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J. Finan. Intermediation

journal homepage: www.elsevier.com/locate/jfi

CEO power, government monitoring, and bank dividends [☆]

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ARTICLE INFO

Article history:

Received 17 April 2014

Available online xxx

Keywords:

CEO power

Dividends

Entrenchment

Government monitoring

Banks

ABSTRACT

We investigate the role of CEO power and government monitoring on bank dividend policy for a sample of 109 European listed banks for the period 2005–2013. We employ three main proxies for CEO power: CEO ownership, CEO tenure, and unforced CEO turnover. We show that CEO power has a negative impact on dividend payout ratios and on performance, suggesting that entrenched CEOs do not have the incentive to increase payout ratios to discourage monitoring from minority shareholders. Stronger internal monitoring by board of directors, as proxied by larger ownership stakes of the board members, increases performance but decreases payout ratios. These findings are contrary to those from the entrenchment literature for non-financial firms. Government ownership and the presence of a government official on the board of directors of the bank, also reduces payout ratios, in line with the view that government is incentivized to favor the interest of bank creditors before the interest of minority shareholders. These results show that government regulators are mainly concerned about bank safety and this allows powerful CEOs to distribute low payouts at the expense of minority shareholders.

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[☆] We thank Charles Calomiris (the editor), Sanjai Bhagat (the referee), Afrasiab Mirza, all participants at the AIDEA Bicentenary conference and seminar participants at Xi'an Jiaotong Liverpool University and Nottingham University Business School China.

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1. Introduction

Powerful CEOs can invest in non-value maximizing projects to pursue managerial objectives including empire-building, expense preference behavior and the like.¹ As such, shareholders monitor CEOs in order to prevent such expropriation, but this can be costly if ownership is dispersed (Shleifer and Vishny, 1986). A partial solution to this problem is provided by dividend payouts. These can act as a monitoring device for shareholders because they reduce the amount of cash that CEOs can dissipate in non-value maximizing projects (Jensen, 1986) and also increase the frequency of CEO scrutiny from outside investors (Easterbrook, 1984).

The U.S. literature related to non-financial firms documents that CEO entrenchment leads to higher dividend payout ratios (Hu and Kumar, 2004; Elyasani and Zhang, 2013). This behavior is ascribed to the incentive of entrenched CEOs to discourage minority shareholder monitoring. Where corporate governance is weak dividends act as a pre-commitment device: a promise to regularly pay cash to shareholders reduces agency costs since it reduces the likelihood that these funds will be wasted on projects that increase the private benefits of CEOs without maximizing shareholder value (John and Knyazeva, 2006). However, the incentive to pay larger dividends also depends on whether entrenched CEOs can fend off take-over threats (Stulz, 1988), and on the degree to which monitoring from the board of directors is effective (Boumosleh and Cline, 2015). A possible reason for weak shareholder monitoring and low dividend payouts relates to the protection of the rights of minority shareholders. In their seminal paper, La Porta et al. (2000) provide evidence that in countries with stronger minority rights payout ratios are higher, suggesting that high payout ratios are an outcome, rather than a substitute, of strong minority rights. Consistent with this hypothesis, Adjaoud and Ben-Amar (2010) find a positive link between the quality of corporate governance and payout ratios.² There is evidence also that dividends dampen expropriation in group-affiliated firms (Faccio et al., 2001), as investors anticipate the risk of expropriation from the controlling shareholder and require higher payouts. Moreover, shareholders in countries with strong creditor rights tend to be more sensitive to possible expropriation from insiders, suggesting that firm insiders set dividend policies with the objective to minimize agency costs of both equity and debt (Shao et al., 2013). This is an important finding – in equilibrium, payout ratios should reflect the monitoring incentives of *all* stakeholders.

Building upon this literature, we aim to investigate the relationship between CEO power and dividend payouts in the banking sector. This is of interest because unlike non-bank firms, the objectives of managers and shareholders can conflict with those of other powerful stakeholders such as depositors and government regulators. Bank executives are subject to the scrutiny of different stakeholders. For instance, Schaeck et al. (2012) provide evidence of shareholder discipline for risky institutions, while there is no evidence of such discipline from debt holders and regulators. Monitoring by minority shareholders may well influence CEO behavior less than oversight from the government. In this case, the government may favor lower payouts since this could improve bank capital positions, resulting in safer institutions. Bank safety is a primary concern for the government, because bank failures result in long-lasting negative effects on economic growth (Kupiec and Ramirez, 2013).

Because of government monitoring, the relation between CEO power and dividend payouts in banking is not necessarily positive. Banks with entrenched CEOs may have relatively low payout ratios to deter greater government scrutiny. Dividend policy can shape the features of agent-principal issues in banking and as such is worthy of further investigation.

Characteristics of CEO power and dynamics are strongly intertwined with the role of bank corporate governance.³ This topic has recently drawn attention from academics and policy makers alike

¹ Alternatively, bank CEOs can decide not to take projects with positive Net Present Value (NPV) (Vallascas and Hagedorff, 2013).

² Other recent literature, however, finds that dividends may act as a substitute for strong minority rights (De Cesari, 2012), and can mitigate the conflict between strong and weak stakeholders (Böhren et al., 2012). This is in-line with the 'substitute model' for dividends. Dividends are paid by insiders to establish a good reputation and reduce conflicts with minority shareholders (La Porta et al., 2000). According to the 'outcome model', dividends are the 'outcome' of regulation that protects the rights of minority shareholders (La Porta et al., 2000).

³ Corporate governance can be defined as 'the allocation of authority and responsibilities, i.e. the manner in which the business and affairs of a bank are governed by its board and senior management' (BIS, 2010, p. 5).

(Erkens et al., 2012; Arnaboldi and Casu, 2011), because poor corporate governance can increase the probability of bank failure,⁴ with potentially large negative externalities due to contagion risk, disruption of the payment system, and costs deriving from deposit insurance payouts (BIS, 2010; Mülbert, 2010).⁵

Academic and policy interest in bank dividend policy has increased because of the importance of retaining earnings for bank soundness, especially during a recessionary period (Financial Stability Board, 2009; Srivastav et al., 2013; Abreu and Gulamhussen, 2013; Hirtle, 2014). Recent developments in banking regulation also impose restrictions on dividends for undercapitalized banks (Caruana, 2010). This is necessary because banks can transfer default risk to their creditors and (when bailouts take place) to the taxpayer, a phenomenon known as risk-shifting (Acharya et al., 2011; Kanas, 2013; Onali, 2014). For this reason, the government has incentives to monitor bank dividend policy. While there are studies that investigate bank CEO incentives (Hagendorff and Vallascas, 2011), and the link between government ownership and bank performance (Shen and Lin, 2012) and risk-taking (Iannotta et al., 2013), so far the literature has neglected the impact of government monitoring on bank dividend policy, and how it interacts with CEO power and incentives. In this paper, we intend to fill this important gap in the literature.

We investigate the association between CEO power, internal monitoring from board of directors, government monitoring, and dividend payouts for banks operating in 15 European Union (EU-15) member states. We restrict our analysis to EU countries given the more uniform bank regulatory framework. Three main proxies for CEO power are investigated: CEO ownership, CEO tenure, and unforced CEO turnover (that is, turnover unrelated to CEO dismissal). Internal monitoring from the board of directors is proxied using director ownership, which has been found to be positively related to firm performance in the non-financial literature. While CEO power proxies are expected to be negatively correlated with performance (the CEO becomes entrenched as she gains more power in the decision-making process of the bank), internal monitoring proxies are expected to be positively correlated with performance. Our modeling approach also controls for a variety of determinants of dividend payout ratios. Unlike the previous literature on bank dividend policy, we can exploit data on government monitoring at the bank level in terms of ownership and the presence of government officials represented on bank board's so as to see how the authorities monitor dividend policy.

