerns. In the row labelled (8), we use generalized least squares regression to minimize the effect of within-firm variation. In the rows labelled (11) and (12), we control for both young and poor county separately since prior literature shows that gambling activities increase among youth and in poor counties (Derevensky & Gupta, 2004; Pryor,

2008).⁵ Overall, the results presented in rows (5) to (12) demonstrate that a positive and robust relationship exists between local gambling preference and earnings management.

Third and finally, we present the results using alternative measures of accrual and real earnings management in Panel C. Specifically, we utilize Raman and Shahpur (2008) and Rajgopal and Venkhatachalam (2011) as two alternative measures of accrual earnings management, and Roychowdhury (2006) based on cash flow as an alternative a measure of real earnings management. The results in row (14) reveal that the effect of local gambling preference on earnings management is positive and significant when we use the alternative measures of earnings management. These findings indicate that our baseline results are not sensitive to how we measure earnings management.

5. Impact of Gambling Preferences on Earnings Management

Companies engage in real earnings management using subtle manipulation in price discounts, overproduction, and reduction of discretionary expenditures (Roychowdhury, 2006). Given that real earnings management is difficult to uncover by external parties (Cohen et al., 2008), we examine whether local gambling preference exhibits a differential effect on accruals and real earnings management. To perform the tests, each independent variable except local gambling preference has been transformed to have a mean of zero and a standard deviation of one in a multivariate regression. Such a transformation makes it possible to compare coefficient estimates across variables (Dhaliwal et al., 2016). We present the results in Table 6.

Insert Table 6 Here

In Column (1) of Panel A, we present the results using accrual earnings management based on the Modified Jones (1995) model (*EM_JONES*). In Column (2), we present the results using real earnings management based on the Roychowdhury (2006) model (*RoyDisExp*). The

⁵ Poor county is a binary variable that equals one if the median income of a county is less than the median income of all sample counties. Likewise, young county is a binary variable equal to one if the median age of a county population is higher than the median age of the entire sample county population.

findings show that local gambling preference positively affects both accrual and real earnings management. However, the chi-square test for the differences in coefficients suggests that the positive and significant effect of local gambling preference on real earnings management is stronger compared to the positive and significant effect of local gambling preference on the accrual earnings management measured by Modified Jones (1995). A similar test in panel B shows that the positive and significant effect of local gambling preference on real earnings management is stronger compared to the positive and significant effect of local gambling preference on the accrual earnings management measured by Kothari (2005).

6. Gambling Preferences, Earnings Volatility and Earnings Management

Thus far, we have shown that local gambling preference increases the likelihood of engaging in earnings management. One of the economic arguments for this observed relationship is that gambling preference captures the risk-taking nature of a firm (Kumar, 2009; Meyer & Stadler, 1999; Williams et al., 2011; Chen et al., 2014). As such, providing evidence that local gambling is related to higher risk-taking vis-à-vis earnings volatility is essential to the story of a positive effect of local gambling preference on earnings management. We follow Michael et al. (2022) and use firm earnings volatility as the standard deviation of prior five-year return on equity (*ROE*), to test this prediction. The results in column (4) of Table 7 show that local gambling preference positively and significantly affects earnings volatility. This means that firms headquartered in high gambling preference areas are more likely to undertake riskier projects (Chen et al., 2014) and consequently have more unstable earnings.

Insert Table 7 Here

To examine the potential of highly volatile earnings to instigate higher earnings management, we interact firm local gambling measure with earnings volatility measure ($LNCPR_{t-1} * EVOL_{t-1}$) and present the results in columns (1) to (3) of Table (7). Standard errors

are corrected for clustering at the firm level. The results indicate that the joint impact of $LNCPR_{t-1} * EVOL_{t-1}$ on earnings management is positive and significant in all the measures of earnings management, suggesting that the positive effect of gambling on earnings management becomes stronger for firms with higher earnings volatility. These results support the assumption that firm risk-taking behavior drives our results.

7. The Role of Governance

In the final set of analyses, we investigate whether various external governance mechanisms can mitigate the effect of gambling preference on earnings management. The analyses are prompted by the findings that companies with good corporate governance practices are more likely to constrain rent-seeking managers to engage in earnings management than firms with poor corporate governance (Cornett et al., 2008). We use two proxies for corporate governance mechanisms. First, we use the hostile takeover index ($TOIND_{t-1}$) of Cain et al. (2017), which is constructed based on external legal determinants and thus offers a more accurate and effective mechanism for the market for corporate control. Powell (1997) and Lel and Miller (2015) document that the threat of takeover corrects managerial behavior and disciplines management teams who engage in harmful actions. Second, we follow Atawnah et al. (2018) and Zaman et al. (2021) employ dedicated institutional investors ($DEDOWN_{t-1}$) as a measure of governance. Dedicated institutional investors have large investments and low turnover in firms, and subsequently have a commitment to provide long-term capital and therefore are more willing to engage in monitoring (Bushee, 2001). Using the above governance mechanisms, we investigate the effect of governance mechanisms on the link between local gambling preference and earnings management and present the results in Table 8.

Insert Table 8 Here

The results in Panel A of Table 8 show that the interaction of $LNCPR_{t-1} * TOIND_{t-1}$ has a negative and significant effect on the levels of various measures of accrual and real earnings management. These findings indicate that the effect of gambling preference on earnings management is weaker in firms with higher takeover index (i.e.: more susceptible to takeover threats). Similarly, the results in Panel B of Table 8 show that the joint effect of $LNCPR_{t-1} * DEDOWN_{t-1}$ is negative and significant for various measures of earnings management. Overall, the results show that corporate governance is effective in altering the positive relationship between earnings management and local gambling preferences. This is consistent with the notion that the ability of managers to manage earnings is contingent on the level of corporate governance and on how closely they are monitored.

8. Conclusions

This paper explores the effect of local gambling preference on firm-level earnings management, an important yet still underexamined area of the behavioral corporate finance literature. We document a positive and significant association between local gambling preference and earnings management using both accruals and real earnings management. Crucially, our results are robust to a large set of controls, year and industry fixed effects, alternative measures of local gambling, alternative measures of earnings management, and several additional tests. Moreover, we use the firms' relocation strategies as an exogenous shock to their local gambling preference measures and document consistent evidence with the baseline results.

Further, we show that the positive association between local gambling preference and earnings management is stronger when firms display higher risk-taking behavior proxied by higher earnings volatility. Finally, we demonstrate that greater monitoring proxied by the threat of hostile takeovers and dedicated institutional ownership mitigates the baseline effects. Overall, this research provides new insights into the impact of local culture on accrual and real earnings management activities. Our paper makes significant contributions to behavioral

corporate finance literature in at least two ways. *First*, it contributes to our understanding of the consequences of local gambling attitudes by highlighting the perverse effects of local attitudes toward gambling in increasing accruals and real earnings management. *Second*, our paper contributes to the extant research on earnings management by showing that faith-induced gambling norms have significant implications for corporate earnings management.

