

CrossRef DOI of original article:

1 Impact of Managerial Entrenchment on Financial Flexibility and
2 Leverage of Small Public Firms: Policy Implications for Global
3 Economic Crisis

4 Akwasi A. Ampofo¹ and Reza Barkhi²

5 ¹ University of Connecticut, Virginia Tech

6 Received: 1 January 1970 Accepted: 1 January 1970 Published: 1 January 1970

7 **Abstract**

8 This paper examines the impact of managerial entrenchment on financial flexibility, and
9 financial leverage decisions of small public firms compared to medium and large firms. We
10 group firms into market capitalization quartiles where small public firms are within the first,
11 medium firms are between the first and second, and large firms are above the third quartile.
12 Results show that entrenched managers in small firms hold significantly less excess cash than
13 entrenched managers in medium or large firms. Small public firms borrow significantly more
14 money using short-term maturity compared to medium and large size firms, which borrow less
15 money using long-term maturities. Compared to pre-2008 crisis levels, most firms borrowed
16 more money and held more excess cash during and after the global economic crisis, though
17 small firms had limited access to cheap long-term funding compared to medium and large
18 firms. Managers adopted more antitakeover practices after the 2008 global crisis and they
19 became more entrenched. Results have economic and policy implications. Public policy should
20 prioritize timely (within 1.5 to 2 years) access to cash for small firms over medium and large
21 firms to pre-crisis excess cash levels in a global economic crisis.

23
24 **Index terms**— managerial entrenchment, financial flexibility, financial leverage, debt maturity, excess cash,
25 small firms.

26 **1 I. Introduction**

27 Financial flexibility is a primary determinant of firms' financing policy according to chief financial officers in the
28 U.S. and Europe (Skiadopoulos 2019). This is because firms require access to cash to exploit of investment
29 opportunities and meet financing and operating cash flow needs (Hsu et al. 2017). Financial flexibility is also
30 identified as a missing link in capital structure research (Yousefi and Yung 2022, Bates et al 2016, Byoun 2011
31 Marchica and Mura 2010). This is especially the case for small firms that are financially constrained (Nicolas 2022)
32 and subject to reduced financial reporting requirements by securities regulators (U.S. Securities and Exchange
33 Commission 2022). Small firms are the backbone of the global economy (de Carvalho Zinga et a. 2013), yet prior
34 research does not focus on the impact of entrenchment on financial flexibility and leverage of small firms. Prior
35 research provides mixed results on the relationship between managerial entrenchment and the extent of leverage
36 in capital structure of the firm (Berger et al. 1997, Ji et al. 2019), and excess cash (Falaye 2004). While Berger
37 et. al (1997) document entrenched managers tendency to borrow less using long-term debt, Ji et. al (2019) find
38 that entrenched managers of diversified firms borrow more (Ampofo 2021), which could be different for small
39 firms (Nicolas 2022). Past research find that managers in poorly governed firms keep less cash (Dittmar and
40 Mahrt-Smith 2007), but it is not clear whether managers in small firms keep more or less excess cash (Jones
41 2022). This paper examines the impact of managerial entrenchment on financial flexibility, and financial leverage
42 decisions of small public firms compared to medium and large firms during a Global Economic Crisis.

1 I. INTRODUCTION

43 Some of the characteristics of small firms include fewer employees, limited financial resources, lower credit
44 worthiness or collateral for secured borrowing, restricted access to cheap long-term debt, and external equity
45 funding. Recognizing the critical value of small firms to the economy and the relative resource limitations
46 compared to larger firms, U.S. Financial Accounting Standards Board (FASB) and International Accounting
47 Standards Board (IASB) often modify accounting guidance to be more practical and less burdensome for small
48 firms to implement in preparing financial statements and related disclosures. For example, FASB established
49 the Small Business Advisory Committee in 2004 with a renewed focus in 2016 to actively provide feedback on
50 matters important to small public companies in the accounting standard setting process (FASB 2022). Similarly,
51 IASB publishes IFRS for small and medium-sized entities (SMEs) that is practically an accounting framework for
52 entities that are not large enough to have the resources to use the full IFRS (IFRS 2023). Securities regulators
53 including the U.S. Securities and Exchange Commission (2022) broadly define smaller reporting companies as
54 those with a public float of less than \$250 million, or \$100 million in revenues and no public float or public float
55 of less than \$700 million. Prior research uses market capitalization (Jones 2022), and we categorize firms with
56 market capitalization below the first quartile as small large firms in capital structure regression analysis when
57 using average firm-year financial data from all firm sizes has the potential to skew the results in favor of the
58 larger firms. Thus, results in prior research can misinform policy implications for small firms.

59 Managerial entrenchment denotes the level to which firms' management exploit agency conflicts and the
60 consequent information asymmetry to extract private benefits, establish dominance, and implement measures
61 that safeguard and enhance the interests of management, rather than protecting and prioritizing the interests
62 of other stakeholders' over an extended period (Murphy and Zabojnik 2004, Zwiebel 1996, Edlin and Stiglitz
63 1995). Managerial entrenchment occurs when managers gain so much power that they are able to use the firm to
64 further their own interests rather than the interest of shareholders ??Weisbach 1988). Managerial entrenchment
65 is primarily operationalized using E-index as in prior research (Harris and ??ampton 2022, Bebchuk, Cohen
66 and Ferrell 2009). Shleifer and Vishny (1989) find that managers entrench themselves by making manager-specific
67 investments that make it costly for shareholders to replace them, extract higher wages and larger perquisites
68 from shareholders, and obtain more latitude in determining corporate strategy. Prior research suggest that while
69 managers in medium and large firms who are working for capital providers may be entrenched (Jones et al. 2022),
70 this may not be the case for small firm managers with limited resources. This paper exploits the tension between
71 agency theory and a resource-based view of managers as a source of competitive advantage (Hansen et al. 2004,
72 Bowman and Toms 2010, Cecchini et al 2013) to examine the impact of entrenchment on excess cash and leverage
73 of small public firms compared to medium and large firms. managers in small firms hold less excess cash than
74 entrenched managers in medium and large firms.

75 Financial leverage refers to the proportion and maturity of debt in the capital structure. Consistent with prior
76 research, financial leverage is primarily operationalized as debt to total assets (Faleye 2004, Ji, Mauer, and Zhang
77 2019). Berger, Ofek, and Yermack (1997) find evidence that firms that have entrenched managers often borrow
78 less, and use long rather than short-term debt. However, Ji et al. (2019) finds entrenched managers borrow more
79 in diversified firms. Prior research has not addressed the impact of entrenchment on the financial leverage of
80 small firms. Small firms typically have less total assets and capital resources than medium and large firms. As a
81 result, we expect the financial leverage ratio of small firms should be higher than the medium or large firms that
82 often have significantly high equity capital and total assets. Also, small firms are not as reputable as medium
83 or large firms that issue more equity capital subscribed by investors. Small public firms rely on limited equity
84 capital and often have to borrow money at expensive short-term rates. Accordingly, unlike Berger et al (1997) this
85 paper posits that entrenched managers in small firms borrow more money (H2) using short-term maturities (H3)
86 compared to entrenched managers in medium and large firms that borrow less money using long-term maturities.

87 The findings of this paper indicate that entrenched managers in small firms hold significantly less excess cash
88 than entrenched managers in large or medium sized firms that maintain higher amounts of excess cash. Small
89 firms have significantly more financial leverage than medium, and large firms. Moreover, small firms borrow more
90 money at short-term maturities, while medium size and large firms borrow less money at long-term maturities.
91 In contrast to the levels observed before the 2008 global financial crisis, most firms experienced an increase in
92 borrowing held larger amounts of excess cash during and after the global financial crisis. However, small firms
93 faced limitations in accessing cheap long-term funding compared to medium and large firms. Consistent with
94 agency theory, managers displayed a higher inclination towards implementing antitakeover measures to safeguard
95 the interests of stakeholders in the aftermath of the 2008 global crisis. This led to an increase in the level of
96 managerial entrenchment.

97 This paper provides new evidence that entrenched managers in small firms exhibit a tendency to borrow more
98 money through short-term debt maturities, compared to their counterparts in large or medium firms who borrow
99 less at cheaper long-term debt maturities (Berger et al. 1997). We also provide new evidence that entrenched
100 managers in small firms tend to hold significantly less excess cash compared to entrenched managers in large
101 or medium-sized firms, who maintain higher amounts of excess cash. To supplement the E-index measure of
102 managerial entrenchment, we also develop two direct measures of entrenchment based on four (DME 4), and six
103 (DME 6) using anti-takeover provisions frequently used by firms after the Sarbanes-Oxley Act ??2002). Public
104 policy should place a higher priority on facilitating timely access to cash for small firms to restore their pre-crisis
105 levels of excess cash within 1.5 to 2 years.

106 Section I of this paper discusses the theoretical background. Section II analyzes data and provides summary
107 statistics. Section III describes the methodology, and Section IV discusses the results. Finally, the paper concludes
108 with implications of our research in section V.

109 **2 II. Prior Research and Hypotheses Development a) Agency 110 Theory and Resource-based Theory of the Firm**

111 Traditional agency theory arises from its origins in risk-sharing, and agency problem perspectives (Jensen
112 and Meckling 1976) in which principal and agent have different attitudes towards risks, and different goals
113 (Eisenhardt 1989). Agency theory stems from the principal-agent conflict that arises from the separation of
114 ownership and control of firms (McGuire, Wang, and Wilson 2014). The agency problem arises from conflicting
115 goals between the agent (i.e., managers) and the principal (i.e., shareholders, debtholders), partly because it is
116 difficult or expensive for the principal to verify the agent's activities (Eisenhardt 1989). Agency theory postulates
117 that managers are self-interested, and risk averse individuals whose decisions follow bounded rationality in
118 contractual relationships (Jensen and Meckling 1976). Managers may extract firms' cash flows, and make it
119 difficult to replace them by investing in projects for which success is tied to the managers (Shleifer and Vishny
120 1989).