Our study presents various innovations. First, we use a new hand-collected dataset on bank ownership structure and corporate governance for 109 listed banks operating in EU-15 countries and combine this sample with data from Bankscope, Bloomberg, Datastream, Factset, SNL financial, and LexisNexis. Second, we employ Instrumental Variables (IV) estimation to elicit the impact of CEO power on bank payout ratios. In particular, we employ a dummy identifying CEOs that are also among the founders of the bank as an instrument for CEO ownership, unforced turnovers, and CEO tenure. Being a founder of the bank is positively correlated with CEO ownership and CEO tenure and negatively correlated with unforced CEO turnovers, satisfying the relevance restriction. Moreover, since the CEO does not have to decide every year to be a founder, this variable is clearly exogenous to dividend policy decisions. Finally, following Hirtle (2014), we also consider the effect of share repurchases.

Our main finding is that powerful CEOs tend to be detrimental for bank performance and distribute lower dividend payouts. In particular, we find a negative relation between CEO ownership and payout ratios (performance) and between CEO tenure and payout ratios (performance), and a positive relation between unforced CEO turnover and payout ratios (performance). Stronger internal monitoring from the board of directors, as proxied by the average shareholding of board members, improves performance and decreases payout ratios. These findings suggest that entrenched bank CEOs tend to distribute lower payout ratios, and stronger internal monitoring from board members decreases

⁴ Since CEOs tend to be risk-averse (Smith and Stulz, 1985), entrenchment should reduce bank risk-taking. Entrenchment can thus reduce the probability of bank default and, in the presence of government-sponsored safety nets (such as deposit insurance), may benefit the public as a whole. Recent contributions provide evidence of a nexus between CEO power and bank risk-taking (Pathan, 2009), and CEO compensation incentives and bank risk-taking (Hagendorff and Vallascas, 2011). Fahlenbrach and Stulz (2011) find that banks with CEOs whose incentives were better aligned to those of shareholders did not perform better during the crisis. Their findings are at odds with the view that a lack of alignment between CEO and shareholder incentives was a root cause of the financial crisis.

⁵ For these reasons, bank directors should comply with higher and broader standards of care (Macey and O'Hara, 2003).

payout ratios, in contrast with what has been found in the non-financial literature. Moreover, when the government is a large owner or there is a government official on the bank board, payout ratios are lower, while performance does not change. These results suggest that monitoring from the government is detrimental to minority shareholders because the government is incentivized to put bank safety and the interests of creditors before the interest of minority shareholders. The remainder of the paper is structured as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 describes the methodology and the data sample. Section 4 reports the results and robustness checks and Section 5 summarizes and concludes.

2. Literature review and hypotheses

This section briefly reviews the literature on dividend policy of nonfinancial firms and banks.

2.1. Dividend policy and CEO entrenchment

Dividend policy is one of the cornerstones of financial economics and an extensive literature has evolved since Miller and Modigliani's (1961) seminal work on the irrelevance of dividend policy. In the presence of taxes, a zero-dividend policy would be optimal (Farrar and Selwyn, 1967; Brennan, 1970). Yet, firms do pay dividends.

Subsequent studies have sought to test Miller and Modigliani's proposition to see if the results derived from theory hold in real financial markets (where the assumptions of perfect information, no tax and agency costs, typically do not hold) (Lease et al., 2000). Empirical literature spans an array of areas covering dividend policy and how it relates to: tax clienteles (Elton and Gruber, 1970), agency costs (Easterbrook, 1984), signalling effects (Aharony and Swary, 1980), life-cycle factors (DeAngelo et al., 2006, 2008), catering incentives (Baker and Wurgler, 2004), and behavioral factors (Turner et al., 2013).

One branch of the literature focusses on the relation between managerial entrenchment and dividend policy. The entrenchment hypothesis argues that managers who fear disciplinary actions tend to pay higher dividends as a protection against such actions (Zwiebel, 1996; Fluck, 1999; Allen et al., 2000). This hypothesis is grounded in the principle that dividends are paid to decrease agency costs between managers and shareholders (Easterbrook, 1984; Jensen, 1986). By paying dividends, managers increase the utility of outside shareholders and decrease monitoring incentives. Literature on non-financial firms typically support the entrenchment hypothesis (Hu and Kumar, 2004; Elyasani and Zhang, 2013). However, the incentive to pay dividends as a monitoring device is negligible for CEOs that can fend off take-over threats (Stulz, 1988). In general, entrenched CEOs are less incentivized to pay large amounts of dividends in the absence of monitoring from minority shareholders (Hu and Kumar, 2004; Elyasani and Zhang, 2013), and when shareholder rights are weak (La Porta et al., 2000; Alzahrani and Lasfer, 2012). On the other hand, in the presence of laws that insulate managers from takeovers, dividend payout ratios fall (Francis et al., 2011).

2.2. Dividend policy in banking: The role of government monitoring

In banking dividend policy is an under-researched area. Early studies focus on the signalling power of bank dividends (Keen, 1983; Bessler and Nohel, 1996, 2000). More recently, bank dividend policy has been investigated because of possible risk-shifting behavior (Acharya et al., 2011; Srivastav et al., 2013; Kanas, 2013; Onali, 2014; Hirtle, 2014). Abreu and Gulamhussen (2013) confirm the importance of size, profitability, growth opportunities, and agency costs in determining bank dividend policy both before and during the financial crisis.

In banking, monitoring can come from the government as well as outside shareholders. The government has incentives to monitor bank dividend policy so as to minimize the likelihood that excessive dividend payouts lead to inadequate equity capital buffers. For this reason, restrictions on dividend payments and share repurchases for under-capitalized banks are part of the Basel III framework. All other things being equal, a low dividend payout ratio can reduce the strength of government

monitoring on the CEO, because of the positive impact on bank stability. A low dividend payout ratio could reduce potential losses for the deposit insurance provider, and in the case of a capital shortfall the government is incentivized to exert monitoring pressure on the bank (see, among others, Pennacchi, 1987). In the words of Abreu and Gulamhussen (2013, p. 57): ‘[...] the pressure associated with holding capital levels near or below the minimum requirement will lead banks to plowback earnings to recapitalize themselves.’

Because of these reasons, there is a clear conflict of interest between the government and outside shareholders as the government has a preference for low dividend payouts while outside shareholders prefer high payouts.

All other things being equal, the sign of the relationship between CEO power and dividend payout ratios depends on whether entrenched CEOs wish to discourage monitoring from the government (entrenched CEOs prefer low dividend payout ratios) or from the outside shareholders (entrenched CEOs prefer high dividend payout ratios). To the knowledge of the authors, there is currently no theoretical contribution that can help us predict the sign of this relationship. We expect that in Europe, a combination of weak protection of minority shareholders (Faccio et al., 2001) and government monitoring may allow entrenched bank CEOs to pay lower dividend payout ratios than CEOs with less power.

To examine these relationships we employ three proxies for CEO power: *CEO Ownership*, *Unforced CEO Turnover*, and *CEO Tenure*. As *CEO Ownership* and *CEO Tenure* increase, the CEO becomes more powerful, in the sense that they acquire a stronger position in the decision-making process of the bank.⁶ *CEO Ownership* has two types of effects: an entrenchment effect, because of the voting power associated with the ownership of bank shares, and an incentive effect deriving from the right to receive dividends (Stulz, 1988; Bhagat and Jefferis, 2002). The positive correlation between *CEO Ownership* and CEO power is substantiated by recent research showing that an increase in *CEO Ownership* decreases the likelihood of a CEO dismissal (Bhagat et al., 2010).