Our study has important implications for practice in several ways. Firstly, our findings will be valuable for managers and investors in identifying potential red flags and areas of concern regarding earnings management. Secondly, regulators can use our results to enhance their monitoring and enforcement efforts to prevent financial statement manipulation. Thirdly, our study highlights the importance of social norms in shaping financial reporting behavior, suggesting the need for regulators to pay attention to the cultural context in which financial reporting takes place. Overall, our study underscores the significance of a vigilant and proactive approach towards detecting and preventing earnings management practices, which can improve the quality and reliability of financial reporting and enhance investor confidence.

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Appendix

Definitions of Variables

Dependent Variables

<i>EM_JONES</i>	Discretionary accruals of firm <i>i</i> and year <i>t</i> , estimated as the residual of the accruals by modified Jones model (1995) suggested for accrual-based earnings management.
<i>EM_KOTHARI</i>	Discretionary accruals of firm <i>i</i> and year <i>t</i> , estimated as the residual of the accruals by Kothari et al. (2005) for accrual based earnings management.
<i>REM_RoyDisExp</i>	Abnormal discretionary expenses of firm <i>i</i> and year <i>t</i> , estimated as the residual of the discretionary expenses (ROYDISXP) suggested by Roychowdhury (2006).

Alternative Dependent Variables

<i>EM_RAMAN</i>	Discretionary accruals of firm <i>i</i> and year <i>t</i> , estimated as the residual of the accruals by Raman and Shaur (2008) for accrual based earnings management.
<i>EM_RAJDD</i>	Squared abnormal accruals based on the residuals extracted from the cross-sectional regression proposed by Rajgopal and Venkatachalam (2011).
<i>REM_ROYCFD</i>	Abnormal levels of cash flow from operations of firm <i>i</i> and year <i>t</i> as implemented in Roychowdhury (2006).

Local Gambling Preference Variables

<i>LNCPR</i>	The natural logarithm of Catholic residents over Protestant residents in the county where the firm is headquartered.
<i>CATH</i>	The proportion of Catholics among a county's total population.
<i>PROT</i>	The proportion of Protestants among a county's total population.
<i>HighPerCapLottery</i>	Indicator variable equal to one if the state in which a firm is headquartered has Lottery Per Capita above the sample median, and zero otherwise.

Independent Variables

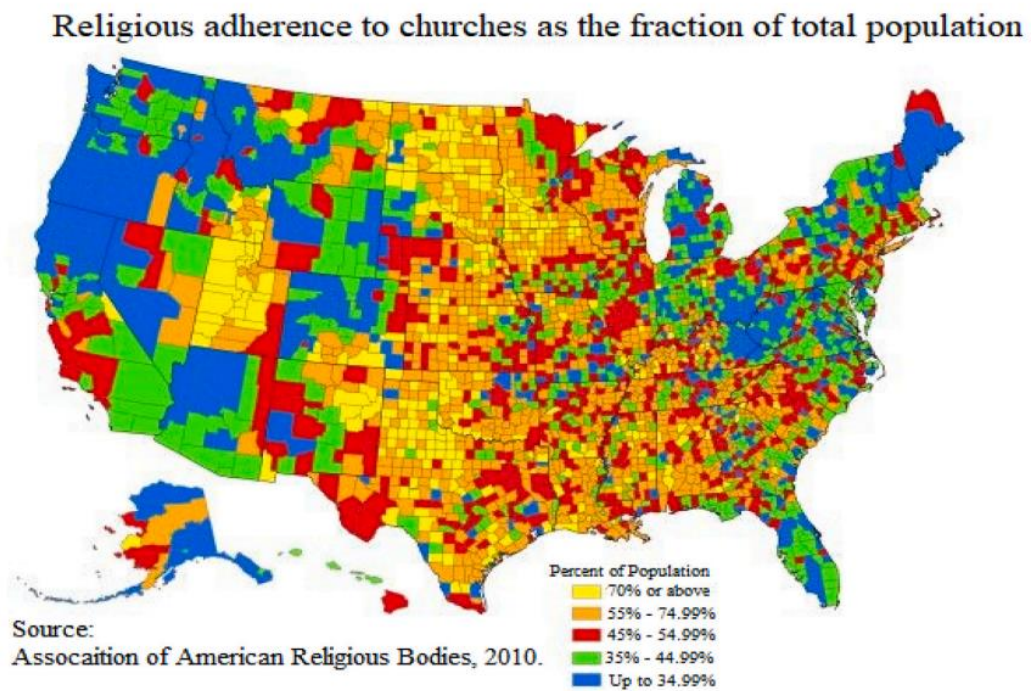
<i>LEV</i>	Leverage is defined as total debt divided by total assets at the beginning of year <i>t</i> .
<i>SIZE</i>	<i>SIZE</i> is the natural log of sales.
<i>MTB</i>	<i>MTB</i> is defined as the market value of equity divided by the book value of equity at the beginning of year <i>t</i> .
<i>ROE</i>	Return on equity is net income divided by common/ordinary equity.
<i>CFO</i>	<i>CFO</i> is cash flow from operations in year <i>t</i> scaled by the total assets at the beginning of year <i>t</i> .
<i>SG</i>	<i>SG</i> is natural log transformation of sales divided by prior year sales.
<i>LOSS</i>	<i>LOSS</i> is an indicator variable that equals one if the firm reports a loss for year <i>t</i> , and zero otherwise.
<i>FAGE</i>	Natural log of the number of years since a firm's IPO and measured as the number of years it has been on the CRSP database.
<i>AQC</i>	<i>AQC</i> is an indicator variable that equals one if the firm has engaged in a merger and acquisition in year <i>t</i> , and zero otherwise
<i>NOA</i>	<i>NOA</i> is the net operating as set at the beginning of year <i>t</i> , defined as shareholders' equity minus cash and marketable securities, plus total debt, and deflated by sales.
<i>SOX</i>	<i>SOX</i> is a dummy variable that equals one for post-SOX period (from July 1, 2002 to 2014) and equals zero for pre-SOX period (from 1980 to June 30, 2002).
<i>BIG4</i>	A dummy variable that equals one if a firm is a client of any or all of the Big 4 firms in that year, and zero otherwise.
<i>AUDOP</i>	<i>AUDOP</i> is a dummy variable that equals one if an unqualified audit opinion is given, and zero otherwise.
<i>LNANALYST</i>	Natural log of the average number of analysts following the firm over the year.
<i>REL</i>	The portion of a county's population whose residents adhere to any religion in the county where the firm is headquartered.
<i>MARSTA</i>	The percentage of county residents who are married in the county where the firm is headquartered.
<i>MTFR</i>	The ratio of male residents over female residents in the county where the firm is headquartered.
<i>MINOR</i>	The percentage of county residents who are non-white in the county where the firm is headquartered.