121 Positivist or contrarian agency theory posit that corporate governance mechanism, such as, goals alignment
122 using outcomes-based contracts, or efficient information systems, limit agent's self-serving behavior so that
123 managers act in the interest of the capital providers (Blair 1996). Managers who work for capital providers
124 are expected to act in the best interest of the stakeholders to maximize the value of the firm (Blair 1996). Prior
125 research argues that agency theory and strategic management perspectives, such as, the positivists agency theory,
126 yield opposing predictions ??Denis et al. 1999 ??Denis et al. , p. 1073)). Shankman (1999) also indicates that
127 agency and stakeholder theories offer competing explanations for firm outcomes. Using agency theory and related
128 creditor alignment, and managerial entrenchment hypotheses Ji, Mauer, and Zhang (2019) find: (1) positive
129 relation between managerial entrenchment and leverage in diversified firms (creditor alignment hypothesis), and
130 (2) negative relation between managerial entrenchment and leverage in focused firms (managerial entrenchment
131 hypothesis). A gap in prior research is the lack of consideration of financial flexibility in capital structure studies
132 (Ariff et al 2022, Bates et al 2016, Byoun 2011 Marchica and Mura 2010), especially, for small firms across
133 different economic cycles. We question the impact of managerial entrenchment on financial flexibility, and the
134 amount and maturity of debt for small versus medium and large firms in a global economic crisis.

135 **3 b) Managerial Entrenchment**

136 Managerial entrenchment occurs when managers gain so much power that they are able to use the firm to further
137 their own interests rather than the interests of shareholders (Weisbach 1988). Firms' management exploits
138 agency conflicts and information asymmetry to extract private benefits (Zwiebel 1996, Edlin and Stiglitz 1995).
139 Managerial entrenchment hypothesis arises from agency conflicts between managers, shareholders, creditors, and
140 even employees (Murphy and Zabojnik 2004). Shleifer and Vishny (1989) explain that entrenched managers make
141 managerspecific investments that make it costly for shareholders to replace them, extract higher wages and larger
142 perquisites from shareholders, and obtain more latitude in determining corporate strategy. Prior research uses the
143 Gompers, Ishii, and Metrick (GIM, 2003) index, Alternative Takeover Index (ATI) of Cremers and Nair (2005)
144 Following Bebchuk et al. (2009) development of E-index, we also utilize different six antitakeover provisions
145 that firms frequently use in the period after the Sarbanes Oxley Act (2002) namely: (1) blank check preferred
146 stocks, (2) cumulative voting, (3) confidential or secret ballot, (4) fair price amendments, (5) limits to special
147 meetings, and (6) limits to written consent to develop two direct measures of managerial entrench-ment indexes
148 (DME4, and DME6) (Ampofo 2021). The direct measures of entrenchment add to the nomological validity of
149 the E-index and provide alternative measures of managerial entrenchment, and they are utilized as alternative
150 proxies of managerial entrenchment.

151 **4 c) Financial Flexibility**

152 Financial flexibility refers to a company's ability to adjust the amounts and timing of cash flows in order to meet
153 unexpected requirements and capitalize on emerging opportunities (Ampofo 2021 ?? FASB 2019). Prior research
154 suggests that financial flexibility is the availability of cash, cash flows, or liquidity to meet unexpected needs
155 or opportunities ??Bates et (Hess and Immenkötter 2014). We differentiate between operating and financing
156 flexibility because operating flexibility is part of financial performance that is not independent from the broader
157 construct of financial flexibility (Kumar and Sopariwala 1992).

158 The residual or excess cash perspective of financial flexibility (Falaye 2004) differs from free cash flow to the
159 firm. Prior research also describes financial flexibility as unused debt capacity that firms can tap into for cash
160 flows (Lo 2015, Gamba and Triantis 2008). In this paper, we describe free cash flow as operating cash flows after
161 adjusting for interest tax shield [that is, plus interest expense (1-tax rate)], plus receipts from net debt proceeds,
162 and less payments for long-term investments (Jensen 1986, Easterbrook 1984). The net proceeds from debt cash
163 flows is a common factor of excess cash and free cash flows. Thus, financial flexibility in the form of untapped

7 III. HYPOTHESIS 3. DEBT MATURITY USED BY SMALL FIRMS

164 reserves of borrowing power is a crucial missing link in capital structure theory (Marchica and Mura 2010). This
165 paper primarily operationalizes financial flexibility as the excess of the cash ratio of the firm over the median
166 cash ratio of the 3-digits SIC industry (Daniels et al 2010), residual cash (Opler et al. 1999), and free cash flow
167 to the firm (Faleye 2004, Jensen 1986, Easterbrook 1984).

168 Prior research on managerial entrenchment and financial flexibility can be summarized as follows: (1) there is
169 strong negative relationship between dividends and management stock options, (2) management stock ownership
170 is associated with higher payouts by firms with potentially the greatest agency problems (Fenn and Liang
171 2001), and (3) following a period of low leverage, firms make larger capital expenditures and increase abnormal
172 investment financed through new issues of debt (Fenn and Liang 2001). Also, there is evidence that (4) financially
173 flexible firms invest more and better than firms that are not financially flexible (Marchica and Mura 2010), (??)
174 self-interested managers are reluctant to disburse excess cash, and they will allow cash levels to remain high unless
175 the firms are subject to external pressure (Jiang and Lie 2016), and (??) the cost of payout flexibility is correlated
176 with governance and agency concerns (Bonaime et al. 2016, Rashidi 2020). However, prior research does not
177 differentiate the evidence between small public firms versus medium and large firms despite the regulatory and
178 economic importance of that distinction especially before and after a global economic crisis.

179 5 d) Development of Hypotheses i. Hypothesis 1. Managerial 180 Entrenchment and

181 Flexibility Prediction for Small Firms Agency theory suggests that managers are selfinterested, risk-averse
182 individuals (Jensen and Meckling 1976) who may invest excess cash balances in projects for which success is
183 tied to the managers (Shleifer and Vishny 1989). In this view, the entrenched managers who can get away with
184 sub-optimal decisions more than other managers who are closely scrutinized, may not be overly concerned with
185 minimizing the opportunity cost of holding excess cash flows, as they prefer more to less financial flexibility.
186 Utilizing agency theory, we explain that more entrenched managers are likely to prefer to hold more excess cash
187 indicating a positive relationship between managerial entrenchment and financial flexibility. However, as the
188 opportunity cost of having excess cash increases due to higher forgone expected returns from missed investment
189 opportunities, the entrenched managers and shareholders lose out on the portion of expected returns that is
190 tied up in excess cash flows. As a result, based on positivist agency theory and resource-based theory (Blair
191 1996, Hansen et al. 2004) that managers act in the best interest of the principal rather than their own best
192 interest (Jensen and Meckling 1976), we expect entrenched managers to take advantage of lucrative investment
193 opportunities rather than holding excess cash flows. Thus, entrenched managers holdless excess cash predicting
194 a negative relationship between entrenchment financial flexibility.

195 Prior research suggests that firm size matters in the analysis of financial constraints in that small firms have
196 less financial flexibility than medium or large firms (Farre-Mensa and Ljungqvist (FML) 2016). Given the limited
197 resources that constrains self-interested behavior, managers of small firms are likely to be less entrenched than
198 manager of medium or large firms mangers (FML 2016). Given that small firms have limited access to external
199 funding and they are financially constrained relative to medium or large firms (FML 2016), managers in small
200 firms cannot afford to hold more excess cash compared to managers in medium or large firms. Accordingly, we
201 hypothesize that entrenched managers in small firms will hold less excess cash compared to entrenched managers
202 in medium or large firms (H1).

203 6 ii. Hypothesis 2. Managerial Entrenchment and Financial 204 Leverage Prediction for Small Firms

205 Prior research find that managerial entrenchment is negatively related to leverage, such that more entrenched
206 managers borrow less money (Berger et al 1997). This is consistent with the agency theory that self-interested,
207 risk-averse, and boundedly rational entrenched managers prefer less to more debt due to the discipline imposed by
208 timely repayment of debt (Jensen 1983). Positivist agency theory (Blair 1996), however, suggests that entrenched
209 managers may utilize more debt if it is cheaper than other sources of financing (e.g., equity or retained earnings)
210 to finance lucrative transactions (e.g., mergers and acquisitions) that add value to their entrenchment objectives.
211 As a result, under these conditions, we expect that entrenched managers are likely to borrow more debt indicating
212 a positive relationship between entrenchment and financial leverage.

213 FML (2016) find that small firms are typically financially constrained, but they are able to raise funds through
214 private debt and equity markets with some difficulty. We argue that small firms primarily use debt finance
215 because of the difficulty of raising equity capital. Accordingly, we posit that entrenched managers in small firms
216 borrow more compared to entrenched managers in medium or large firms (H2).

217 7 iii. Hypothesis 3. Debt Maturity used by Small Firms

218 Prior research find that more entrenched managers use long-term rather than short-term debt (Datta et al 2005).
219 Debt with maturities of less than 3 years is short-term, and more than 5years is long-term (Datta et al 2005).
220 Market place evidence suggests that companies are frequently issuing domestic and foreign medium-term notes
221 to finance business activities. Medium-term debt (3 to 5 years debt maturity) that is commonly used by firms

222 because it is often cheaper than long-term debt, especially when the yield curve is positively sloping. Also, some
223 investors may prefer to make debt investment decisions in the medium rather than long-term.