CEO Tenure is the natural logarithm of the number of years for which the CEO has been in office. Finkelstein and Hambrick (1989) argue that some determinants of CEO power take time to develop, and for this reason CEO power tends to increase with tenure.⁷ Since the relationship between tenure and dividend payout ratios may be nonlinear (Hu and Kumar, 2004), we consider the natural logarithm of tenure (in years). While *CEO Ownership* and *CEO Tenure* increase CEO power, CEO turnover events should reduce it. This is because the new CEO may need time to entrench and pursue policies that do not maximize shareholder value (Jiraporn et al., 2012). However, *CEO Turnover* may depend on dividends, since dividend cuts may lead to CEO dismissal (Schaeck et al., 2012). For this reason we consider only unforced CEO turnover as a proxy for CEO power, creating a dummy variable equal to one if turnover that cannot be defined as forced takes place, and zero otherwise (*CEO Unforced Turnover*). In a nutshell, unforced turnovers refer to turnovers that are *not* a result of dismissal, for instance, cases in which the CEO has retired.⁸

Our CEO power proxies are likely to be related to “bad” corporate governance. Apart from *CEO Ownership*, for which the incentive effect could dominate the entrenchment effect, the stronger the CEO, the stronger the degree of agency costs between the CEO and shareholders. We expect dividend payouts to be negatively linked *CEO Ownership* and *CEO Tenure* and positively related to *CEO Unforced Turnover*. This is in contrast with the received wisdom in the non-financial literature, which posits that firms with entrenched CEOs should have larger dividend payout ratios to discourage monitoring from outside shareholders.

What happens if we consider the impact of stock ownership of board members? This variable should be a proxy for “good” governance because, as suggested by Bhagat et al. (2008), director

⁶ Since *CEO Ownership* is positively skewed, we repeat our main estimations using the natural logarithm of *CEO Ownership*. The results are virtually the same.

⁷ *CEO Tenure* may also increase moral hazard, since for CEOs close to retirement reputational damage resulting from dismissal is less important (Murphy, 1986; Hu and Kumar, 2004).

⁸ In Appendix A1 we provide more detailed explanations of how we distinguish between forced and unforced CEO turnover. This proxy is related to *CEO Tenure*, because turnover results in a drop in tenure. However, while tenure can be related to recent dismissals (which may be related to dividend cuts), for *Unforced CEO Turnover* such reverse causality we believe is unlikely to occur.

ownership improves monitoring on the CEO and other executives. Empirical studies show that director ownership consistently correlates with good performance (Bhagat and Bolton, 2008, 2013). For this reason, we also investigate the impact of this variable on payout ratios and performance. Theoretically, larger director ownership should lead to less entrenchment, and therefore should lead to a decrease in agency costs and dividend payouts. Following Bhagat and Bolton (2013), we employ the proxy *Director Ownership* ϵ , which consists of the average value of the stake of board members (in millions of Euros).⁹

Pressure from the government could lead to lower dividend payout ratios, as a result of potential political and reputational damage associated with bank failure (Brown and Dinç, 2005). In the following section we outline the impact of government monitoring on dividend payout ratios in the form of both government ownership and the representation of government officials on bank boards.

2.3. The impact of government monitoring

The recent financial crisis has prompted a reconsideration of the role of government monitoring in the banking system, with the objective of aligning private incentives with public interest. Of particular interest is the case of government ownership. While government ownership of banks can provide the authorities with an additional tool for crisis management, it may also give rise to agency problems – for instance, politically motivated lending can lead to inefficiencies and cronyism (Čihák and Demirgüç-Kunt, 2013). Iannotta et al. (2007) provide evidence of a negative effect of government monitoring, in the form of government ownership, on bank performance. In our analysis, we are interested in the role of government ownership on agency costs and private incentives.

According to Gugler (2003), when the government acquires ownership of a firm, there is a double principal-agent problem: between the government and citizens (the government is the agent), and managers (the government is the principal). Government ownership should result in increased monitoring and therefore higher dividend payout ratios, however, the government's objectives can be twofold: (1) maximizing shareholder value; and (2) protecting depositors' rights. The latter objective, as mentioned above, is likely to be a consequence of possible reputational and political damage in the case of bank liquidation,¹⁰ or it may be associated with concerns of potential losses deriving from deposit insurance schemes or other types of (implicit or explicit) guarantees. Since high dividend payout ratios reduce the ability of a bank to pay back its creditors, government monitoring can also lead to lower dividend payout ratios.

We employ two proxies for government monitoring. The first proxy is the percentage stockholding of the government, *Government Ownership*. This proxy is highly positively skewed, and for this reason we take this variable in natural logs. The second proxy considers both government ownership and the presence of a government official on the board of directors of the bank. We construct the dummy variable *Government monitoring* which takes the value one if either the government owns at least 3% of the bank shares¹¹ or there is a government official on the board of directors of the bank, and zero otherwise. These variables are assumed to be positively correlated with the extent of government monitoring.

3. Methodology and data

This section describes the methodology and data set. Section 3.1 describes the econometric framework. Section 3.2 describes our instrumental variables. Section 3.3 outlines the data set.

⁹ This proxy is, according to Bhagat and Bolton (2013, p. 105) “simple, intuitive, less prone to measurement error, and not subject to the problem of weighting a multitude of governance provisions in constructing a governance index.” Because data on director ownership tends to be available at the bank-level but not at the director-level, we cannot calculate the median director ownership for each bank.

¹⁰ Iannotta et al. (2013) find that government-owned banks face strong political pressure and may pursue objectives different from profit maximization. During election years, government-owned banks display higher lending growth and lower profitability than private banks. Higher lending growth is consistent with the government objective to favor political supporters.

¹¹ This is the sample mean for *Government Ownership* (see Table 3), rounded up to the nearest integer. Using alternative thresholds, such as 2%, 4%, or 6% does not change substantially our main results.

3.1. Methodology

The empirical literature on CEO entrenchment for non-financial firms is heterogeneous in terms of econometric methodology and variables chosen.¹² Since the government is likely to be concerned about safety, and common equity is a key component of the regulatory capital in banking, we employ the dividend to equity ratio as the dependent variable, following previous literature on bank dividend policy (Acharya et al., 2012; Kanas, 2013; Onali, 2014). Using equity in the denominator rather than earnings has an additional advantage: it eliminates the problem of dealing with negative dividend payout ratios. However, since the ratio of dividends to equity is highly skewed to the right, in our main regressions we use this variable in logs, DPE (Ln).

In the spirit of Bhagat and Bolton (2008, 2013), we rely on a simultaneous equation framework to tease out the relation between dividend policy, CEO power and performance. In our first set of tests we focus on the relation between CEO power, performance, and dividend policy:

$$Div_{it} = f(Perf_{it}, CEO_{it}, C_{it}) \quad (1)$$

where $i = 1, 2, \dots, N$ labels panel units (banks), $t = 1, 2, \dots, T_i$ labels time periods (years), Div is the proxy for the payout ratio, $Perf$ is the proxy for performance, CEO the proxy for CEO power, and C is a vector of control variables. As proxies for performance, we choose the *Market-to-book* ratio, and *Tobin Q*. We choose these proxies because they are related to the existence of growth opportunities and are therefore linked to the concept of CEO entrenchment: banks with high *Market-to-book* ratios and high *Tobin Q* are likely to have projects with positive NPV. Thus, a negative relation between performance and payout ratios suggests that banks decrease payout ratios to invest in projects with positive NPV.¹³ If the relation is positive, on the other hand, banks tend to decrease payout ratios despite the absence of projects with positive NPV, suggesting expropriation of minority shareholders. Moreover, these ratios are less likely to be manipulated by banks than accounting measures of performance such as ROA or ROE.¹⁴

To better identify whether the CEO is effectively entrenched or not, we must also investigate the determinants of performance variables. If the proxies for CEO power that we employ increase performance, then the CEO is unlikely to be entrenched. On the other hand, if there is a negative or insignificant relation between the CEO proxies and performance, then the CEO is likely to be entrenched. For example, in the case of *CEO Ownership* and performance proxies, a positive relation would suggest absence of entrenchment.