Additional Variables

<i>AFTER</i>	A dummy variable for firms that have a relocation that equals one if the observation is from the period after the relocation; otherwise zero.
<i>INCREASE</i>	A dummy variable that equals one if a firm relocated its headquarters to a county with a higher level of gambling preference; otherwise zero for relocation with lower level of gambling preference.
<i>CEOCH</i>	It is dummy one if the CEO also the president and the chairperson, otherwise zero.
<i>EVOL</i>	EVOL is measured as standard deviation of the previous 5 years' ROE.
<i>TOIND</i>	Hostile takeover index, a measure of takeover susceptibility. This study thanks Cain et al. (2017) for making this data available to us.
<i>DEDOWN</i>	The proportion of shareholdings owned by institutional investors. Chung et al. (2002) provide evidence for the monitoring role of large insitutional investors.

Figure 1. Geographical distribution of religiosity in the US

Panel A: Religiosity at the county level



Panel B: Distribution of Catholic vs Protestant Population in USA.

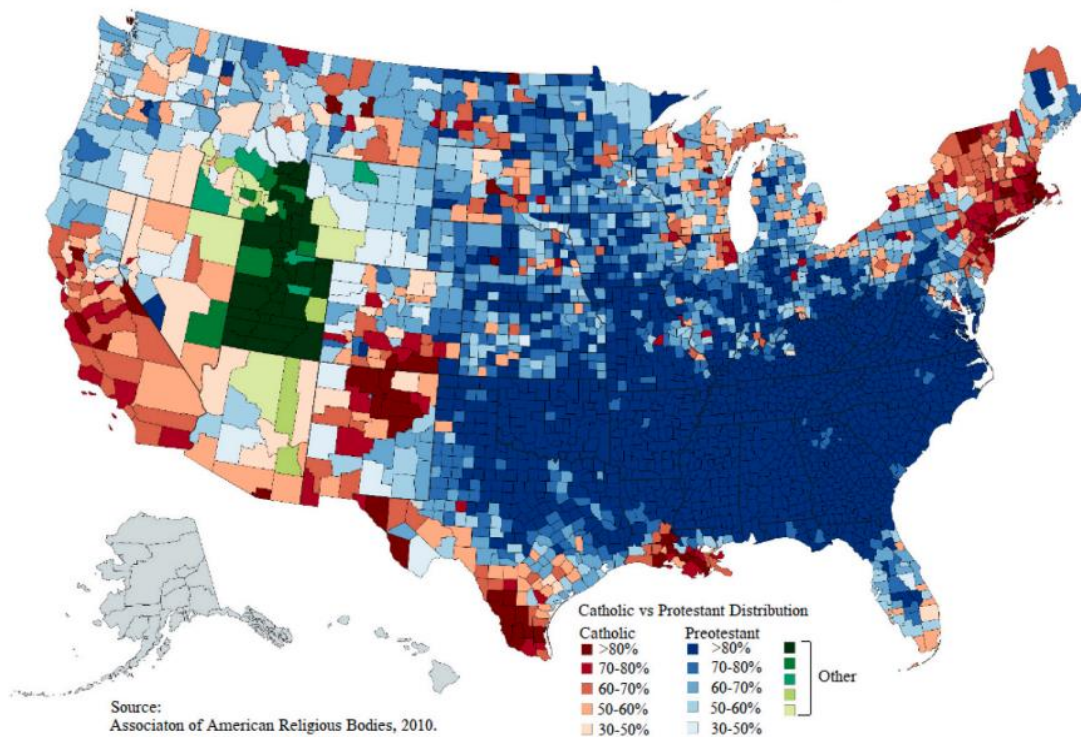


Fig. 1. Geographical distribution of religiosity and Catholic-Protestant ratio in the USA.

Table 1. Summary Statistics

This table presents the summary statistics of the study variables over the period 1980 to 2010. Panel A shows the summary statistics of the entire sample. Panels B and C presents the most Protestant and most Catholic populations by state and county, respectively, and shows the mean difference between them. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

Panel A: Descriptive Statistics for the Full Sample						
Variable	N	Mean	SD	P25	P50	P75
<i>EM_JONES</i>	19,116	0.003	0.125	-0.051	-0.003	0.045
<i>EM_KOTHARI</i>	19,116	-0.002	0.126	-0.056	-0.010	0.038
<i>REM_RoyDisExp</i>	16,876	-0.1680	0.718	-0.3080	-0.1208	.0782
<i>LNCPR</i>	19,116	0.900	0.558	0.424	0.910	1.302
<i>LEV</i>	19,116	0.273	0.286	0.091	0.232	0.376
<i>SIZE</i>	19,116	5.104	2.204	3.396	4.946	6.628
<i>MTB</i>	19,116	3.839	2.191	3.034	3.643	6.281
<i>ROE</i>	19,116	0.020	0.417	0.016	0.102	0.167
<i>CFO</i>	19,116	0.154	0.606	-0.000	-0.004	-0.044
<i>SG</i>	19,116	0.058	0.298	-0.013	0.076	0.169
<i>LOSS</i>	19,116	0.219	0.413	0.000	0.000	0.000
<i>FAGE</i>	19,116	2.860	0.738	2.398	2.996	3.434
<i>AQC</i>	19,116	0.952	0.214	1.000	1.000	1.000
<i>NOA</i>	19,116	0.676	1.088	0.319	0.477	0.706
<i>SOX</i>	19,116	0.119	0.324	0.000	0.000	0.000
<i>BIG4</i>	19,116	0.415	0.493	0.000	0.000	1.000
<i>AUDOP</i>	19,116	0.076	0.265	0.000	0.000	0.000
<i>LNANALYST</i>	19,116	0.397	0.787	0.000	0.000	0.459
<i>REL</i>	19,116	0.542	0.119	0.451	0.549	0.625
<i>MARSTA</i>	19,116	0.528	0.095	0.484	0.538	0.590
<i>MTFR</i>	19,116	0.947	0.038	0.921	0.943	0.973
<i>MINOR</i>	19,116	0.225	0.144	0.105	0.201	0.334

Panel B: Descriptive Statistics by State								
Most Protestant population				VS	Most Catholic Population			
Variable	N	Mean	SD		N	Mean	SD	Mean Diff.
<i>EM_JONES</i>	5,312	-0.002	0.114		5,005	0.008	0.110	-4.845***
<i>EM_KOTHARI</i>	5,312	-0.009	0.115		5,005	0.002	0.109	-5.852***
<i>REM_RoyDisExp</i>	4,537	-0.112	0.742		4,583	-0.030	0.701	-4.476***

Panel C: Descriptive Statistics by County								
Most Protestant population					Most Catholic Population			
Variable	N	Mean	SD		N	Mean	SD	Mean Diff.
<i>EM_JONES</i>	4,897	-0.004	0.095		4,971	0.006	0.106	-4.973***
<i>EM_KOTHARI</i>	4,897	-0.011	0.093		4,971	0.001	0.104	-6.230***
<i>REM_RoyDisExp</i>	4,039	-0.126	0.409		4,536	-0.054	0.367	-8.630***