224 Self-interested managers in firms are expected to borrow less using cheaper long-term(after 5 years) rather
225 than more expensive medium term (between 3 and 5 years), and short-term (less than 3 years) debt maturities.
226 Compared to medium and large firms, we believe that small firms typically have limited financial resources
227 and credit worthiness to qualify for cheap long-term maturities in debt markets. Accordingly, small firms are
228 likely to utilize more short-term debt maturities than medium or large size firms. This suggests a positive
229 relationship between firm size and debt maturity (H3). Managerial entrenchment is operationalized using E-
230 index, DME4 and DME6 using entrenchment data obtained from ExecuComp, and Institutional Shareholders
231 Services (ISS/formerly RiskMetrics) or Investors Responsibility Resource Center (IRRC). Financial flexibility is
232 measured using excess cash, and free cash flows to the firm based on data obtained from Compustat. Financial
233 leverage is operationalized as debt to total assets ratio, and average debt maturity. We collected data from
234 different databases and joined them into the sample relational database using GvKey, fiscal year, and ticker as
235 primary keys.

236 Consistent with prior research, we exclude firm year data for financial and utilities firms that are regulated
237 entities with solvency requirements leading to different capital structure. We also exclude data for dual share
238 class firms, and firms' years with negative net sales, negative book or market value of assets, and missing SIC
239 code (Giroud and Mueller 2012). Figure 2 is reconciliation of sample size including a sample period that overlaps
240 the 2008 global financial crisis to test our predictions in times of such a crisis. Lagged values of independent
241 variables are used to be consistent with empirical specifications in prior research, and appendix 1 defines the
242 proxies for the variables used in this study.

243 **8 b) Dependent Variables**

244 In this paper, financial leverage is a dependent variable that is measured by debt ratio of interestbearing debt
245 as a percent of firms' total assets or total capital (Ji et al. 2019, Byoun 2011, Denis and McKeon 2012). The
246 average debt ratio of the sample of all firms is about 0.26 (SD = 0.17), which differs significantly for small (debt
247 ratio = 0.33, SD = 0.25) versus large (debt ratio = 0.39, SD = 0.21, $t = -14.10$, $p = .00$) firms. Also, the debt
248 ratios for small versus medium (debt ratio = 0.34, SD=0.23) groups firms are significantly different ($t = -2.83$, p
249 = .01). We find that the debt ratios do not differ significantly before, during, and after the 2008 global economic
250 crisis for the sample firms. The average debt maturity is about 4.). Excess cash is highly correlated with (r
251 = .51, $p < .001$) residual excess cash used in Faleye (2004). The excess cash of small versus medium firms are
252 not significantly different ($p = .54$), though that for small versus large firms are significantly different ($t = 5.95$,
253 $p < .001$). Also, the median excess cash for the pre-2008 crisis period is significantly different from during the
254 2008 ($t = -2.51$, $p = <.01$), and post 2008 ($t = -6.81$, $p < .001$). We group firms into quartiles of market capitalization
255 (Jones 2022), where small firms are below the first ($<= 25\%$), medium firms are between the first and second (25%
256 and 50%), and large firms are above the third quartile ($=> 75\%$). Tables 1 and2 provide descriptive statistics
257 and correlations.

258 **9 c) Independent Variables**

259 Managerial entrenchment is a key independent variable for which the E-index (Bebchuk et al 2009) is a primary
260 proxy. Alternate proxies for entrenchment are the direct measures of entrenchment (DME 4 and DME 6)
261 developed in this research. E-index is highly correlated with ($r = .13$, $p < .001$) the DME 4 index.

262 **10 d) Descriptive Statistics**

263 Tables 1 and2 summarize the descriptive statistics of the key variables. About 17,338 firm years for 1,864 firms
264 are included in the sample of which about 25 percent each are in the small, or medium, and 50 percent are in
265 large market value firm year groups. Approximately seventy percent firm-year data are in the post-2008 global
266 financial crisis period, while about 24 percent and 6 percent respectively firm years are in the pre-2008 and during
267 this period. Excess cash, and residual excess cash are significantly positively correlated ($r = .14$, $p < .001$). Figures
268 3 A and ?? A describe the relationship between excess cash, firm size and managerial entrenchment over time.
269 Also, Figures 3 B and ?? B depict the association between debt ratios, firm size, and managerial entrenchment
270 over the sample period.

271 **11 IV. Method**

272 Ordinary least squares (OLS) panel regression is used to analyze data. Consistent with prior research, firm year
273 data is grouped into small, medium, and large based on market values (Byoun 2011, FML 2016, Giroud and
274 Mueller 2011). We evaluate univariate and multivariate regressions, and include standard controls for growth
275 opportunities (market to book ratio), firm size (Log of total assets), asset tangibility (PPE to total assets),
276 leverage (debt to equity), and profitability (return on assets) to minimize endogeneity (Rajan and Zingales
277 1995). Year, and firm, or industry fixed effects are included in regression models to minimize heterogeneity in
278 the analysis. We also include alternative variables for managerial entrenchment (DME 4 and DME 6 as proxies
279 for E-index), financial flexibility (free cash flows as alternate proxy for excess cash), and financial leverage (debt

280 to equity ratio as proxy for debt to total assets ratio) in robustness tests. We also test predictions before, during,
281 and after the 2008 global financial crisis for small, medium, and large sized firms. Consistent with prior research,
282 results are robust to endogeneity as we use standard controls, firm and year fixed effects, and alternative proxies
283 in regression analysis (Roberts and Whited 2013, Benlemlih 2019).

284 **12 a) Hypotheses Tests i. Managerial Entrenchment and
285 Financial Flexibility**

286 Hypothesis H1 states that entrenched managers in small firms will hold less excess cash compared to entrenched
287 managers in medium or large firms. Correlation analysis in Table 1 panel A shows significant positive correlation
288 between E-index and excess cash($r = .02, p < .05$). Results of t-test in Table 2 panel A shows that small firms
289 hold less residual cash than medium or large firms ($p < .01$). Table 3 panel B shows that E-index has significant
290 positive beta in explaining the variance in excess cash ($t = 1.96, p < .05$) of all firm sizes. This is especially the
291 case for medium size firms ($t = 2.29, p < .01$), but not small firms in Table 3 panel C. The evidence suggests
292 that more entrenched managers keep more excess cash, but small firms utilize less excess cash than large firms.
293 Results support H1 that entrenched managers in small firms will hold less excess cash compared to entrenched
294 managers in medium or large firms.

295 Figure ?? A: Above shows the debt ratios of small, medium, and large firms from 2000 to 2018. Compared to
296 figure 3 above, the debt ratio line for small firms lies on top while that of large firms lies at the bottom. This
297 indicates that the small firms generally had higher debt ratios than the large or medium firms. Also, debt ratios
298 for all firm sizes declined from 2000 through 2005, which partially explains the decline in excess cash from 2003
299 to 2005. The debt ratios increase through 2009 as firm needed access to cash to mitigate the effects of the 2008
300 global economic crisis. Thereafter, the debt ratios for all firm sizes have increased through 2018, although excess
301 cash declined from 2009 through 2018.

302 Figure ?? B: Illustrates that debt to total assets ratio of more entrenched managers were lower than that of
303 moderate or less entrenched managers over the sample period. It is interesting to note that debt ratios peaked
304 around 2008 for all levels of managerial entrenchment, but it declined slightly through 2009. Thereafter, the
305 debt ratios rose steadily through 2018. It should be noted that less entrenched managers tend to keep low excess
306 cash, but increase borrowing to finance operating and investing activities over time. Accordingly, it is critical
307 that small firms' managers who typically have less resources and are less entrenched, have timely access to cash
308 or debt markets.

309 **13 Public Policy Implications**

310 Public policy should prioritize small firms' access to cash to pre-crisis levels within 2 years or less after a global
311 economic crisis, given that small firms that are the backbone of the economy. Also, public policy should provide
312 access to cash to medium and large firms in less than 3 years after the global economic crisis to minimize a
313 liquidity crisis. It appears from figure 3A that firms increased borrowing after the 2008 crisis, although access to
314 credit or debt markets dried up for small firms that needed cash the most immediately after the 2008 crisis. As
315 a result, the CARES Act (2020) provides timely access to cash of about \$1.8 trillion in economic stimulus package
316 for individuals, and small firms through the paycheck protection program (PPP), and economic injury disaster
317 loans (EIDL) in 2020 and 2021 during the COVID-19 pandemic. Managerial Entrenchment, Financial Flexibility
318 and Financial Leverage Hypothesis H2 predicts that entrenched managers in small firms borrow more compared
319 to entrenched managers in medium or large firms. Univariate results indicate significant positive correlation
320 between firm size and debt ratio ($r = .30, p < .01$). T-test in Table 2 shows small firms experience significantly
321 less debt-to-equity ratio than medium ($t = -2.83, p = .01$) or large firms ($t = -14.06, p = < .01$). Multivariate
322 tests in Table 4 panel B shows that E-index has a significant positive beta in explaining debt ratio ($t = 1.89,$
323 $p < .05$), especially for small, but not medium or large firms (footnote 2 to Table 4). Market to book shows a
324 significant positive beta in explaining debt ratio ($t = 4.47, p < .001$) indicating firms with small market to book
325 ratios borrow more than firms with large market to book ratios. Therefore, univariate and multivariate tests
326 suggest entrenched managers in small firms borrow more compared to entrenched managers in medium or large
327 firms, lending support to H2.

328 **14 iii. Firms Size and Debt Maturity**

329 Hypothesis H3 predicts that small firms utilize more short-term debt maturities than medium or large size firms.
330 This suggests a positive relationship between firm size and debt maturity as shown in the correlation matrix
331 ($r = .27, p < .05$). Table 2 panel A shows the average debt maturities of small firms is significantly lower than
332 medium ($t = -13.43, p < .001$) and large ($t = -27.08, p < .001$) firms. Multivariate test in Table 5 panel B shows
333 that debt maturities significantly positively explain the variance in debt ratio ($t = .10, p < .001$). Also, firm size
334 significantly and positively explain the variance in debt ratio ($t = 20.68, p < .001$). This suggests that large firms
335 utilize more long-term debt than small firms, lending support to H3.