As described above, we also consider the effect of director ownership, using the proxy *Director Ownership* ϵ .

To examine the impact of government monitoring on bank dividend policy, we employ the following specification:

$$Div_{it} = f(Perf_{it}, Gov_{it}, C_{it}) \quad (2)$$

In our main regressions, we include both bank and year fixed effects to account for unobservable, time-invariant bank-specific characteristics, and time-varying shocks on the European banking industry, assumed to have the same impact on dividend policy in all observed banks. For these tests, we rely on 2-Stage Least Squares (2SLS) regressions. However, we also employ 3SLS models in robustness tests.

We include in our regressions several controls in Eqs. (1) and (2). Size, profitability and growth opportunities are believed to be the main drivers of dividend policy for non-financial firms (Fama and French, 2001). As stated above, we proxy for profitability and growth opportunities using the performance variables *Market-to-book* and *Tobin Q*. We proxy for *Bank Size* using the natural logarithm of total bank assets. The non-bank literature documents that large firms tend to pay higher dividends (Fama and French, 2001; Francis et al., 2011). Thus, we expect the coefficient on *Bank Size* to be pos-

¹² For instance, Francis et al. (2011) employ dividends scaled by earnings, dividends scaled by total assets (book value), and dividends scaled by total assets (market value).

¹³ Blau and Fuller (2008) develop a model that emphasizes the trade-off between dividends and financial flexibility. Managers that believe the firm has good future growth opportunities may desire a higher level of financial flexibility.

¹⁴ As explained in Section 4.3, we also run robustness tests with ROA and loans growth instead of *Market-to-book* and *Tobin Q*.

itive. The stage of the bank life-cycle, represented by earned equity (DeAngelo et al., 2006; DeAngelo and DeAngelo, 2007), is proxied by the *Retained earnings ratio* (retained earnings divided by total equity). Banks with large values of earned equity are likely to be at a more mature stage of their life-cycle, and thus should have more cash available for distribution to shareholders. In robustness tests, we also consider specifically the impact of the tax differential between capital gains and dividends, and we employ the total payout ratio (cash dividends plus share repurchases divided by equity). To allow for the effects of the Eurozone sovereign debt problems and the Capital Requirement and Bonuses Package (CRBP), which came into force on January 1, 2011, we include the dummy *Year > 2010*, which is equal to one for the years 2011, 2012, 2013 and zero otherwise.¹⁵

For the regressions on bank performance, we include the following set of controls: *Board Size*, *RetVol* (standard deviation of monthly bank stock returns), *Size* (log of total assets), and *Year > 2010*, in addition to *Treasury securities* (the ratio of treasury securities to loans, which is an excluded instrument for the regressions on the payout ratio). These control variables are also justified by the non-financial literature, in particular Bhagat and Bolton (2013).¹⁶

3.2. Instrumental variables

Because dividend policy, performance, and corporate governance/ownership structure variables are endogenous, we must rely on an Instrumental Variables (IV) setup for our econometric strategy.

The CEO power proxies (*CEO Ownership*, *Unforced CEO Turnover*, and *CEO Tenure*) are instrumented by the dummy *Founder CEO*, which takes on the value one when the CEO of the bank is also one of the founders. This variable is likely to be positively correlated with the degree of clout of the CEO within the bank, and we expect *Founder CEO* to be positively correlated with *CEO Ownership* and *CEO Tenure*, and negatively correlated with *Unforced Turnover*. The CEO cannot decide every year to be a founder, suggesting that *Founder CEO* is exogenous to dividend policy. For the performance proxies, we employ the instrument *Treasury securities*, equal to the ratio of securities issued by governments to loans and we expect a positive relationship between this ratio and performance because banks are likely to buy these securities when government bond yields are high and bank stock prices are also high (resulting in high *Market-to-book* and *Tobin Q*). Conversely, in periods of high risk-aversion, “flight to quality” occurs, and investors move from stocks to government bonds, leading to lower Treasury bond yields and *Market-to-book* and *Tobin Q*. Given that the level of *Treasury securities* depends mainly on current conditions in the bond and stock markets, this variable is likely to be exogenous to dividend policy.¹⁷ A positive correlation between performance and investing in government securities rather than loans for sample periods including the 2007–2009 financial crisis (as in our case) is consistent with Beltratti and Stulz (2012).

For the proxy of director ownership, we choose the value of the stake of the CEO as an instrumental variable, *CEO Ownership* ϵ (in millions of Euros). We expect *CEO Ownership* ϵ to be positively correlated with *Director Ownership* ϵ , simply because of cross-sectional differences in the average emoluments paid to board members and executives at the bank-level. Therefore, this variable is likely to be exogenous to dividends and performance.

We instrument both *Government Ownership* and *Government monitoring* using a measure of ownership concentration, namely the *Herfindahl–Hirshman Index* (HHI).¹⁸ The reason for our choice is twofold: first, when the government intervenes in the bank, it usually acquires large stakes in the bank,

¹⁵ The CRBP imposes restrictions on executive compensation and is believed to reduce incentives to create value (Murphy, 2013).

¹⁶ Bhagat and Bolton (2013) also include industry performance and the ratio of research and development plus advertising expenses to assets. However, we are only looking at the banking industry, for which research and development expenses are negligible, and advertising expenses are not reported.

¹⁷ Bhagat and Bolton (2008, 2013) use treasury stock as an instrument for performance. However, this variable is not available for European banks. This proxy is also likely to be endogenous in the regressions using the total payout ratios as dependent variable.

¹⁸ The HHI is measured as follows:

$$HHI = \sum_{i=1}^N s_i^2$$

where s_i is the ownership share for shareholder i . Given that this variable is highly positively skewed, we consider the natural logarithm of the HHI in our regressions.

thereby artificially increasing the level of ownership concentration – this fact generates a positive correlation between the HHI and the two proxies for government monitoring; second, because the increase in HHI is a natural consequence of government monitoring, unrelated to bank dividend policy. Both the exclusion and relevance restrictions are thus satisfied.

3.3. Data and descriptive statistics

We build a new hand-collected data set with information on board composition and ownership structure for 109 listed banks (commercial banks, bank holding companies, and cooperative banks)¹⁹ located in 15 EU countries for the period 2005–2013.²⁰ The sample period starts in 2005 to reduce the impact of different accounting standards on cross-country comparability, since in this year International Financial Reporting Standards (IFRS) became compulsory for all EU listed companies.