Table 2. Correlation Matrix

This table presents the correlation matrix for the study variables over the period 1980-2010. This table only reports correlation significance at the 5% level. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

Variables	<i>LNCPR</i>	<i>EM_JONES</i>	<i>EM_KOTHARI</i>	<i>REM_RoyDisExp</i>	<i>LEV</i>	<i>SIZE</i>	<i>MTB</i>	<i>ROE</i>	<i>CFO</i>	<i>SG</i>	<i>LOSS</i>	<i>FAGE</i>	<i>AQC</i>
	1	2	3	4	5	6	7	8	9	10	11	12	13
<i>LNCPR</i>	1												
<i>EM_JONES</i>	0.0390*	1											
<i>EM_KOTHARI</i>	0.0406*	0.9861*	1										
<i>REM_RoyDisExp</i>	0.0641*	0.0574*	0.0783*	1									
<i>LEV</i>	-0.0935*	0.1485*	0.1711*	-0.0179*	1								
<i>SIZE</i>	-0.0424*	-0.0883*	-0.0997*	-0.0837*	0.0290*	1							
<i>MTB</i>	-0.0340*	-0.0667*	-0.0778*	-0.0934*	0.0661*	0.9601*	1						
<i>ROE</i>	-0.0219*	0.1424*	0.0806*	-0.0332*	-0.1230*	0.1689*	0.1488*	1					
<i>CFO</i>	0.0026	-0.0527*	-0.0696*	-0.0700*	-0.0343*	0.4818*	0.5020*	0.1343*	1				
<i>SG</i>	-0.0077	0.1183*	0.1186*	0.1239*	0.1856*	-0.0078	-0.0203*	0.1732*	0.0018	1			
<i>LOSS</i>	0.0291*	-0.1186*	-0.0666*	0.0142	0.1063*	-0.2053*	-0.1743*	-0.6015*	-0.1493*	-0.2301*	1		
<i>FAGE</i>	0.0623*	-0.0856*	-0.1072*	-0.1914*	-0.1054*	0.5576*	0.5511*	0.0816*	0.2403*	-0.1851*	-0.0772*	1	
<i>AQC</i>	-0.0138	-0.0196*	-0.0197*	-0.0136	-0.0589*	-0.1150*	-0.1233*	-0.0252*	-0.1168*	-0.0501*	0.0306*	-0.0357*	1
<i>NOA</i>	-0.0734*	-0.0468*	-0.0371*	-0.0534*	0.1992*	-0.1249*	0.0647*	-0.1083*	0.0361*	0.1269*	0.1268*	-0.0635*	-0.0136
<i>SOX</i>	0.0458*	0.0151*	-0.0042	-0.1349*	-0.0904*	0.2457*	0.2681*	0.0385*	0.2058*	-0.0274*	-0.0287*	0.3680*	-0.0001
<i>BIG4</i>	0.0981*	-0.0161*	-0.0161*	0.0944*	-0.1178*	0.2009*	0.1870*	0.0182*	0.0422*	-0.0448*	-0.0319*	0.2058*	-0.0017
<i>AUDOP</i>	0.0664*	0.0253*	0.007	-0.0266*	-0.0858*	0.1093*	0.1238*	0.0096	0.0522*	-0.0526*	0.0088	0.2471*	0.0156*
<i>LNANALYST</i>	-0.0162*	-0.0334*	-0.0470*	0.0239*	-0.0508*	0.5686*	0.5892*	0.0740*	0.3431*	-0.0008	-0.0933*	0.3284*	-0.0802*
<i>REL</i>	0.3227*	-0.0137	-0.0187*	-0.0546*	-0.0175*	0.0121	0.0126	0.0059	0.0094	-0.0405*	0.003	0.1228*	0.0019
<i>MARSTA</i>	-0.0415*	0.0146*	0.0279*	0.0472*	0.0286*	-0.2248*	-0.2428*	-0.0221*	-0.1412*	0.0419*	0.0067	-0.2347*	0.0418*
<i>MTFR</i>	-0.0953*	0.0235*	0.0193*	0.0147	-0.0384*	-0.0631*	-0.0374*	-0.0288*	-0.0065	0.0184*	0.0394*	-0.0529*	0.0103
<i>MINOR</i>	0.0420*	-0.0068	-0.0204*	-0.0240*	-0.0202*	0.2220*	0.2455*	0.0183*	0.1625*	-0.0319*	-0.0133	0.1828*	-0.0442*
	<i>NOA</i>	<i>SOX</i>	<i>BIG4</i>	<i>AUDOP</i>	<i>LnAnalyst</i>	<i>REL</i>	<i>MARSTA</i>	<i>MTFR</i>	<i>MINOR</i>				
	14	15	16	17	18	19	20	21	22				
<i>NOA</i>	1												
<i>SOX</i>	0.0253*	1											
<i>BIG4</i>	-0.1112*	0.0991*	1										
<i>AUDOP</i>	-0.0062	0.4509*	0.0952*	1									
<i>LnAnalyst</i>	0.002	0.2181*	0.2617*	0.1353*	1								
<i>REL</i>	-0.0154*	-0.0415*	0.0123	-0.0274*	-0.0111	1							
<i>MARSTA</i>	-0.0268*	-0.2197*	-0.0501*	-0.1307*	-0.1383*	-0.0201*	1						
<i>MTFR</i>	0.0895*	0.0801*	0.0243*	0.0800*	0.0414*	-0.4550*	0.3546*	1					
<i>MINOR</i>	0.0627*	0.2058*	0.0375*	0.1254*	0.1168*	-0.0565*	-0.6961*	-0.0975*	1				

Table 3. Gambling Preferences and Earnings Management: Baseline Model

This table presents the effect of a firm's local gambling preference on accrual earnings management (AEM) and real earnings management (REM). We use Modified Jones (1995) and Kothari (2005) as two proxies for accrual earnings management, and Roychowdhury (2006) as a measure of real earnings management. The independent variable is a firm's local gambling preference ($LNCPR_{t-1}$). The dependent variables are at year t and the independent variables and the other control variables are at year t-1. The t-values reported in parentheses are clustered by firm. All regressions include both industry and year fixed effects. The 1%, 5% and 10% significance levels of the coefficients are denoted by ***, ** and *, respectively. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