336 15 b) Robustness Tests

337 We control for omitted variables to minimize endogeneity (Black 2010) in the panel regression tests by including
338 standard control variables (Rajan and Zingales 1995), firm and year fixed effects in our design (Roberts and
339 Whited 2013). We include corporate governance and compensation variables of CEO pay slice, CEO tenure,
340 CEO share ownership, and CEO dual role as chair in a robust model to test our predictions. We also utilize
341 alternative proxies for the key variables (Ampofo 2021).

342 In robustness tests, we find that entrenched managers in all firms keep significantly more excess cash ($t =$
343 2.97, $p = .003$) than managers who are not entrenched. Results do not change if we utilize residual excess cash (t
344 = 2.75, $p = .006$, untabulated) instead of median excess cash as dependent variable. Market to book ratio shows
345 significant positive relationship with excess cash suggesting that firms with small market to book have low excess
346 cash relative to firms with large market to book ratios. Also, entrenched managers in all firms tend to borrow
347 significantly less ($t = -2.11$, $p < .05$) compared to managers who are not entrenched, consistent with prior research
348 (Berger et al. 1997). Debt maturity is also positively related to debt ratio ($t = 23.8$, $p < .001$), which together
349 with the market to book ratio noted above suggest that small firms utilize more shortterm debt. Robustness
350 tests support the hypotheses.

351 However, results are not always consistent from using E-index, and DME 4 as proxies for managerial
352 entrenchment in regressions with excess cash or financial leverage as dependent variables. This is because while
353 E-index was developed in the 1990s by ??ebchuk et al. (1999) for antitrust provisions that were frequently used
354 during that period, the corporate American scandals in 2000s and related Sarbanes-Oxley Act (2002) reforms led
355 to firms using different antitrust provisions (Bebchuk et al. 2011) that are reflected in the DME 4 and DME 6.

356 Finally, prior research indicates that unlike the E-index that reflects entrenchment of the entire senior leadership
357 team, a CEO's pay slice is a proxy for individual CEO's managerial ability or efficiency of compensation contract
358 (Bugeja et al. 2017). Therefore, an individual CEO may borrow more (not less) money compared to results
359 from entrenchment indexes that entrenched managers generally borrow less money than managers who are not
360 entrenched (Berger et al. 1997).

361 16 c) Economic Significance using Analysis of Actual Loans and 362 Spread Data

363 We obtain data on actual loans, debt maturity, and spreads on 44 ANOVA shows that the normalized spread is
364 increasing for short to medium term debt, but declining for long-term debt. Also, we find that debt maturity is
365 significantly negatively related to loan spreads ($\beta = -15.97$, $SE = 2.14$, $t (10) = -7.46$, $p < .001$) in robustness
366 test. This suggests the firms in the sample period receive cheaper spreads for using long-term rather than short-
367 term debt maturities. The impact of excess cash on loan spreads is also significant ($t = 2.61$, $p = .009$), which
368 suggests that large firms that hold high excess cash often utilize cheaper long-term debt than small or medium
369 firms that keep low excess cash.

370 Overall, the results of this research show that entrenched managers in large firms are able to keep more
371 liquidity than small firms. With more resources and credit worthiness, large firms are able to borrow cheaply
372 using long-term rather than equity to save on borrowing costs, which further increases excess cash for the firms.
373 On the other hand, small firms with limited resources have less liquidity that allows them to borrow short to
374 medium term debt with high borrowing costs. Accordingly, our results suggest that the inability of small firms
375 to show more financial resources and creditworthiness to banks and other lenders raise borrowing costs for using
376 expensive short to mediumtermdebt facilities. As a result, compared to large and medium sized firms, small
377 firms have to make higher periodic payments on borrowed money, which must be repaid rather than rolled over
378 into a new long-term loan at debt maturity. Taken together, the limited resources, lack of liquidity, and limited
379 creditworthiness of small firms significantly reduce their ability to absorb shocks in the financial system including
380 recessions, pandemic, and global financial crisis.

381 17 d) Global Financial Crisis

382 The global financial crisis of 2008 led to bankruptcy filings and business failures of many small, medium, and
383 large firms causing havoc and shocks in the economic system. Typically, firms ability to obtain funding quickly
384 dries up and loan rates spike to high levels. As a result, most businesses during such difficult times are not able to
385 obtain new funding or make timely payments on existing obligations. This could lead to massive unemployment
386 and a sharp decline in aggregate demand and gross domestic product. In particular, small businesses, which are
387 the backbone of the economy, suffer economic consequences that could force them to close down.

388 Our panel data from 2000 to 2018 allows us to analyze our results during the 2008 global financial crisis in
389 Table 2 panel B. We find that debt ratio was significantly lower before than during ($t = -4.63$, $p < .001$) and after
390 ($t = -11.12$, $p < .001$) the 2008 global crisis. Also, debt maturities was significantly higher before than during (t
391 = 3.30, $p < .001$) and after ($t = 4.13$, $p < .001$) the 2008 crisis. Also, firms had generally lower residual excess cash
392 before than during ($t = -2.51$, $p < .001$) and after ($t = -6.81$, $p < .001$). Also, while managers were significantly
393 more entrenched before than during 2008 ($t = 3.28$, $p < .001$), managerial entrenchment was significantly higher
394 after ($t = -7.88$, $p < .001$) than before the global financial crisis. This suggests that cash infusion and firms

395 access to short-term financing during the global financial crisis increased firms cash balances as more entrenched
396 managers effectively deployed antitakeover policies to protect firms.

397 18 V. Summary of Results

398 The overall results of this research show that entrenched managers in small firms hold significantly less excess
399 cash than entrenched managers in medium or large firms that keep more excess cash. Small firms have more
400 financial leverage than medium and large firms. Also, small firms borrow more money at more expensive short-
401 term maturities compared to medium and large firms that borrow less money at cheaper longterm maturities.
402 Moreover, compared to pre-2008 crisis levels, most firms borrowed more money and held more excess cash during
403 and after the global economic crisis, though small firms had limited access to cheap longterm funding compared
404 to medium and large firms. Consistent with agency theory, managers adopted more antitakeover practices to
405 protect stakeholders' interests in the aftermath of the 2008 global crisis and managers became more entrenched
406 in their positions of authority.

407 The results also suggest that entrenched managers in medium and large firms leverage their influence and
408 networks to secure access to long-term debt markets at cheaper interest rates than less entrenched managers in
409 small firms. Moreover, entrenched managers in medium and large firms tend to retain more excess cash in order
410 to obtain more favorable loan spreads and mitigate the risk of liquidity crisis. In contrast to small firms, large
411 and medium firms opt for borrowing less long-term debt (Berger et al. 1997) to reduce borrowing costs, while
412 strategically building up debt capacity for future business needs. The 2008 global financial crisis resulted in a
413 significant surge in borrowing compared to the pre-crisis period, particularly when credit availability declined and
414 firms' credit risk escalated. Unfortunately, small firms encountered challenges in securing inexpensive funding
415 during this period.

416 Furthermore, the results of this research indicate that entrenched managers in medium and large firms enjoy
417 easier access to affordable long-term funding, whereas managers in financially constrained small firms primarily
418 rely on costly short-term financing options. As a result, public policy should prioritize facilitating timely access
419 to cash for small firms, aiming to restore pre-crisis levels of excess cash during a global financial crisis, within a
420 timeframe of approximately 1.5 to 2 years.

421 19 VI. Conclusions

422 This paper examines the impact of managerial entrenchment on excess cash, and financial leverage of small firms
423 from 2008 to 2018. The evidence indicates a contrast between entrenched managers in large or medium sized
424 firms, who tend to maintain higher levels of excess cash (Falaye 2004), and entrenched managers in small firms,
425 who hold comparatively lower amounts of excess cash. Additionally, unlike entrenched managers in medium and
426 large firms who borrow less money at cheaper long-term maturities (Berger et al. 1997), entrenched managers in
427 small firms borrow more money through costly short-term maturities. In comparison to pre-2008 crisis levels, the
428 majority of firms experienced an increase in borrowing and held higher levels of excess cash during and after the
429 global financial crisis. However, small firms had limited access to cheap long-term funding compared to medium
430 and large counterparts. Despite the overall increase in borrowing during the 2008 crisis, especially in times of
431 liquidity shortage and elevated credit risk for firms, small firms encountered difficulties in accessing the financial
432 markets for borrowing purposes.

433 This paper makes several contributions to existing research. First, it presents novel findings that highlight
434 the borrowing behavior of entrenched managers in small firms. Unlike their counterparts in medium or large
435 firms, entrenched managers tend to acquire higher levels of short-term debt maturities. In contrast, entrenched
436 managers in larger firms exhibit a preference for cheaper long-term debt maturities (Berger et al. 1997). We also
437 provide new evidence that entrenched managers in small firms hold significantly less excess cash than entrenched
438 managers in large or medium sized firms that keep more excess cash (Falaye 2004). To supplement E-index
439 measure of managerial entrenchment, we develop two direct measures of entrenchment based on four (DME 4),
440 and six (DME 6) anti-takeover provisions frequently used by firms after the Sarbanes-Oxley Act (2002). This
441 paper has important economic and policy implications, consistent with De Vito and Gomez (2020). It suggests
442 that the COVID-19 health crisis may result in a significant liquidity crunch for most firms, potentially occurring
443 within 6 months to 2 years. During the 2008 global financial crisis, firms typically increased borrowings to
444 mitigate liquidity crisis. However, access to credit in the debt markets significantly diminished, particularly for
445 small firms. In the aftermath of the 2008 financial crisis, Federal Reserve policies facilitated direct borrowing at
446 a more favorable funds rate from the Feds for medium to large firms (Ampofo 2021). Conversely, individuals and
447 small firms generally faced challenges in accessing debt capital when it was most needed during the 2008 global
448 financial crisis.