We start with the universe of European publicly quoted banks listed on Bankscope (EU-15). For the sake of comparability, we focus on banks which use IFRS accounting standards. We focus on institutions classified as: commercial banks, bank holding companies, holding companies and cooperative banks. A total number of 127 banks satisfy these selection criteria. Next, we exclude institutions for which data on gross loans is unavailable (6, resulting in 121 remaining banks).²¹ Finally, to allow hand-collection of information on corporate governance and ownership structure, we stipulate that there is at least one annual report (available on the bank's web site) for the period 2005–2013. These criteria results in a sample of 109 banks. The geographic distribution of our sample is similar to that in the related literature.²²

Table 1 presents the main steps of our sample construction. Table 2 provides a breakdown of the number of banks per country and type of bank, and the sample representativeness relative to the population of listed banks in the EU-15 over the sample period. Our final sample is an unbalanced panel with 913 bank-year observations for 109 banks. However, data availability for the main variables reduces the amount of bank-year observations to 775, as shown in Table 3.

In our analysis, we concentrate on payout ratios as well as the decision to pay a dividend. We calculate the dividend payout ratio (*DPE*) as dividends paid for a given year divided by bank equity. Because this variable is positively skewed, our main regressions are based on the natural logarithm of *DPE*. Table 3 reports statistics for the decision to pay a dividend (the dummy variable *Dividends payer*), *DPE* (Ln) and proxies for CEO power and performance. We report the statistics for the whole sample (Panel A) and for the regressions on *DPE* (Ln), considering only the cases for which cash dividends are paid by the bank (Panel B).

Government shareholding is on average 2.7% for the whole sample (and 1.41% when we exclude cases for which there are no dividends paid), considering cases even when the government does not hold any bank shares. However, when we consider only cases where the government has an ownership stake the average value increases to 19.81% (10%). Therefore, as said above, once the government buys bank stocks, the ownership structure becomes immediately more concentrated and the HHI increases. The cases for which we have a government official on the board of directors are 7.7% of the total sample (5% when considering only dividend payers).²³

Fig. 1 shows the geographical distribution of the average *DPE* across countries over the sample period. The effect of the financial crisis of 2008–2009 and the subsequent Eurozone sovereign debt problems elicit heterogeneous responses from banks in different European countries. All countries

¹⁹ All cooperative banks in our sample are publicly traded and, therefore, are partly owned by non-members.

²⁰ We collect information from different sources: bank annual reports (including notes to financial statements), corporate governance reports, and other documents available from the web sites of the banks, banking regulators and authorities, and other publicly available sources.

²¹ Our purpose is to exclude firms that are not in the lending business, as in Fahlenbrach and Stulz (2011).

²² The geographic distribution of our sample differs slightly from that of Vallascas and Hagendorff (2013), who investigate 41 banks from Europe for the period 2000–2008, due to different selection criteria. In particular, Vallascas and Hagendorff (2013) stipulate that data on CEO compensation be available for at least five years.

²³ The voting rights of the government share are exercised by different types of individuals/groups, depending on the country examined. For instance, in Austria it is the Federal Minister of Finance, in Belgium the Council of Ministers. In France and the UK, the shares are handled by agencies specifically appointed for this purpose (Agence des participations de l'État (APE) in France and the UK Financial Investments (UKFI) in the UK).

Table 1
Steps of sample construction.

	Search criterion	Number of banks
Step 1	Listed banks	2454
Step 2	World region: European Union (15)	255
Step 3	Accounting standards: IFRS	187
Step 4	Specialization: Commercial banks, Cooperative banks, Bank holdings & Holding companies	127
Step 5	Information availability: gross loans	121
Step 6	Information availability (annual reports on the banks' web sites and market capitalization)	109

Table 2
Sample composition and representativeness.

Country	Banks	Sample %	Observations	Sample %
Austria	7	6	54	7
Belgium	3	3	16	2
Denmark	11	10	85	11
Finland	4	4	24	3
France	8	7	72	9
Germany	9	8	68	9
Greece	11	10	39	5
Ireland	2	2	16	2
Italy	22	20	153	20
Luxembourg	2	2	14	2
Netherlands	5	5	39	5
Portugal	4	4	24	3
Spain	8	7	59	8
Sweden	4	4	36	5
United Kingdom	9	8	76	10
Total:	109	100	775	100

	BHC	Commercial	Cooperative	Total
<i>Total bankscope sample in 2013 (listed banks, EU-15)</i>				
1	Banks	78	24	140
2	Sample %	27.14	55.71	17.14
<i>Sample banks</i>				
3	Banks	30	68	11
4	Sample %	27.52	62.39	10.10
5	Representativeness, % (3/1)	78.95	87.18	45.83
<i>Total Bankscope sample in 2013 (listed banks, EU-15)</i>				
1	Assets Millions of Euros	9,133,293	12,463,542	2,336,025
2	Share of total assets, %	38.16	52.08	9.76
<i>Sample banks</i>				
3	Assets millions of Euros	9,112,651	12,026,512	2,053,685
4	Share of total assets, %	39.29	51.85	8.85
5	Representativeness, % (3/1)	99.77	96.49	87.91

except for Belgium and Sweden experienced a reduction in mean *DPE* from 2008 onwards (Panel A). When we compare 2005–2007 with 2008–2009, the mean *DPE* increases even for Danish banks. Sharp declines in *DPE* occurred for the countries that were most affected by the crisis. For Portugal, the mean *DPE* dropped from 5.22% in 2005–2007 to 2.44% in 2008–2009. For Italy it fell from 4.70% to 2.91%. However, Irish banks were the most affected: the mean *DPE* was 6.82% just before the crisis in 2007 and 0% from 2010 until the end of the sample period. In Fig. 2, we compare the trend of *DPE* over the sample period for Ireland, where there is a sharp drop after the crisis, and Sweden, where *DPE* is overall stable.

Table 3

Summary statistics for dividend policy, CEO power, director ownership, government monitoring, performance and other control variables.

		Panel A					Panel B				
		Obs.	Mean	SD	Min	Max	Obs.	Mean	SD	Min	Max
Dividend payer	Dummy variable: 1 if the bank has paid cash dividends in the year, and 0 otherwise	775	0.570	0.495	0.000	1.000	442	1.000	0.000	1.000	1.000
DPE (Ln)	Natural log of dividends for a given year divided by bank equity	442	1.987	0.913	0.000	3.350	442	1.987	0.913	0.000	3.350
CEO ownership	CEO equity stake in the bank (%)	775	1.809	8.775	0.000	65.950	442	2.417	10.703	0.000	65.950
CEO tenure (Ln)	Natural logarithm of the number of years for which the CEO has been in office	766	1.456	0.906	0.000	3.434	437	1.582	0.895	0.000	3.434
CEO unforced turnover	Dummy variable: 1 if there is a CEO unforced turnover (see definition in Appendix A), and 0 otherwise	775	0.107	0.309	0.000	1.000	442	0.100	0.300	0.000	1.000
Director ownership €	Average director ownership, in millions of Euros	750	10.921	47.144	0.000	594.410	430	11.903	35.020	0.000	266.373
Government ownership	Government ownership stake in the bank (%)	775	2.684	12.043	0.000	100.000	442	1.413	7.194	0.000	77.312
Govt. ownership > 0%	Government ownership stake in the bank (%), for cases for which the government is an owner of the bank	103	19.808	27.145	0.003	100.000	61	10.235	16.987	0.003	77.312
Government official on the Board	Dummy variable: 1 if there is a government official on the board, and 0 otherwise	775	0.077	0.267	0.000	1.000	442	0.050	0.218	0.000	1.000
Government monitoring	Dummy variable: 1 if there is a government official on the board or the government owns more than 3% of the bank, and 0 otherwise	775	0.135	0.342	0.000	1.000	442	0.102	0.303	0.000	1.000
Market-to-book	Market value of equity dividend by book value of equity	775	1.106	0.772	0.157	2.964	442	1.217	0.776	0.157	2.964
Tobin Q	Market value of equity plus face value of debt divided by book value of equity plus face value of debt	772	1.108	0.761	0.173	2.943	440	1.220	0.764	0.173	2.943
<i>Control variables</i>											
Size	Log of total assets	775	17.313	2.343	13.155	21.070	442	17.587	2.403	13.155	21.070
Retained earnings ratio	Retained earnings to total equity	775	38.197	32.516	−9.223	90.028	442	42.373	31.408	−9.223	90.028
Board size	Board members	774	13.858	5.157	6.000	24.000	442	14.186	5.081	6.000	24.000

Notes: Panel A includes all available observations and Panel B considers only observations for which cash dividends are paid in that year. DPE, performance, and control variables are winsorized at the 5th and 95th percentile.