	<i>EM_JONES</i>			<i>EM_KOTHARI</i>		<i>REM_RoyDisExp</i>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>LNCPR_{t-1}</i>	0.0064*** (3.52)	0.0063*** (3.48)	0.0067*** (3.42)	0.0070*** (3.83)	0.0066*** (3.59)	0.0075*** (3.69)	0.0327*** (2.62)	0.0332*** (2.88)	0.0453*** (3.50)
<i>LEV_{t-1}</i>		0.0922*** (13.38)	0.0923*** (13.36)		0.0936*** (13.64)	0.0938*** (13.62)		-0.0394* (-1.69)	-0.0363 (-1.56)
<i>SIZE_{t-1}</i>		-0.0399*** (-8.91)	-0.0399*** (-8.99)		-0.0394*** (-9.00)	-0.0394*** (-9.07)		-0.0051 (-0.30)	-0.0041 (-0.24)
<i>MTB_{t-1}</i>		0.0345*** (7.90)	0.0344*** (7.97)		0.0351*** (8.23)	0.0351*** (8.28)		0.0054 (0.33)	0.0027 (0.16)
<i>ROE_{t-1}</i>		0.0332*** (10.58)	0.0332*** (10.60)		0.0207*** (6.59)	0.0208*** (6.62)		-0.0359*** (-2.98)	-0.0349*** (-2.91)
<i>CFO_{t-1}</i>		-0.0066*** (-3.96)	-0.0067*** (-3.96)		-0.0077*** (-4.62)	-0.0077*** (-4.59)		-0.0177 (-1.08)	-0.0178 (-1.08)
<i>SG_{t-1}</i>		0.0372*** (5.86)	0.0372*** (5.86)		0.0412*** (6.57)	0.0411*** (6.56)		0.2136*** (9.81)	0.2126*** (9.76)
<i>LOSS_{t-1}</i>		-0.0203*** (-7.86)	-0.0203*** (-7.85)		-0.0127*** (-5.02)	-0.0127*** (-5.01)		0.0228** (2.07)	0.0219** (1.99)
<i>FAGE_{t-1}</i>		-0.0106*** (-4.69)	-0.0102*** (-4.49)		-0.0103*** (-4.54)	-0.0099*** (-4.29)		-0.0701*** (-6.50)	-0.0639*** (-5.89)
<i>AQC_{t-1}</i>		-0.0075** (-1.96)	-0.0074* (-1.94)		-0.0073* (-1.94)	-0.0072* (-1.91)		-0.0071 (-0.34)	-0.0043 (-0.21)
<i>NOA_{t-1}</i>		-0.0407*** (-9.17)	-0.0408*** (-9.26)		-0.0375*** (-8.64)	-0.0376*** (-8.73)		-0.0520*** (-3.31)	-0.0521*** (-3.28)
<i>SOX_{t-1}</i>		-0.0073 (-0.69)	-0.0070 (-0.66)		-0.0071 (-0.68)	-0.0068 (-0.66)		-0.0168 (-0.22)	-0.0145 (-0.18)
<i>BIG4_{t-1}</i>		-0.0006 (-0.32)	-0.0007 (-0.38)		0.0002 (0.10)	0.0000 (0.02)		0.0917*** (8.61)	0.0893*** (8.54)
<i>AUDOP_{t-1}</i>		-0.0009 (-0.28)	-0.0011 (-0.32)		-0.0006 (-0.18)	-0.0007 (-0.22)		0.1583*** (4.35)	0.1572*** (4.30)
<i>LNANALYST_{t-1}</i>		0.0018 (1.42)	0.0018 (1.43)		0.0005 (0.43)	0.0005 (0.41)		0.0346*** (4.45)	0.0353*** (4.56)

<i>REL</i> _{<i>t-1</i>}			-0.0056 (-0.51)			-0.0104 (-0.97)			-0.1489** (-2.32)
<i>MARSTA</i> _{<i>t-1</i>}			0.0120 (0.67)			0.0063 (0.35)			-0.0613 (-0.54)
<i>MTFR</i> _{<i>t-1</i>}			0.0108 (0.30)			0.0156 (0.42)			0.1785 (0.75)
<i>MINOR</i> _{<i>t-1</i>}			0.0098 (0.99)			0.0068 (0.69)			0.0855 (1.35)
CONSTANT	0.0020 (0.49)	0.0650*** (7.49)	0.0480 (1.32)	-0.0004 (-0.11)	0.0545*** (6.35)	0.0386 (1.05)	-0.0132 (-1.00)	0.1795*** (5.28)	0.0847 (0.40)
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
N	19,116	19,116	19,116	19,116	19,116	19,116	16,875	16,875	16,875
Adjusted R2	0.0247	0.1277	0.1279	0.0256	0.1152	0.1154	0.1107	0.1564	0.1601

Table 4. Gambling Preference and Earnings Management – Relocation Regression

Panel A presents the effect of headquarters relocation to examine the relationship between gambling preference and earnings management. We use Modified Jones (1995) and Kothari (2005) as two proxies for accrual earnings management, and Roychowdhury (2006) as a measure of real earnings management. Panel B reports the results of the impact of changes in local gambling preference on changes in earnings management. The t-values are reported in parentheses and clustered by firm. All regressions include industry and year fixed effects. The 1%, 5% and 10% significance levels of the coefficients are denoted by ***, ** and *, respectively. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

Panel A: Relocation Regression

	<i>EM_JONES</i>		<i>EM_KOTHARI</i>		<i>REM_RoyDisExp</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
	Multiple moves	One move	Multiple moves	One move	Multiple moves	One move
<i>AFTER*INCREASE</i>	0.022* (1.97)	0.026* (1.95)	0.026** (2.37)	0.030** (2.28)	0.289*** (2.74)	0.228* (1.94)
<i>AFTER</i>	-0.017 (-1.44)	-0.021 (-1.44)	-0.022* (-1.80)	-0.027* (-1.84)	-0.338*** (-2.74)	-0.289* (-1.95)
<i>INCREASE</i>	-0.012 (-1.20)	-0.016 (-1.42)	-0.012 (-1.20)	-0.016 (-1.38)	-0.032 (-0.68)	-0.010 (-0.21)
<i>LEV</i>	0.072*** (3.16)	0.093*** (3.90)	0.073*** (3.22)	0.092*** (3.86)	0.053 (0.77)	0.069 (0.83)
<i>SIZE</i>	-0.027*** (-2.85)	-0.025*** (-2.75)	-0.026*** (-2.87)	-0.026*** (-2.99)	-0.013 (-0.36)	0.018 (0.35)
<i>MTB</i>	0.025*** (2.76)	0.024** (2.56)	0.025*** (2.86)	0.026*** (2.87)	0.012 (0.33)	0.003 (0.06)
<i>ROE</i>	0.024** (2.34)	0.022** (2.29)	0.013 (1.46)	0.014 (1.50)	-0.043 (-1.29)	0.074 (0.88)
<i>CFO</i>	-0.014*** (-3.09)	-0.010** (-2.26)	-0.015*** (-3.24)	-0.011** (-2.46)	-0.057 (-1.33)	-0.136*** (-4.82)
<i>SG</i>	0.060*** (2.87)	0.062** (2.52)	0.064*** (3.23)	0.066*** (2.84)	0.184** (2.13)	0.013 (0.12)
<i>LOSS</i>	-0.015* (-1.75)	-0.017* (-1.85)	-0.010 (-1.19)	-0.012 (-1.31)	0.054 (1.08)	0.084 (1.56)
<i>FAGE</i>	0.007 (0.87)	0.008 (0.98)	0.007 (0.92)	0.009 (1.01)	-0.090* (-1.98)	-0.122** (-2.32)
<i>AQC</i>	-0.014 (-1.39)	-0.019** (-2.03)	-0.011 (-1.08)	-0.016 (-1.59)	-0.071 (-1.30)	-0.037 (-0.69)
<i>NOA</i>	-0.039*** (-3.84)	-0.038*** (-3.94)	-0.036*** (-3.60)	-0.036*** (-3.81)	-0.028 (-0.66)	0.009 (0.20)
<i>SOX</i>	-0.043 (-1.19)	-0.048 (-1.27)	-0.042 (-1.22)	-0.046 (-1.31)	0.241 (0.66)	0.234 (0.64)
<i>BIG4</i>	-0.004 (-0.70)	-0.005 (-0.98)	-0.002 (-0.39)	-0.003 (-0.55)	0.131*** (3.30)	0.134*** (3.10)
<i>AUDOP</i>	-0.002 (-0.19)	0.002 (0.16)	-0.005 (-0.54)	-0.000 (-0.05)	0.069 (0.66)	0.072 (0.67)
<i>LNANALYST</i>	-0.003 (-0.82)	-0.003 (-0.80)	-0.004 (-1.15)	-0.005 (-1.13)	0.002 (0.08)	-0.035 (-1.32)
<i>REL</i>	0.034 (1.00)	0.060 (1.60)	0.034 (0.99)	0.059 (1.58)	-0.038 (-0.16)	0.076 (0.30)
<i>MARSTA</i>	0.043 (0.94)	-0.014 (-0.29)	0.037 (0.79)	-0.022 (-0.43)	-0.208 (-0.53)	-0.027 (-0.07)
<i>MTFR</i>	0.219* (1.70)	0.346** (2.35)	0.213 (1.65)	0.336** (2.22)	0.462 (0.48)	0.879 (1.03)
<i>MINOR</i>	0.052 (1.33)	0.034 (0.73)	0.047 (1.21)	0.027 (0.57)	-0.366* (-1.79)	-0.206 (-0.88)
CONSTANT	-0.224* (-1.96)	-0.315** (-2.27)	-0.227* (-1.98)	-0.312** (-2.19)	0.038 (0.05)	-0.611 (-0.76)
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES

N	16,94	14,37	16,94	14,37	14,32	12,19
Adjusted R2	0.1600	0.1779	0.1496	0.1681	0.1977	0.1998

Panel B: Change Regression

	ΔEM_JONES	$\Delta EM_KOTHARI$	$\Delta REM_RoyDisExp$
	(1)	(2)	(3)
$\Delta LNCPR_{t-1}$	0.0047** (2.26)	0.0047** (2.33)	0.0110*** (2.60)
ΔLEV_{t-1}	0.2231*** (10.15)	0.2252*** (10.24)	0.1498*** (5.58)
$\Delta SIZE_{t-1}$	-0.0679*** (-3.67)	-0.0650*** (-3.55)	0.0285 (1.51)
ΔMTB_{t-1}	0.0644*** (4.09)	0.0620*** (3.99)	0.0017 (0.09)
ΔROE_{t-1}	0.0005 (1.06)	0.0004 (1.12)	-0.0000 (-0.30)
ΔCFO_{t-1}	-0.0075*** (-3.17)	-0.0082*** (-3.20)	-0.0015 (-0.26)
ΔSG_{t-1}	-0.0044 (-0.47)	-0.0033 (-0.35)	0.0663*** (5.44)
$\Delta LOSS_{t-1}$	-0.0382*** (-9.97)	-0.0284*** (-7.54)	0.0028 (0.41)
$\Delta FAGE_{t-1}$	0.0122 (0.43)	0.0090 (0.32)	-0.0575 (-1.62)
ΔAQC_{t-1}	-0.0070 (-1.06)	-0.0074 (-1.14)	-0.0068 (-0.59)
ΔNOA_{t-1}	-0.0134*** (-3.09)	-0.0129*** (-2.91)	0.0045 (0.77)
ΔSOX_{t-1}	0.0150 (0.72)	0.0151 (0.74)	0.0432 (0.79)
$\Delta BIG4_{t-1}$	-0.0075 (-1.42)	-0.0074 (-1.43)	0.0294*** (3.39)
$\Delta AUDOP_{t-1}$	0.0051 (0.85)	0.0052 (0.87)	0.0209 (0.96)
$\Delta LNANALYST_{t-1}$	-0.0026 (-1.02)	-0.0020 (-0.81)	0.0194** (2.46)
ΔREL_{t-1}	0.0290 (1.05)	0.0257 (0.97)	0.0330 (0.94)
$\Delta MARSTA_{t-1}$	0.0416 (0.65)	0.0367 (0.59)	0.1382 (1.55)
$\Delta MTFR_{t-1}$	-0.0903 (-0.57)	-0.0605 (-0.39)	-0.6120** (-2.25)
$\Delta MINOR_{t-1}$	0.8128** (2.34)	0.7926*** (2.73)	1.3001** (2.17)
CONSTANT	-0.0094 (-1.54)	-0.0082 (-1.36)	-0.0273*** (-4.26)
Year EF	YES	YES	YES
Industry FE	YES	YES	YES
N	17,484	17,484	15,179
Adjusted R2	0.1075	0.1052	0.0382

Table 5. Robustness Tests

This table reports the results of robustness tests for our main result. Panels A and C present the results using alternative proxies of local gambling preference and alternative measures of earnings management, respectively. Panel B presents the result using several econometric choices. The main specification shows the estimate from the regression on the full sample as reported in column (3), (6), and (9) of Table 3. For brevity, the table only reports the coefficients of the LNCP. The t-values are reported in parentheses and clustered by firm. All regressions include both industry and year fixed effects. The 1%, 5% and 10% significance levels of the coefficients are denoted by ***, ** and *, respectively. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