449 Against this background, the economic stimulus policy implemented by the U.S. government in 2020 and 2021
450 aimed at ensuring easy access to cash for not only medium and large firms but also for individuals and small firms,
451 is a positive and forward-thinking measure. Under the CARES Act (2020), the U.S. Congress approved about
452 \$2 trillion in COVID-19 relief that included \$1.8 trillion direct aid to individuals and businesses to stimulate the
453 U.S. economy. Also, regulatory policies that provide more time for individuals and small firms to pay cash for
454 existing debt, or purchased goods and services should ease the cash crunch. Based on this study and existing

455 evidence, it becomes apparent that the effectiveness of an economic stimulus package depends on the amount,
456 timing, and the specific entities targeted. The findings suggest that in times of global financial crisis, public
457 policy should prioritize supporting small firms timely access to cash over medium and large firms,

458 The limitations of this study provide opportunities for further research. This paper focused on small public
459 firms that have publicly available financial data for analysis. Future research can investigate small private firms
460 as well as firms that operate as Employee Stock Ownership Plan (ESOP) companies. Also, further research can
461 study the trade-offs of keeping high excess cash versus investing excess funds during periods of global financial
462 crisis depending on if the company is new and cash starved or cash cow companies that are more mature and
463 are not cash starved. The impact of instrumental variables, such as significant tax cuts for businesses, payment
464 protection programs, economic injury and disaster loans on firms' outcomes may be other fruitful research topics
465 to investigate in the future. Finally, it may be interesting to examine other variables during the global financial
466 crisis and recommend additional policies for individuals, firms and governments.

467 Data Availability: Data is available from public sources cited in this paper.

468 **20 Financial flexibility [FINFLEX]**

469 Excess cash is the median SIC industry cash and cash equivalents/total assets ratio in year t less firm cash and
470 cash equivalents/total assets ratio in year t.

471 Residual excess cash is the error term of OLS regression of Opler et al. (1999) model per Faleye (2004).

472 Free cash flow to the firm is operating cash flow plus after-tax interest expense, plus net debt proceeds less
473 long-term investment.

474 **21 + + +**

475 **22 Main proxy Excess cash**

476 Alternative proxies Residual excess cash Free cash flow to the firmData sources: Compustat Capital structure
477 [LEV]

478 The term leverage (LEV) refers to the level of debt in the capital structure.

479 It is measured as the proportion of interestbearing debt divided by total assets of the firm. .00 (-.37)

480 **23 Controls**

481 .00 (-.

482 .00 (-.

483 .00 (.08)

484 .00 (-.13)

485 .00 (-.13)

486 .00 (-.14)

487 **24 CEO tenure**

488 .00 ??1.31) .00 ??1.11) .00 ??1.12) .00 ??1.14) .00 ??1.25) .

¹ ²

¹ © 2023 Global Journals

² ThisTable Shows Descriptive Statistics Including the Number of Observations, Mean, Standard Deviation, Minimum and Maximum.

1

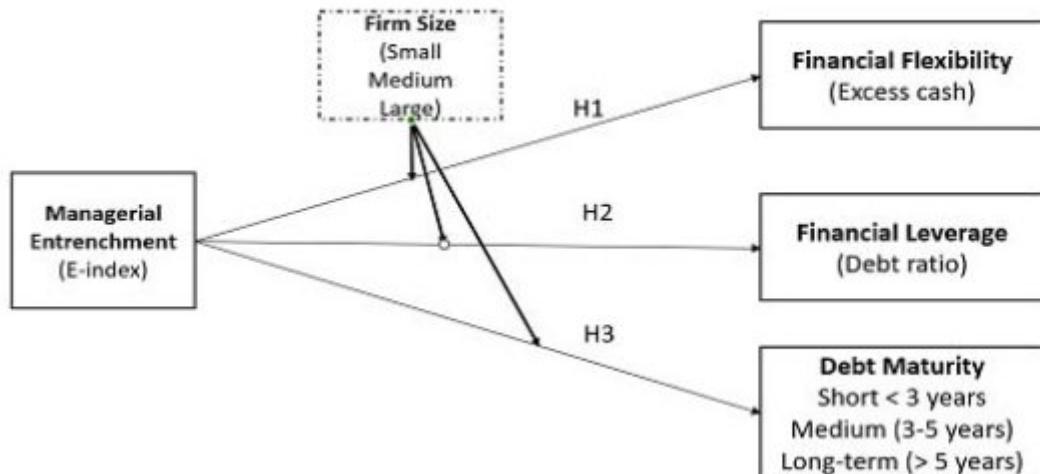


Figure 1: Figure 1 :

2

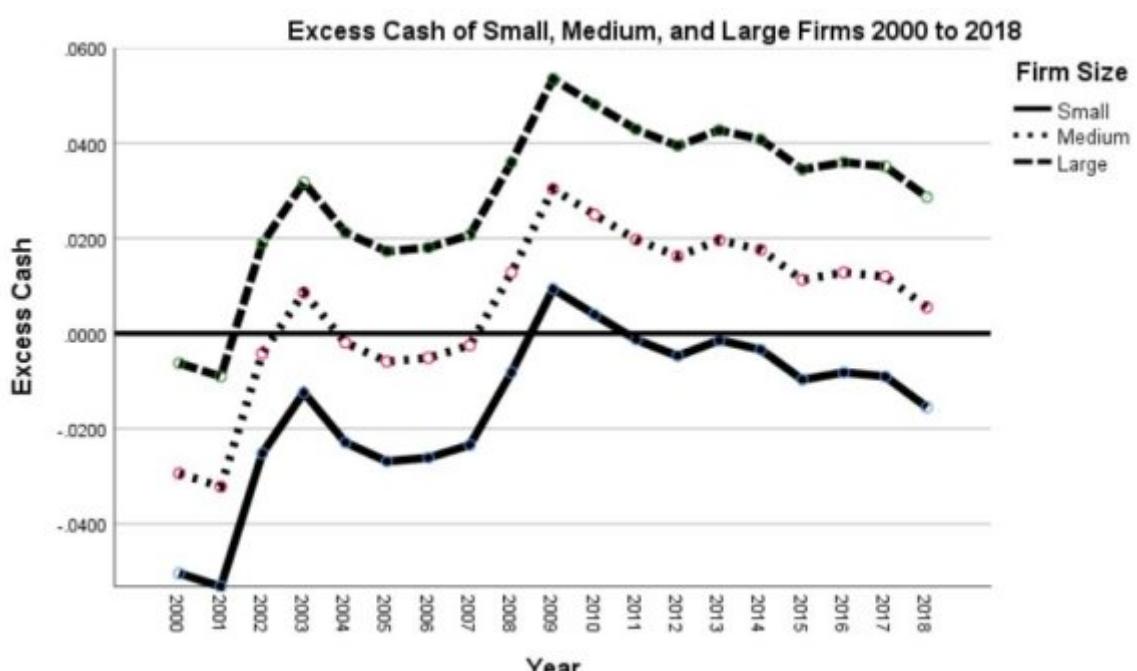
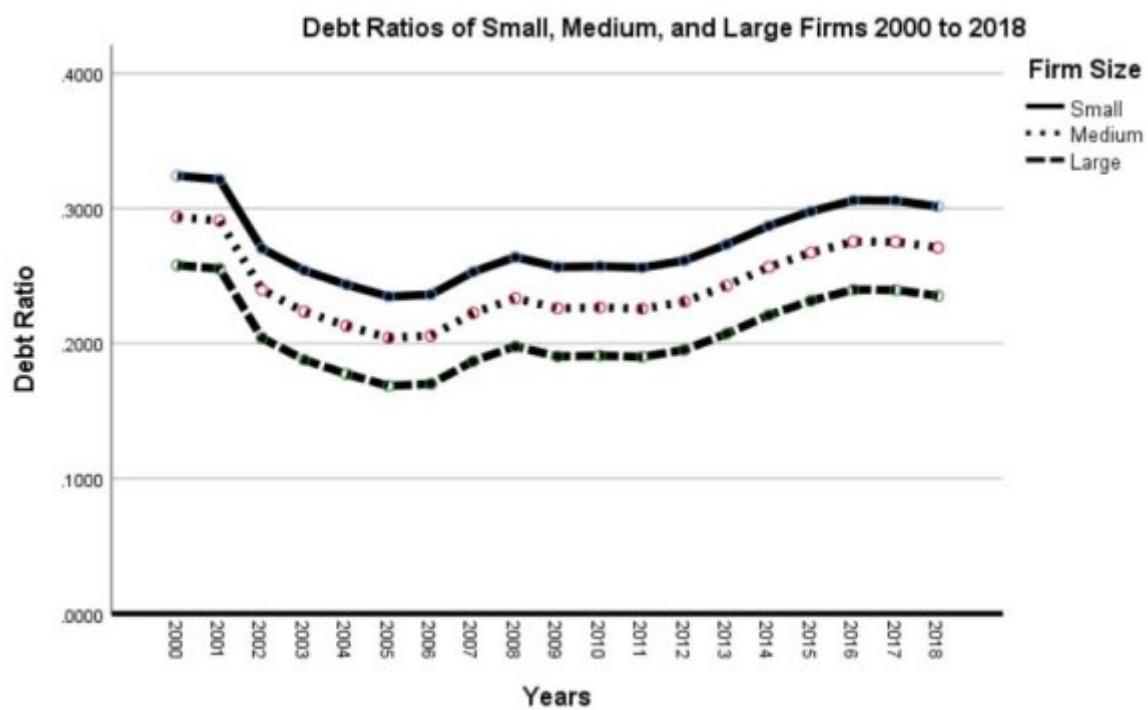