4. Results

In this section, we report the results of our main regressions. We employ the econometric procedure described in Section 3.1. Section 4.1 reports the main results with respect to the effect of CEO power on payout ratios and performance, and the effect of director ownership (a proxy for internal monitoring on bank CEOs) on payout ratios and performance. Section 4.2 reports the main results for the impact of government monitoring on payout ratios and performance. Section 4.3 reports robustness checks.

4.1. CEO power, dividends and bank performance

4.1.1. Results for CEO Ownership, Unforced CEO Turnover and CEO Tenure

Table 4 reports our main results for the 2SLS regressions on the relation between CEO power (proxied by *CEO Ownership*, *CEO Tenure*, and *Unforced CEO Turnover*) and the payout ratio, *DPE* (Ln), allowing for the effect of bank performance as proxied by *Market-to-Book* and *Tobin Q*. The Kleibergen-Paap tests for weak IV and the coefficients on the IVs for the first stage of the regressions support the hypothesis that our instruments, *Founder CEO* and *Treasury securities*, are strongly correlated with the CEO power and bank performance proxies, respectively. The results for the coefficients on the proxies for CEO power suggest a negative relation between CEO power and payout ratios. The results for the coefficients on the bank performance proxies show a positive relation between performance and payout ratios.

To what extent are the results reported in Table 4 a result of sample selection bias? Table 5 reports the results for Heckman selection models investigating the impact of CEO power, proxied by *CEO Ownership*, and performance on the payout ratio (*DPE* (Ln)), allowing for possible sample selection bias. Moreover, to increase the robustness of our results, we also run 3SLS models on the relation between CEO power, dividends, and bank performance. In these regressions, we also add a key variable to our framework: volatility of returns (standard deviation of monthly stock returns, *RetVol*). This variable is found to negatively affect performance (Bhagat and Bolton, 2013). We posit that this variable has an indirect effect on the payout ratio: firms with higher information costs are likely to have more volatile earnings, and therefore they will favor lower payouts to reduce the likelihood that earnings do not fall below some threshold needed to remit dividends. For this reason, *RetVol* enters the selection equation in the Heckman models, and the equation on *Market-to-Book* and *Tobin Q* in the 3SLS models.

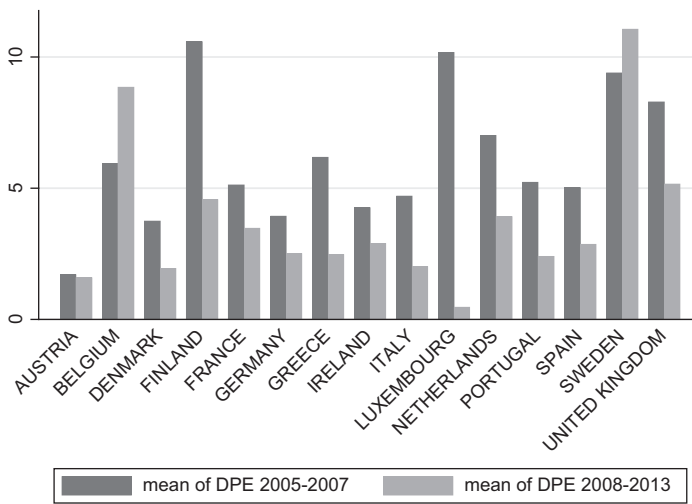
The results in Table 5 show that *CEO Ownership* is still negatively correlated with *DPE* (Ln). Moreover, as expected, higher *RetVol* results in lower performance and a lower propensity to pay dividends. The Likelihood Ratio (LR) test on the significance of the correlation between the residuals of the outcome and selection equation for the Heckman selection model confirm that some degree of sample selection bias exists. The 3SLS models also confirm the positive relation between performance and payout ratios, and indicate that CEOs increase their ownership as performance increases (performance increases *CEO Ownership*), but the opposite is not true (*CEO Ownership* does not increase *Market-to-Book* or *Tobin Q*). The latter results suggest that *CEO Ownership* is a good proxy for “bad” corporate governance or, in other words, CEOs with large stockholdings are “entrenched”. However, the negative coefficient on *CEO Ownership* for the regressions on the payout ratio, *DPE* (Ln), is inconsistent with the findings of the non-financial literature on CEO power and the payout ratio, which documents that CEO entrenchment leads to higher dividend payout ratios (Hu and Kumar, 2004).²⁴

4.1.2. Results for Director Ownership ϵ

Does stronger internal monitoring from the board of directors improve bank performance? In Table 6 we examine the impact of *Director Ownership ϵ* on bank payout ratios using Heckman selection models and 3SLS models that allow for the interactions between director ownership, dividend payout ratios, and performance. As said above, this variable has been found to be positively correlated with performance in previous empirical studies (Bhagat and Bolton, 2008, 2013). The results reported in

²⁴ The results for *Unforced CEO Turnover* and *CEO Tenure*, untabulated but available upon request, are qualitatively the same: while these proxies do not improve performance, they suggest that more powerful CEOs tend to decrease payout ratios.

(A) Average DPE (%) across countries for 2005-2007 and 2008-2013.



(B) Average DPE (%) across countries for 2005-2007 and 2008-2009.

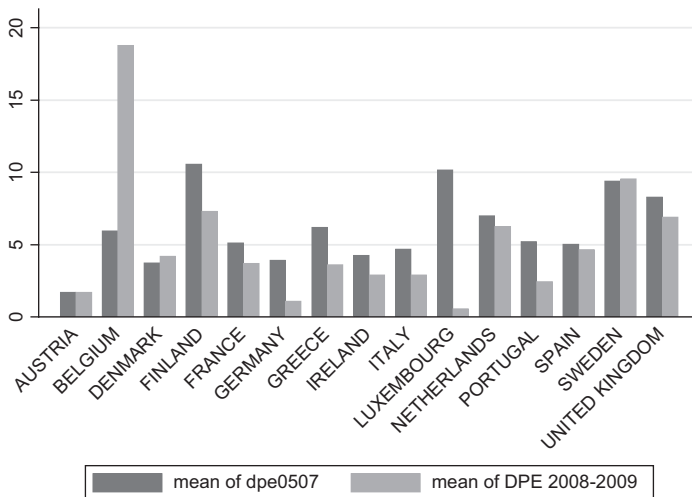


Fig. 1. Average DPE (%) across countries over the sample period.

Table 6 confirm that this is the case: *Director Ownership* € is positively related to both *Market-to-Book* and the *Tobin Q* ratio. However, our results also provide some evidence of a *negative* impact on dividend payout ratios, although the coefficients on *Director Ownership* € are significant for the 3SLS regressions but not for the Heckman selection models.