	<i>EM_JONES</i>			<i>EM_KOTHARI</i>			<i>REM_RoyDisExp</i>		
	Coeff.	t-stats	N	Coeff.	t-stats	N	Coeff.	t-stats	N
Panel A: Alternative Proxies of Gambling									
1) <i>CPR</i>	0.0020***	(2.99)	19116	0.0022***	(3.23)	19116	0.0148***	(3.40)	16875
2) Catholic (CATH)	0.0211**	(2.58)	19116	0.0248***	(2.96)	19116	0.1448***	(2.84)	16875
3) Protestant (PROT)	-0.0272***	(-3.67)	19116	-0.0300***	(-3.95)	19116	-0.1653***	(-3.35)	16875
4) HighPerCapLottery	0.0043*	(1.66)	8562	0.0033*	(1.81)	8562	0.0285*	(1.79)	7588
Panel B: Robustness Checks									
5) Survey year sample only	0.0080*	(1.82)	2271	0.0082*	(1.87)	2271	0.0583***	(3.61)	1998
6) Cluster by county instead of firm	0.0067***	(3.42)	19116	0.0075***	(3.64)	19116	0.0453***	(3.85)	16875
7) Random effect regression	0.0101***	(2.92)	19116	0.0120***	(3.52)	19116	0.0712***	(5.95)	16875
8) GLS regression	0.00801***	(2.84)	19116	0.00889***	(3.12)	19116	0.05230***	(4.04)	16875
9) Double-cluster standard errors by firm & year	0.006***	(2.81)	19116	0.008***	(3.30)	19116	0.060***	(4.78)	16875
10) Fama-MacBeth-style regression	0.0044**	(2.55)	19116	0.0054***	(3.18)	19116	0.0540***	(9.94)	16875
11) Control for poor counties	0.0065***	(3.20)	19116	0.0072***	(3.45)	19116	0.0436***	(3.21)	16875
12) Control for young age	0.0060***	(3.03)	19116	0.0068***	(3.35)	19116	0.0423***	(3.18)	16875
C) Alternative Proxies									
	<i>EM_RAMAN</i>			<i>EM_RAJDD</i>			<i>REM_ROYCFO</i>		
14) <i>LNCP_{t-1}</i>	0.0076***	(3.35)	17631	0.0029**	(2.51)	17313	0.0053*	(1.82)	10135

Table 6. Gambling Preferences, Accrual vs. Real Earnings Management

This table presents the differential effect off local gambling preference on accrual vs real earnings management. Panel A presents the result with accrual earnings management proposed by Modified Jones (1995). Panel B presents the result with accrual earnings management proposed by Kothari (2005). In both panels real earnings is measured by Roychowdhury (2006). To ease the interpretation and comparability of coefficient estimates across variables, we standardize all independent variables (except dummy variables and local gambling preference) to have a mean of zero and a standard deviation of one in multivariate regressions. The dependent variables are at year t and the the independent variables and the other control variables are at year t-1. The t-values reported in parentheses are clustered by firm. All regressions include both industry and year fixed effects. The 1%, 5% and 10% significance levels of the coefficients are denoted by ***, ** and *, respectively. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

Panel A: Difference between accrual (modified Jones) and real earnings management

	<i>EM_JONES</i>	<i>REM_RoyDisExp</i>
	(1)	(2)
<i>LNCPR_{t-1}</i>	0.0319*** (4.29)	0.0832*** (10.50)
Difference in coefficient (2) – (1)		0.0513***
Coefficient test (chi-square)		(23.11)
<i>LEV_{t-1}</i>	0.1859*** (25.10)	-0.0397*** (-5.00)
<i>SIZE_{t-1}</i>	-0.7850*** (-22.98)	-0.1029*** (-2.71)
<i>MTB_{t-1}</i>	0.6618*** (19.13)	0.0751* (1.94)
<i>ROE_{t-1}</i>	0.1254*** (14.52)	-0.0396*** (-4.26)
<i>CFO_{t-1}</i>	-0.0365*** (-4.52)	-0.0331*** (-3.59)
<i>SG_{t-1}</i>	0.0792*** (10.31)	0.1365*** (16.62)
<i>LOSS_{t-1}</i>	-0.1743*** (-8.14)	0.0570** (2.52)
<i>FAGE_{t-1}</i>	-0.0621*** (-6.17)	-0.1274*** (-11.60)
<i>AQC_{t-1}</i>	-0.0685** (-2.11)	-0.0510 (-1.47)
<i>NOA_{t-1}</i>	-0.2174*** (-22.39)	-0.0806*** (-7.24)
<i>SOX_{t-1}</i>	-0.0634 (-0.34)	-0.0070 (-0.04)
<i>BIG4_{t-1}</i>	0.0135 (0.90)	0.2325*** (14.66)
<i>AUDOP_{t-1}</i>	0.0009 (0.02)	0.3948*** (9.94)
<i>LNANALYST_{t-1}</i>	0.0236** (2.09)	0.1198*** (9.73)
<i>REL_{t-1}</i>	-0.0045 (-0.51)	-0.0487*** (-5.23)
<i>MARSTA_{t-1}</i>	0.0087 (0.77)	-0.0082 (-0.68)
<i>MTFR_{t-1}</i>	0.0107 (1.13)	0.0117 (1.15)
<i>MINOR_{t-1}</i>	0.0148 (1.50)	0.0311*** (2.94)
CONSTANT	0.0131 (0.30)	0.0935** (1.99)

Year FE	YES	YES
Industry FE	YES	YES
N	19,116	16,875
Adjusted R2	0.1115	0.1167

Panel B: Difference between accrual (Kothari, 2005) and real earnings management

	<i>EM_KOTHARI</i>	<i>REM_RoyDisExp</i>
	(1)	(2)
<i>LNCPR_{t-1}</i>	0.0392*** (5.23)	0.0832*** (10.50)
Difference in coefficient (2) – (1)		0.044***
Coefficient test (chi-square)		(17.06)
<i>LEV_{t-1}</i>	0.1929*** (25.85)	-0.0397*** (-5.00)
<i>SIZE_{t-1}</i>	-0.7669*** (-22.27)	-0.1029*** (-2.71)
<i>MTB_{t-1}</i>	0.6676*** (19.14)	0.0751* (1.94)
<i>ROE_{t-1}</i>	0.0785*** (9.01)	-0.0396*** (-4.26)
<i>CFO_{t-1}</i>	-0.0427*** (-5.24)	-0.0331*** (-3.59)
<i>SG_{t-1}</i>	0.0899*** (11.62)	0.1365*** (16.62)
<i>LOSS_{t-1}</i>	-0.1053*** (-4.88)	0.0570** (2.52)
<i>FAGE_{t-1}</i>	-0.0608*** (-5.99)	-0.1274*** (-11.60)
<i>AQC_{t-1}</i>	-0.0690** (-2.11)	-0.0510 (-1.47)
<i>NOA_{t-1}</i>	-0.2134*** (-21.81)	-0.0806*** (-7.24)
<i>SOX_{t-1}</i>	-0.0775 (-0.41)	-0.0070 (-0.04)
<i>BIG4_{t-1}</i>	0.0280* (1.85)	0.2325*** (14.66)
<i>AUDOP_{t-1}</i>	0.0099 (0.26)	0.3948*** (9.94)
<i>LNANALYST_{t-1}</i>	0.0129 (1.13)	0.1198*** (9.73)
<i>REL_{t-1}</i>	-0.0115 (-1.31)	-0.0487*** (-5.23)
<i>MARSTA_{t-1}</i>	0.0074 (0.65)	-0.0082 (-0.68)
<i>MTFR_{t-1}</i>	0.0096 (1.00)	0.0117 (1.15)
<i>MINOR_{t-1}</i>	0.0080 (0.80)	0.0311*** (2.94)
CONSTANT	0.0483 (1.09)	0.0935** (1.99)
Year FE	YES	YES
Industry FE	YES	YES
N	19,116	16,875
Adjusted R2	0.0976	0.1167