Figure 2: Figure 2 :



3

Figure 3: Figures 3 A

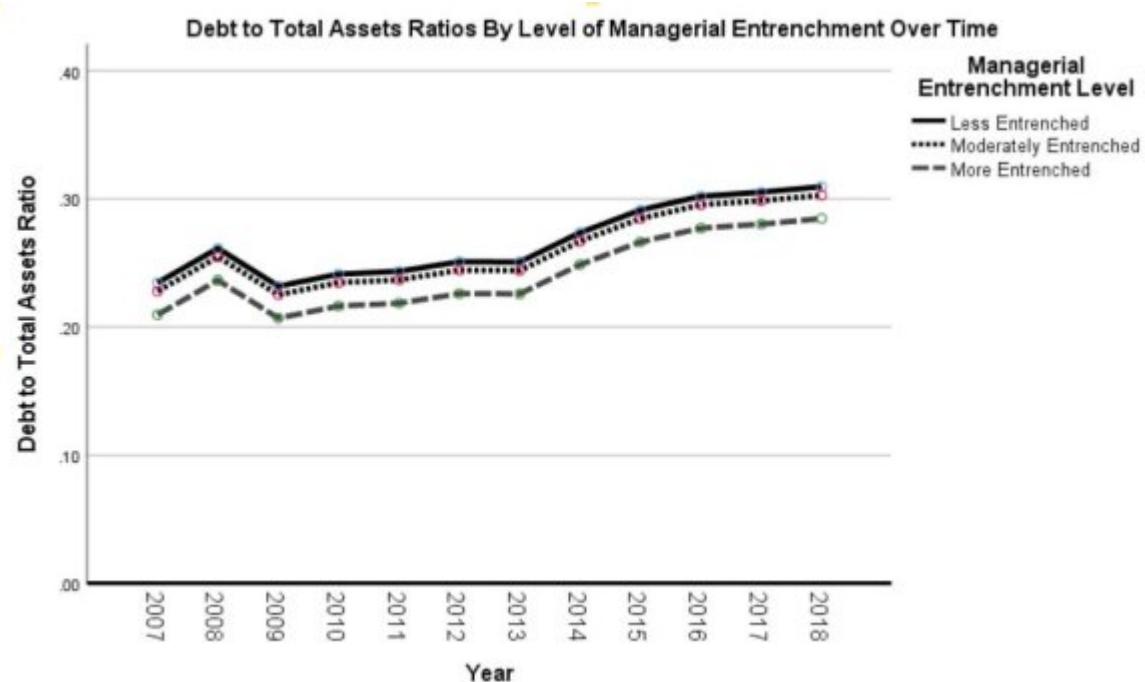


Figure 4:

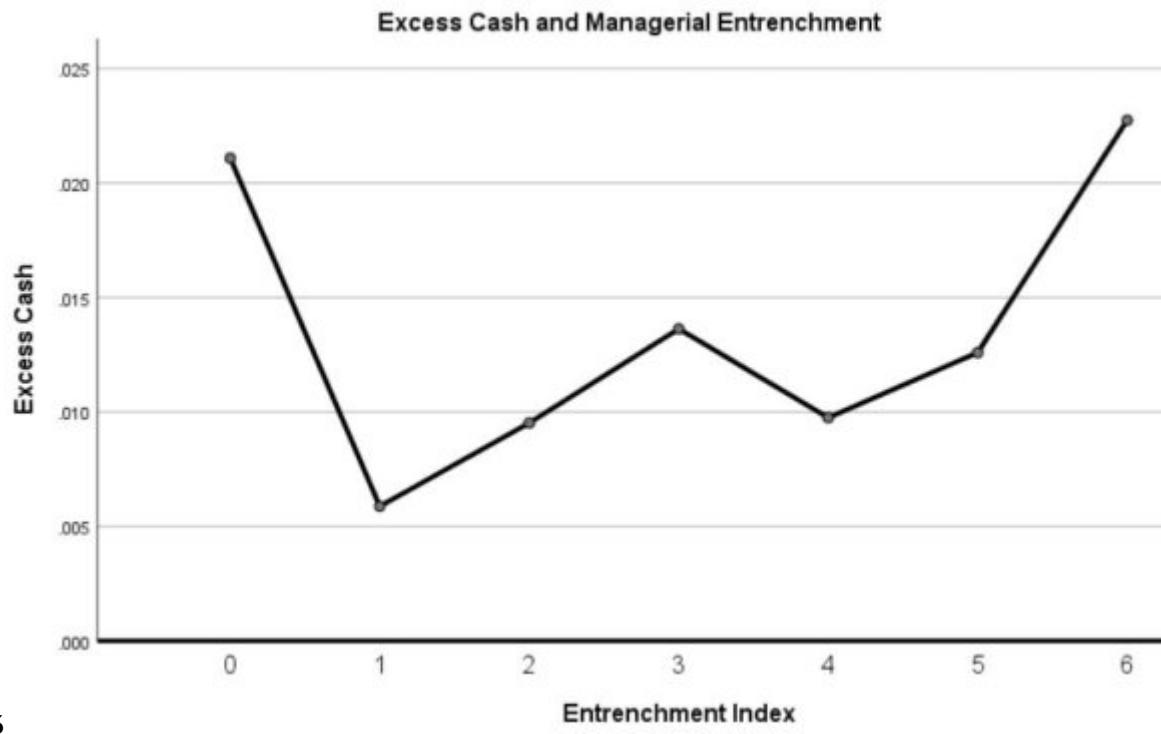


Figure 5: Figure 5 :

1

Weighted average debt maturity is the proportion of short, medium or long-term debt as a measure of debt maturity (Titman and Wessels 1988).

FIXED Year fixed effects (YFE) are dummy EF- variables to control for heterogeneity FECIfESyear trends over the sample period. [FE] Firm fixed effects (FFE) are dummy variables to control for heterogeneity in firm's characteristics.

*

Main proxy

Average debt maturity

Alternative proxy

n.a. Short versus long-term debt. Short versus medium versus long-term debt.

n.a.

Data sources: Compustat

n.a. YFE, FFE, or IFE are individually n.a. and collectively included in the regression models to control for heterogeneity in these fixed effects. I do not include both FFE and IYE in the same regression since firms

Figure 6: Table 1 :

Description	N			Mean		SD			(Unequ Small v	
	Small	Medium	Large	Small	Medium Large	Small	Medium	Large		
Debt to equity ratio	4,334	4,335	8,669	2.99	1.78	1.53	72.58	34.99	9.11	Medium 0.99
Debt to total capital	4,334	4,335	8,669	0.33	0.34	0.39	0.25	0.23	0.21	-2.83
Average debt maturity	4,334	4,335	8,669	3.84	4.18	4.42	1.26	1.11	0.86	-13.43
Debt maturity category 2	4,334	4,335	8,669	1.70	1.82	4.42	0.46	0.39	0.86	-12.97
Debt maturity category 3	4,334	4,335	8,669	1.93	2.10	2.18	0.72	1.11	0.86	-11.25
CEO Pay Slice	4,334	4,335	8,669	0.39	0.40	0.41	0.12	0.12	0.11	-4.99
E-index	1,716	2,607	6,076	3.95	4.07	3.96	1.07	1.00	0.93	-3.77
DME4 Index	1,716	2,607	6,076	1.11	1.15	1.29	0.47	0.53	0.62	-2.36
DME6 Index	1,716	2,607	6,076	2.71	2.86	3.08	0.82	0.80	0.80	-6.01
Residual excess cash	2,792	2,706	5,384	-0.04	0.00	0.02	0.61	0.53	0.45	-2.56
Median excess cash	4,334	4,335	8,669	0.02	0.02	0.01	0.11	0.10	0.09	-0.61
Retained earnings/total assets	4,334	4,335	8,669	-0.25	0.14	0.22	1.80	1.04	1.23	-12.56
Description	N			Mean		SD			(Unequ Pre vs.	
	Pre-crisis	Crisis	Post crisis	Pre-crisis	Crisis	Post crisis	Pre-crisis	Crisis		
Debt to equity ratio	4,101	1,076	12,161	1.80	1.71	2.03	48.65	12.61	39.51	Crisis 0.11
Debt to total capital	4,101	1,076	12,161	0.33	0.37	0.37	0.21	0.23	0.23	-4.63
Average debt maturity	4,101	1,076	12,161	4.28	4.16	4.20	1.07	1.07	1.06	3.30
Debt maturity category 2	4,101	1,076	12,161	1.84	1.83	4.20	0.36	0.37	1.06	0.82
Debt maturity category 3	4,101	1,076	12,161	2.15	2.08	2.08	0.66	1.07	1.06	2.97
CEO Pay Slice	4,101	1,076	12,161	0.39	0.39	0.41	0.12	0.12	0.12	-0.46
E-index	617	680	9,102	3.64	3.40	4.05	1.29	1.26	0.90	3.28
DME4 Index	617	680	9,102	1.24	1.25	1.22	0.61	0.61	0.58	-0.38
DME6 Index	617	680	9,102	2.54	2.54	3.03	1.00	1.02	0.77	0.08
Residual excess cash	2,741	696	7,445	-0.05	-0.02	0.02	0.50	0.57	0.52	-1.37
Median excess cash	4,101	1,076	12,161	0.00	0.01	0.01	0.09	0.10	0.10	-2.51
Retained earnings/total assets	4,101	1,076	12,161	0.14	0.09	0.06	0.99	1.09	1.50	1.53

3

		Mediu	m	.20***	(7.48))	n.a.	.01**	(2.29)	n.s.	n.s.	2	Yea
C	Var. =	Large		.12***	(10.46		n.a.	.00	.00	(1.47)	n.s.	n.a.	
		Excess	Small	.10***	(3.92)		n.a.			(1.09)	n.a.	n.a.	
			Cash										
PaneDep.	1 2			.090***	(15.92)		n.a.	.002*	(1.76)	n.a.	n.a.		Volu
B	Var. =	3 4		.107***	(14.03)		n.a.	.002**	(1.96)	n.a.	n.a.		XXI
		Excess		.098***	(16.39)		n.a.	n.a.	(.54)	n.a.	.004***		Issu
			Cash	.10***	(14.22)		n.a.	.000		n.a.	n.a.		Vers
) C
PaneDep.	1 2			.087***	(19.78)	(18.90)		(1.17)	n.a.		n.a.	(3.57)	Glo
A	Var. =	3 4		.086**	*		.007	(1.14)	n.a.		n.a.	n.a.	Jou
		Excess		.077***	(16.24)		.008	(1.34)	n.a.		n.a.	n.a.	Man
			Cash	.101***	(16.76)		n.a.	n.a.		.005***		n.a.	men
													Bus
													Res
		Variables	Intercept					CEO		E-		DME4	DME6
								Pay		index		Index	Index
								Slice					

2DME 4 or DME 6 each is significant predictor of excess cash for firms in small or large ($p < .05$), but not medium market value groups.