4.1.3. "Good" corporate governance and current and future performance

To further dig deeper into the relationship between performance and "good/bad" corporate governance, Table 7 reports the results of 2SLS regressions of current and future performance on *Director Ownership* €, using as IV *CEO Ownership* €. The results confirm that *Director Ownership* € increases both current and future performance. Among the control variables, *RetVol* and *Size*

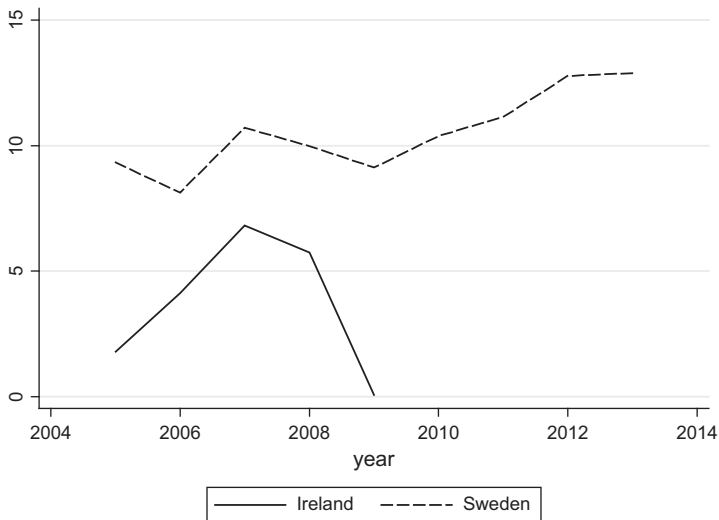


Fig. 2. Average DPE (%) over the sample period: Ireland and Sweden.

decrease current performance, while the variable *Treasury securities* increases performance. The dummy *Year > 2010* is related to a drop in performance, most likely because of the consequences of the financial crisis and the ensuing Eurozone sovereign debt problems. Besides *Year > 2010*, *Director Ownership* ϵ is the only variable that affects both *Market-to-Book* and *Tobin Q* even in the following years ($t + 1$ and $t + 2$).

Tables 8 and 9 report the same results but for *CEO Ownership*, *Unforced CEO Turnover* and *CEO Tenure*. The results suggest that *CEO Ownership* decreases current performance and the performance of the next year. However, the effect ceases to exist at $t + 2$. The results for *Unforced CEO Turnover* and *CEO Tenure* confirm the negative impact of our CEO power proxies on performance.

To recap, the results for *Director Ownership* ϵ are consistent with those provided by the entrenchment literature on non-financial firms: director ownership improves performance. The results for *CEO Ownership* suggest that the entrenchment effect dominates the incentive effect, and entrenched CEOs do not increase payout ratios to discourage monitoring from bank shareholders. These findings can be interpreted as evidence that performance-based incentives based on ownership stakes work well when they are applied to board members, but less well when applied to bank CEOs, for which the entrenchment effect appears to dominate. Moreover, they suggest that entrenched bank CEOs have little incentive to discourage monitoring from shareholders by increasing payout ratios. In the next section, we examine the impact of government monitoring on payout ratios and bank performance.

4.2. Government monitoring, dividends and bank performance

Table 10 reports the results for 2SLS and 3SLS regressions investigating the impact of government monitoring on payout ratios. For the 2SLS models, the Kleibergen-Paap tests for weak IV and the coefficients on the IVs for the first stage of the regressions supports the hypothesis that *HHI* is a strong instrument for both *Government Ownership* (Ln) and *Government monitoring*. The results for our 2SLS and 3SLS regressions suggest that government monitoring decreases payout ratios, contrary to what is argued by Gugler (2003). These results backup the view that governments are keen to reduce bank payout ratios for the fear of potential reputational damage and financial losses deriving from bank defaults.

Table 4
Determinants of dividend payout: 2SLS regressions.

	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)
CEO Ownership	−0.266^{***} (−3.616)	−0.242^{***} (−3.307)	−0.265^{***} (−2.904)	−0.221^{***} (−2.653)						
Unforced CEO turnover					1.845^{***} (3.000)	1.897^{**} (2.531)				
CEO tenure (Ln)							−0.405^{***} (−3.399)	−0.382^{***} (−2.994)		
Director Ownership €									−0.023^{***} (−3.356)	−0.025^{***} (−3.069)
Market-to-Book	0.477^{***} (4.987)		1.534^{***} (3.388)		0.411^{***} (3.879)		1.099^{***} (2.619)		0.411^{***} (3.879)	
Tobin Q		0.499^{***} (5.153)		1.342^{***} (4.177)		0.430^{***} (4.021)		1.219^{**} (2.542)		0.430^{***} (4.021)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crisis (2008–2009) included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Founder CEO	<i>1st stage</i> 2.159 ^{***} (12.406)	<i>1st stage</i> 2.157 ^{***} (11.056)	<i>1st stage</i>	<i>1st stage</i>	<i>1st stage</i> −0.311 ^{**} (−4.383)	<i>1st stage</i> −0.275 ^{***} (−4.468)	<i>1st stage</i> 1.417 ^{***} (6.727)	<i>1st stage</i> 1.365 ^{***} (6.331)	<i>1st stage</i>	<i>1st stage</i>
Treasury securities			0.213 ^{***} (4.624)	0.238 ^{***} (6.114)						
CEO Ownership €									0.056 ^{***} (4.183)	0.054 ^{***} (3.707)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	447	443	315	312	447	443	446	442	434	430
Banks	77	76	61	60	77	76	77	76	74	73
Kleibergen-Paap weak IV test	153.9	122.2	21.37	37.37	19.21	19.96	45.27	40.09	17.49	13.74
R-squared	0.336	0.346	0.225	0.310	−0.260	−0.288	0.193	0.213	−0.092	−0.147

Notes: The controls include *Retained earnings ratio*, *Size*, and *Year > 2010*. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses. *DPE* (Ln), performance, and control variables are winsorized at the 5th and 95th percentile.

* Significance at 10% level.

** Significance at 5% level.

*** Significance at 1% level.

Table 5
Determinants of dividend payout: Heckman selection and 3SLS models for CEO Ownership.

	Heckman (outcome) DPE (Ln)	Heckman (outcome) DPE (Ln)	3SLS DPE (Ln)	3SLS MTB	3SLS CEO ownership	3SLS DPE (Ln)	3SLS <i>Tobin Q</i>	3SLS CEO ownership
CEO Ownership	−0.007* (−1.673)	−0.007* (−1.705)	−0.426** (−2.144)	−0.056 (−0.791)		−0.427** (−2.144)	−0.057 (−0.814)	
MTB	0.644*** (9.611)		1.768*** (2.427)		0.639** (2.341)			
Tobin Q		0.642*** (9.387)				1.786** (2.386)		0.664** (2.314)
<i>RetVol</i>	<i>Selection</i> −2.572*** (−3.153)	<i>Selection</i> −2.532*** (−3.128)		−1.090*** (−2.708)			−1.049*** (−2.659)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crisis included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rho	−0.869	−0.876						
LR test (H_0 : Rho = 0)	15.52***	17.24***						
Treasury securities				0.602*** (6.929)			0.591*** (6.920)	
Founder CEO					2.290*** (12.626)			2.293*** (12.338)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	775	772	301	301	301	300	300	300
Banks	100	99	66	66	66	66	66	66
R-squared			0.573	0.901	1.000	0.574	0.901	1.000

Notes: The controls include *Retained earnings ratio*, *Size*, and *Year > 2010*. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses (for 2SLS models). *DPE* (Ln), performance, and control variables are winsorized at the 5th and 95th percentile.

* Significance at 10% level.

** Significance at the 5% level.

*** Significance at 1% level.

Table 6
Determinants of dividend payout: Heckman selection and 3SLS models for *Director Ownership* €.