Table 7. Gambling Preferences, Earnings Volatility, and Earnings Management

This table presents the effect of local gambling preference on earnings volatility. Earnings volatility (EVOL) is measured as the standard deviation of the previous five years' ROE. This table also presents the joint effects of gambling and earnings volatility on earnings management. The independent variables in Panels A and B are at time $t-1$ and the dependent variables are at time t . The t-values reported in parentheses are clustered by firm. All regressions include both industry and year fixed effects. The 1%, 5% and 10% significance levels of the coefficients are denoted by ***, ** and *, respectively. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

	<i>EM_JONES</i>	<i>EM_KOTHARI</i>	<i>REM_RoyDisExp</i>	<i>EVOL</i>
	(1)	(2)	(3)	(4)
<i>LNCPR</i> _{$t-1$} * <i>EVOL</i> _{$t-1$}	0.0077*** (2.78)	0.0079*** (2.84)	0.0196*** (2.81)	
<i>EVOL</i> _{$t-1$}	0.0046** (2.22)	0.0053** (2.49)	0.0394*** (3.00)	0.1207*** (3.09)
<i>LNCPR</i> _{$t-1$}	-0.0012 (-0.84)	-0.0013 (-0.86)	0.0001 (0.05)	
<i>LEV</i> _{$t-1$}	0.0887*** (12.77)	0.0901*** (13.02)	-0.0499** (-2.13)	1.0846*** (8.58)
<i>SIZE</i> _{$t-1$}	-0.0402*** (-9.09)	-0.0397*** (-9.19)	-0.0054 (-0.32)	0.1331*** (2.59)
<i>MTB</i> _{$t-1$}	0.0352*** (8.18)	0.0358*** (8.51)	0.0053 (0.32)	-0.2374*** (-4.35)
<i>ROE</i> _{$t-1$}	0.0362*** (11.10)	0.0238*** (7.33)	-0.0251** (-2.16)	-0.8428*** (-7.52)
<i>CFO</i> _{$t-1$}	-0.0071*** (-4.20)	-0.0082*** (-4.83)	-0.0194 (-1.19)	0.1150*** (5.19)
<i>SG</i> _{$t-1$}	0.0375*** (5.95)	0.0415*** (6.66)	0.2134*** (9.71)	-0.1654** (-2.17)
<i>LOSS</i> _{$t-1$}	-0.0198*** (-7.64)	-0.0122*** (-4.81)	0.0237** (2.16)	-0.2193*** (-4.54)
<i>FAGE</i> _{$t-1$}	-0.0105*** (-4.61)	-0.0101*** (-4.40)	-0.0640*** (-5.91)	0.0153 (0.51)
<i>AQC</i> _{$t-1$}	-0.0072* (-1.90)	-0.0070* (-1.87)	-0.0035 (-0.17)	-0.0672 (-0.95)
<i>NOA</i> _{$t-1$}	-0.0407*** (-9.31)	-0.0376*** (-8.78)	-0.0509*** (-3.21)	-0.0098 (-0.18)
<i>SOX</i> _{$t-1$}	-0.0079 (-0.75)	-0.0078 (-0.76)	-0.0164 (-0.21)	-0.0743 (-0.73)
<i>BIG4</i> _{$t-1$}	0.0001 (0.03)	0.0009 (0.45)	0.0922*** (8.73)	-0.1922*** (-5.73)
<i>AUDOP</i> _{$t-1$}	-0.0005 (-0.14)	-0.0001 (-0.03)	0.1594*** (4.36)	-0.1809*** (-3.26)
<i>LNANALYST</i> _{$t-1$}	0.0016 (1.31)	0.0004 (0.30)	0.0348*** (4.51)	0.0254 (1.29)
<i>REL</i> _{$t-1$}	-0.0041 (-0.39)	-0.0090 (-0.84)	-0.1418** (-2.22)	-0.5650*** (-2.62)
<i>MARSTA</i> _{$t-1$}	0.0109 (0.61)	0.0052 (0.29)	-0.0663 (-0.58)	0.4408 (1.24)
<i>MTFR</i> _{$t-1$}	0.0134 (0.37)	0.0183 (0.49)	0.1881 (0.80)	-0.9443 (-1.51)
<i>MINOR</i> _{$t-1$}	0.0086 (0.88)	0.0056 (0.57)	0.0818 (1.29)	0.2865 (1.49)
CONSTANT	0.0456 (1.26)	0.0361 (0.99)	0.0738 (0.35)	1.2138** (2.08)
Year FE	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
N	19,114	19,114	16,873	19,114
Adjusted R2	0.1296	0.1173	0.1613	0.1066

Table 8. Gambling Preference and Earnings Management: Role of Governance

This table presents the effect of corporate governance on the link between a firm's local gambling preference and earnings management. In Panel A, we use takeover index (*TOIND*) as our first measure of corporate governance. In Panel B, we use Dedicated institutional ownership (*DEDOWN*) as a second measure of corporate governance. The dependent variables are at year *t* and the independent variables and the other control variables are at year *t-1*. The *t*-values reported in parentheses are clustered by firm. All regressions include both industry and year fixed effects. The 1%, 5% and 10% significance levels of the coefficients are denoted by ***, ** and *, respectively. All continuous variables are winsorized at the 1% level. Detailed definitions of the variables can be found in the Appendix.

Panel A: Takeover Index

	<i>EM_JONES</i>	<i>EM_KOTHARI</i>	<i>REM_RoyDisExp</i>
	(1)	(2)	(3)
<i>LNCPR_{t-1} * TOIND_{t-1}</i>	-0.0186** (-2.05)	-0.0168* (-1.83)	-0.1514** (-2.52)
<i>LNCPR_{t-1}</i>	0.0139*** (3.11)	0.0138*** (3.06)	0.0938*** (3.77)
<i>TOIND_{t-1}</i>	0.0753*** (4.39)	0.0715*** (4.22)	-0.0526 (-0.55)
Constant and other controls	YES	YES	YES
Year FE	YES	YES	YES
Industry FE	YES	YES	YES
N	16,355	16,355	14,833
Adjusted R2	0.1327	0.1191	0.1680

Panel B: Dedicated Institutional Ownership

	<i>EM_JONES</i>	<i>EM_KOTHARI</i>	<i>REM_RoyDisExp</i>
	(1)	(2)	(3)
<i>LNCPR_{t-1} * DEDOWN_{t-1}</i>	-0.0712*** (-2.70)	-0.0733*** (-2.79)	-0.2223* (-1.95)
<i>LNCPR_{t-1}</i>	0.0085*** (3.95)	0.0093*** (4.23)	0.0506*** (7.77)
<i>DEDOWN_{t-1}</i>	0.0736*** (2.63)	0.0762*** (2.72)	0.4196*** (3.46)
Constant and other controls	YES	YES	YES
Year FE	YES	YES	YES
Industry FE	YES	YES	YES
N	19,116	19,116	16,875
Adjusted R2	0.1327	0.1191	0.1680