Figure 8: Table 3 :

4

.059
.046
.099
.044
.046
.041
.036
.044
.030
.028
.028

3E-index is significant for firms in small ($p < .05$), but not medium or large market value groups ($p > .05$). "n.a." means variable not included in the model. 4 DME 4 and DME 6 each significantly negatively explain variance in leverage ratio. "n.s." means variable is included in the model but it is not significant.

Figure 9: Table 4 :

Figure 10: This table reports results of testing hypothesis 2 by regressing on financial leverage (debt to total assets) managerial entrenchment (E-index, DME4 and DME6). Control variables and fixed effects for

4	-	(-	-.00	(-	.n.a.	-	(-	.10***	(23.80)	.06***	(4.70)		
	.168***	11.66)		.88).			.01**	3.06)					
PanElec.	2	-	(-	-	(-	-	(-	n.a.	.10***	(23.73)	.06***	(4.78)	
B Var.	3	.166***	11.74)	.00**	2.03)	.01**	2.11)	n.a.	.10***	(23.72)	.06***	(4.77)	
=	-	(-	-	(-	-	(-							
Debt		.166***	11.44)	.00**	2.03)	.01**	2.11)						
Ra-													
ratio													
PanElec.	4	.089***	(9.73)	-.00	(-	n.a.	(-	.00***	(3.23)	.00	(1.39)	- (
A Var.	1	-	(-	.00	.15)	-	3.62)	n.a.	.11***	.80)	.07***	(5.26)	.00 .47
=	3	.107***	7.71)	.00	(.89)	.01***	(2.97)	n.a.	-.00	(23.76)	.01	(1.32)	
Ex-	2	.087***	(9.46)	.00	(.85)	.01**	(2.65)	n.a.	-.00	(-	.01	(1.19)	
cess	1	.098***	(10.94)	.00	(.71)	.00**	(3.34)	n.a.	-.00	.71)	.01	(.94)	
Cash		.081***	(9.36)		(.59)	.01**			(-				
									.74)				
									(-				
									.89)				

Variable	Intercept	E-Index	DME4	DME6	Debt	CEO	CEO
					ma- tu- rity	pay slice	du- al- ity

Figure 11:

.00*(1.71)	(-	.02***	(20.68)	.00***	(10.51)	.02***	(3.38)	-	(-	n.a.	Y	Y	1	
.00**	2.84)								.38***	20.22)				
.00*(1.72)	(-	.02***	(20.57)	.00*	(10.52)	.02***	(3.30)	-	(-	n.a.	Y	Y	1	
.00**	2.84)								.38***	20.22)				
00*(1.72)	(-	.02***	(20.57)	.00***	(10.53)	.02***	(3.31)	-	(-	n.a.	Y	N	1	
.00**	2.85)								.38***	20.23)				
-	(-	.02***	(22.05)	.00***	(10.90)	.01***	(2.36)	-	(-	n.a.	N	N	1	
.00**	2.76)								.35***	18.38)				
.00	(-	-	(-	.00**	(2.25)	-	(-	.11***	(9.27)	-.00**	(-	Y	Y	2
1.23)	.01***	12.75)				.01***	3.19)					2.34)		
.00	(-	-	(-	.00*	(2.23)	-	(-	.01***	(9.27)	-.00**	(-	Y	Y	2
1.21)	.01***	12.69)				.01***	3.12)					2.34)		
00	-.94	-	(-	.00**	(2.17)	-	(-	.11***	(9.37)	-.00**	(-	Y	N	2
	.00***	12.69)				.01***	3.31)					2.25)		
.00	(-	-	(-	.00**	(1.95)	-	(-	.10***	(8.65)	-.00**	(-	N	N	2
.96)	.01***	13.46)				.008***	2.90)					2.24)		
CEO	Log		Market		Asset		Return		Debt		Year	Firm		
share	Total		to		Tan-		on		to		Fixed	Fixed		
owned	As-		Book		gibil-		As-		Eq-		Ef-	Ef-		
	sets				ity		sets		uity		fects	fects		
											(Debt/Equity)			

Figure 12:

Figure 13: Table 5 :

489 [Hansen et al. ()] 'A Bayesian operationalization of the resource-based view'. M H Hansen , L T Perry , C S
490 Reese . *Strategic Management Journal* 2004. 25 (13) p. .

491 [Gombola and Ketz ()] 'A note on cash flow and classification patterns of financial ratios'. M J Gombola , J E
492 Ketz . *Accounting Review* 1983. p. .

493 [Bowman and Toms ()] 'Accounting for competitive advantage: The resource-based view of the firm and the
494 labor theory of value'. C Bowman , S Toms . *Critical Perspectives on Accounting* 2010. 21 (3) p. .

495 [Jensen ()] 'Agency costs of free cash flow, corporate finance, and takeovers'. M C Jensen . *The American economic
496 review* 1986. 76 (2) p. .

497 [Denis et al. ()] 'Agency theory and the influence of equity ownership structure on corporate diversification
498 strategies'. D J Denis , D K Denis , A Sarin . *Strategic Management Journal* 1999. 20 (11) p. .

499 [Eisenhardt ()] *Agency theory: An assessment and review*, K M Eisenhardt . 1989. Academy of management
500 review. 14 p. .

501 [Ferris et al. ()] 'An agency analysis of the effect of longterm performance plans on managerial decision making'.
502 S P Ferris , R Kumar , R Sant , P R Sopariwala . *The Quarterly Review of Economics and Finance* 1998. 38
503 (1) p. .

504 [Charitou and Ketz ()] 'An empirical examination of cash measures'. A Charitou , E Ketz . *Abacus* 1991. 27 (1)
505 p. .

506 [Jiraporn et al. ()] 'Analyst following, staggered boards, and managerial entrenchment'. P Jiraporn , P Chin-
507 trakarn , Y S Kim . *Journal of Banking & Finance* 2012. 36 (11) p. .

508 [Chakraborty and Sheikh ()] 'Antitakeover amendments and managerial entrenchment: new evidence from
509 investment policy and CEO compensation'. A Chakraborty , S Sheikh . *Quarterly Journal of Finance and
510 Accounting* 2010. p. .

511 [Chakraborty et al. ()] 'Antitakeover provisions, managerial entrenchment and firm innovation'. A Chakraborty
512 , Z Rzakhanov , S Sheikh . *Journal of Economics and Business* 2014. 72 p. .

513 [Available Small Business Advisory Committee (SBAC) ()] 'Available'. [https://www.fasb.org/Page/
514 PageContent?PageId=/about-us/advisory-groups/sbac.Html&bcpath=tf](https://www.fasb.org/Page/PageContent?PageId=/about-us/advisory-groups/sbac.Html&bcpath=tf) Small Business
515 Advisory Committee (SBAC), 2022. (Financial Accounting Standards Board)

516 [Available online at Glossary of Accounting Standards Codification (ASC) ()] 'Available online at'. www.fasb.org
517 *Glossary of Accounting Standards Codification (ASC)*, 2019. (Financial Accounting Standards Board)

518 [Black ()] *Bloopers: How (Mostly) Smart People Get Causal Inference Wrong, Slides for his workshop on causal
519 inference*, B S Black . 2010.

520 [Bates et al. ()] 'Board classification and managerial entrenchment: Evidence from the market for corporate
521 control'. T W Bates , D A Becher , M L Lemmon . *Journal of Financial Economics* 2008. 87 (3) p. .

522 [Byoun ()] S Byoun . *Financial flexibility and capital structure decision*. Available at SSRN 1108850, 2011.

523 [DeAngelo and DeAngelo ()] *Capital structure, payout policy, and financial flexibility*. Marshall school of business
524 working paper no. FBE, H DeAngelo , L DeAngelo . 2007. p. .

525 [Faleye ()] 'Cash and corporate control'. O Faleye . *The Journal of Finance* 2004. 59 (5) p. .

526 [Jiang and Lie ()] 'Cash holding adjustments and managerial entrenchment'. Z Jiang , E Lie . *Journal of
527 Corporate Finance* 2016. 36 p. .

528 [Faleye ()] 'Classified boards, firm value, and managerial entrenchment'. O Faleye . *Journal of Financial
529 Economics* 2007. 83 (2) p. .

530 [Gompers et al. ()] 'Corporate governance and equity prices'. P Gompers , J Ishii , A Metrick . *The quarterly
531 journal of economics* 2003. 118 (1) p. .

532 [Hartford et al. ()] 'Corporate governance and firm cash holding'. J Hartford , S Mansi , W Maxwell . *Journal
533 of Finance* 2008. 87 (3) p. .

534 [Dittmar and Mahrt-Smith ()] 'Corporate governance and the value of cash holdings'. A Dittmar , J Mahrt-Smith
535 . *Journal of financial economics* 2007. 83 (3) p. .

536 [Giroud and Mueller ()] 'Corporate governance, product market competition, and equity prices'. X Giroud , H
537 M Mueller . *The Journal of Finance* 2011. 66 (2) p. .

538 [Fenn and Liang ()] 'Corporate payout policy and managerial stock incentives'. G W Fenn , N Liang . *Journal
539 of financial economics* 2001. 60 (1) p. .

540 [Benlemlih ()] 'Corporate social responsibility and dividend policy'. M Benlemlih . *Research in International
541 Business and Finance* 2019. 47 p. .

542 [Denis and McKeon ()] 'Debt financing and financial flexibility evidence from proactive leverage increases'. D J
543 Denis , S B McKeon . *The Review of Financial Studies* 2012. 25 (6) p. .

544 [Johnson ()] 'Debt maturity and the effects of growth opportunities and liquidity risk on leverage'. S A Johnson
545 . *The Review of Financial Studies* 2003. 16 (1) p. .

546 [Harris and Hampton ()] 'Director co-option and the cash conversion cycle'. O Harris , J Hampton . *Journal of*
547 *Corporate Accounting & Finance* 2022. 33 (2) p. .

548 [Edlin and Stiglitz ()] 'Discouraging rivals: Managerial rent-seeking and economic inefficiencies'. A S Edlin , J E
549 Stiglitz . *The American Economic Review* 1995. 85 (5) p. .

550 [Farre-Mensa and Ljungqvist ()] 'Do measures of financial constraints measure financial constraints?'. J Farre-
551 Mensa , A Ljungqvist . *The Review of Financial Studies* 2016. 29 (2) p. .

552 [Hsu et al. ()] 'Does accounting conservatism mitigate the shortcomings of CEO overconfidence?'. C Hsu , K E
553 Novoselov , R Wang . *The Accounting Review* 2017. 92 (6) p. .

554 [De Vito and Gómez ()] 'Estimating the COVID-19 cash crunch: Global evidence and policy'. A De Vito , J P
555 Gómez . *Journal of Accounting and Public Policy* 2020. 39 (2) p. 106741.

556 [Carvalho Zinga et al. ()] 'Family Involvement, agency cost of debt financing, and small firm performance:
557 research agenda'. De Carvalho Zinga , M T Augusto , M A G Ramos , ME G . *European Journal of Family*
558 *Business* 2013. 3 (1) p. .

559 [Denis ()] 'Financial flexibility and corporate liquidity'. D J Denis . *Journal of corporate finance* 2011. 17 (3) p. .

560 [Arslan-Ayaydin et al. ()] 'Financial flexibility, corporate investment and performance: evidence from financial
561 crises'. Ö Arslan-Ayaydin , C Florackis , A Ozkan . *Review of Quantitative Finance and Accounting* 2014. 42
562 (2) p. .

563 [Ang and Smedema ()] 'Financial flexibility: Do firms prepare for recession?'. J Ang , A Smedema . *Journal of*
564 *corporate finance* 2011. 17 (3) p. .

565 [Cremers and Nair ()] 'Governance mechanisms and equity prices'. K M Cremers , V B Nair . *The Journal of*
566 *Finance* 2005. 60 (6) p. .

567 [Chintrakarn et al. ()] 'How do powerful CEOs view dividends and stock repurchase? Evidence from the CEO
568 pay slice (CPS)'. P Chintrakarn , P Chatjuthamard , S Tong , P Jiraporn . *International Review of Economics*
569 & *Finance* 2018. 58 p. .

570 [Hess and Immenkötter ()] *How much is too much? Debt Capacity and Financial Flexibility. Debt Capacity and*
571 *Financial Flexibility*, D Hess , P Immenkötter . 2014.

572 [International Financial Reporting Standards, 2023. IFRS for Small and Medium-Sized Entities] https://www.ifrs.com/overview/IFRS_SMES/IFRS_SMES_FAQ.html *International Financial Report-*
573 *ing Standards, 2023. IFRS for Small and Medium-Sized Entities*, (#:~:text=IFRS%20for%20S
574 MEs%20is%20a%20self%2Dcontained%20global%20accounting%20and. %2D%20and%20medium%2D
575 sized%20entities)

576 [Jones et al. ()] E Jones , H Li , O Adamolekun . *Excess cash holdings, stock returns, and investment organicity:*
577 *evidence from uk investment announcements*. Abacus, 2022.

578 [Lee et al. ()] 'Management forecast accuracy and CEO turnover'. S Lee , S R Matsunaga , C W Park . *The*
579 *Accounting Review* 2012. 87 (6) p. .

580 [Berger et al. ()] 'Managerial entrenchment and capital structure decisions'. P G Berger , E Ofek , D L Yermack
581 . *The journal of finance* 1997. 52 (4) p. .

582 [Ji et al. ()] 'Managerial entrenchment and capital structure: The effect of diversification'. S Ji , D C Mauer , Y
583 Zhang . *Journal of Corporate Finance* 2019. p. 101505.

584 [Kesten ()] 'Managerial entrenchment and shareholder wealth revisited: Theory and evidence from a recessionary
585 financial market'. J B Kesten . *BYU L. Rev* 2010. p. 1609.

586 [Datta et al. ()] 'Managerial stock ownership and the maturity structure of corporate debt'. S Datta , M Iskandar-
587 Datta , K Raman . *The Journal of Finance* 2005. 60 (5) p. .

588 [Cecchini et al. ()] 'Multinational transfer pricing: A transaction cost and resource-based view'. M Cecchini , R
589 Leitch , C Strobel . *Journal of Accounting Literature* 2013. 31 (1) p. .

590 [DeAngelo and Masulis ()] 'Optimal capital structure under corporate and personal taxation'. H DeAngelo , R
591 Masulis . *Journal of Financial Economics* 1980. 8 p. .

592 [Blair ()] 'Ownership and control: Rethinking corporate governance for the twenty-first century'. M M Blair .
593 *Long Range Planning* 1996. 29 (3) p. .

594 [Ariff et al. ()] 'Political Stability, Board Tenure and Corporate Cash Holding'. A M Ariff , K A Kamarudin , A
595 Jaafar . *Journal of International Accounting Research* 2022.

596 [Chintrakarn et al. ()] 'Powerful CEOs and capital structure decisions: evidence from the CEO pay slice (CPS)'.
597 P Chintrakarn , P Jiraporn , M Singh . *Applied Economics Letters* 2014. 21 (8) p. .

599 [Hoberg et al. ()] 'Product market threats, payouts, and financial flexibility'. G Hoberg , G Phillips , N Prabhala
600 . *The Journal of Finance* 2014. 69 (1) p. .

601 [Diamond ()] 'Reputation acquisition in debt markets'. D W Diamond . *Journal of political Economy* 1989. 97
602 (4) p. .

603 [Fama and Jensen ()] 'Separation of ownership and control'. E F Fama , M C Jensen . *The journal of law and
604 Economics* 1983. 26 (2) p. .

605 [Daniel et al. ()] *Sources of financial flexibility: Evidence from cash flow shortfalls*, N D Daniel , D J Denis , L
606 Naveen . 2010. Drexel University.

607 [Bebchuk et al. ()] 'The CEO pay slice'. L A Bebchuk , K M Cremers , U C Peyer . *Journal of financial Economics*
608 2011. 102 (1) p. .

609 [Bugeja et al. ()] 'The CEO pay slice: Managerial power or efficient contracting? Some indirect evidence'. M
610 Bugeja , Z Matolcsy , H Spiropoulos . *Journal of Contemporary Accounting & Economics* 2017. 13 (1) p. .

611 [Bonaimé et al. ()] 'The cost of financial flexibility: Evidence from share repurchases'. A A Bonaimé , K W
612 Hankins , B D Jordan . *Journal of Corporate Finance* 2016. 38 p. .

613 [Kumar and Sopariwala ()] 'The effect of adoption of long-term performance plans on stock prices and accounting
614 numbers'. R Kumar , P R Sopariwala . *Journal of Financial and Quantitative Analysis* 1992. 27 (4) p. .

615 [Florackis and Ozkan ()] 'The impact of managerial entrenchment on agency costs: An empirical investigation
616 using UK panel data'. C Florackis , A Ozkan . *European Financial Management* 2009. 15 (3) p. .

617 [Emery and Cogger ()] 'The measurement of liquidity'. G W Emery , K O Cogger . *Journal of accounting research*
618 1982. p. .

619 [Gamba and Triantis ()] 'The value of financial flexibility'. A Gamba , A Triantis . *The journal of finance* 2008.
620 63 (5) p. .

621 [Jensen et al. ()] 'Theory of the firm: Managerial behavior, agency costs and ownership structure'. Michael C
622 Jensen , H William , Meckling . *Journal of Financial Economics* 1976. 3 p. .

623 [Easterbrook ()] 'Two agency-cost explanations of dividends'. F H Easterbrook . *The American economic review*
624 1984. 74 (4) p. .

625 [Ampofo ()] *Two Essays on Capital Structure Decisions of the Firm: An Empirical Analysis of the Impact of
626 Managerial Entrenchment and Ethical Corporate Citizenship*. Doctoral dissertation, A A Ampofo . 2021.
627 Virginia Tech.

628 [Bebchuk et al. ()] 'What Matters in Corporate Governance? 22'. L Bebchuk , A Cohen , A Ferrell . *Rev. Fin.
629 Stud* 2009. 783 p. 823.

630 [Bates et al. ()] 'Why to US Firms Hold Much More Cash than They Used To?'. T Bates , K Kahle , R Stulz .
631 *The Journal of Finance* 2016. 1985-2021. 64.