	Heckman (outcome) DPE (Ln)	Heckman (outcome) DPE (Ln)	3SLS DPE (Ln)	3SLS MTB	3SLS Director Ownership €	3SLS DPE (Ln)	3SLS <i>Tobin Q</i>	3SLS Director Ownership €
Director Ownership €	-0.001 (-1.408)	-0.000 (-1.377)	-0.039** (-2.059)	0.010*** (2.600)		-0.039** (-2.042)	0.009*** (2.615)	
MTB	0.645*** (9.477)		2.836** (2.269)		10.941 (0.522)			
Tobin Q		0.640*** (9.247)				2.883** (2.236)		10.909 (0.505)
<i>RetVol</i>	<i>Selection</i> -2.863*** (-3.276)	<i>Selection</i> -2.806*** (-3.247)		-1.408*** (-3.154)			-1.370*** (-3.129)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crisis included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rho	-0.815	-0.827						
LR test (H_0 : Rho = 0)	6.31**	7.85**						
Treasury securities				0.058 (0.644)			0.057 (0.641)	
CEO Ownership €					0.072*** (2.816)			0.072*** (2.795)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Observations	750	748	295	295	295	294	294	294
Banks	97	97	64	64	64	64	64	64
R-squared			-0.076	0.884	0.784	-0.083	0.883	0.783

Notes: The controls include *Retained earnings ratio*, *Size*, and *Year > 2010*. *DPE (Ln)*, performance, and control variables are winsorized at the 5th and 95th percentile.

* Significance at 10% level.

** Significance at 5% level.

*** Significance at 1% level.

Table 7Determinants of current and future performance: *Director Ownership* €.

Performance proxy Period	Market-to-Book <i>t</i>	Market-to-Book <i>t</i> + 1	Market-to-Book <i>t</i> + 2	Tobin Q <i>t</i>	Tobin Q <i>t</i> + 1	Tobin Q <i>t</i> + 2
Director Ownership €	0.010*** (8.683)	0.013*** (4.676)	0.013*** (2.723)	0.010*** (8.668)	0.013*** (4.673)	0.012*** (2.723)
Board Size	−0.008 (−0.728)	−0.011 (−1.033)	−0.012 (−0.917)	−0.008 (−0.727)	−0.011 (−1.013)	−0.012 (−0.901)
RetVol	−1.139** (−2.063)	0.465 (0.979)	0.702 (1.321)	−1.093** (−2.014)	0.461 (0.985)	0.691 (1.321)
Treasury securities	0.193*** (7.506)	−0.021 (−0.754)	0.002 (0.051)	0.191*** (7.549)	−0.022 (−0.776)	0.002 (0.073)
Size	−0.323** (−2.140)	−0.079 (−0.511)	0.029 (0.101)	−0.323** (−2.172)	−0.082 (−0.536)	0.029 (0.102)
Year > 2010	−0.749*** (−4.328)	−1.121*** (−6.522)	−0.829*** (−4.657)	−0.736*** (−4.321)	−1.102*** (−6.548)	−0.815*** (−4.648)
	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>
CEO Ownership €	0.078*** (7.210)	0.085*** (5.111)	0.084*** (5.833)	0.078*** (7.208)	0.085*** (5.108)	0.084*** (5.832)
Crisis included	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	285	263	233	284	261	233
Banks	54	54	48	54	53	48
Kleiberger-Paap	51.93	26.12	33.92	51.91	26.07	33.92
R-squared	0.737	0.576	0.207	0.735	0.577	0.205

Notes: 2SLS regressions for dividend payers. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses. Performance variables are winsorized at the 5th and 95th percentile.

* Significance at 10% level.

** Significance at 5% level.

*** Significance at 1% level.

Is government monitoring good for bank performance? We answer this question in Table 11. The results suggest that government monitoring has little impact on bank current and future performance.²⁵ These results are somewhat consistent with the findings reported by Iannotta et al. (2007), who find that in Europe government-owned banks do not outperform privately-owned banks.

What happens if the government changes as a result of elections? To answer this question, we collect data on elections (both parliamentary elections and, if available, presidential elections) from the Elections Database (website http://www.nsd.uib.no/european_election_database/). This website contains information on the outcomes of parliamentary elections in terms of total votes and percentage of votes for each of the main parties in the elections. For presidential elections understanding whether there is a change in power is straightforward.²⁶ However, the parliamentary elections information needs to be supplemented with other data sources because governments can be formed by various coalitions between two or more parties. As such, we combine the aforementioned information with other sources (such as Bloomberg, European Journal of Political Research–Political Data Yearbook, the Guardian, and Reuters) to determine whether the elections determined a change in government. We then run probit regressions where the dependent variable is the first-difference of the dummy *Government Official on the Board* and the independent variable is either *Elections* (a dummy variable equal to one if in the previous year there is either a parliamentary or a presidential election and zero otherwise) or *Change in Government* (a dummy variable equal to one if in the previous year there is a change in the parties in government and zero otherwise). The results, untabulated but available upon request, suggest

²⁵ It could be argued that some of these results are a result of a weak IV problem for our performance regressions. However, even when we employ similar OLS regressions with bank and year fixed effects with robust standard errors clustered on the bank level, the results still suggest lack of correlation between government monitoring and bank performance.

²⁶ For instance, consider the 2012 presidential elections in France, as a result of which Nicolas Sarkozy (center-right) was replaced by François Hollande. On the other hand, in the 2010 elections in the UK, the Labour party (incumbent) received the largest number of votes, but the coalition between Conservatives and Liberal Democrats resulted in a change in government.

Table 8
Determinants of current and future performance: *CEO Ownership*.

Performance proxy Period	Market-to-Book <i>t</i>	Market-to-Book <i>t</i> + 1	Market-to-Book <i>t</i> + 2	<i>Tobin Q</i> <i>t</i>	<i>Tobin Q</i> <i>t</i> + 1	<i>Tobin Q</i> <i>t</i> + 2
CEO ownership	−0.141** (−2.244)	−0.087 [†] (−1.865)	0.012 (0.116)	−0.140** (−2.257)	−0.086 [†] (−1.858)	0.015 (0.138)
board size	−0.006 (−0.463)	−0.014 (−1.242)	−0.015 (−1.026)	−0.006 (−0.459)	−0.014 (−1.221)	−0.015 (−1.010)
RetVol	−1.443** (−2.592)	−0.070 (−0.215)	0.098 (0.294)	−1.396** (−2.551)	−0.065 (−0.201)	0.094 (0.286)
Treasury securities	0.256** (6.939)	0.000 (0.021)	−0.044 (−0.801)	0.254** (6.962)	0.000 (0.001)	−0.044 (−0.815)
Size	−0.331** (−1.963)	−0.075 (−0.602)	0.062 (0.199)	−0.331** (−1.994)	−0.078 (−0.632)	0.062 (0.202)
Year > 2010	−0.709** (−8.055)	−1.132** (−9.634)	−0.893** (−5.781)	−0.696** (−8.133)	−1.112** (−9.663)	−0.879** (−5.764)
	−0.141**	−0.087 [†]	0.012	−0.140**	−0.086 [†]	0.015
Founder CEO	<i>1st Stage</i> 2.232** (39.334)	<i>1st Stage</i> 2.286** (31.234)	<i>1st Stage</i> 2.239** (22.735)	<i>1st Stage</i> 2.232** (39.336)	<i>1st Stage</i> 2.286** (31.250)	<i>1st Stage</i> 2.239** (22.730)
Crisis included	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	291	268	236	290	266	236
Banks	56	56	50	56	55	50
Kleibergen-Paap	1546	975.4	515.5	1546	975.9	515.5
R-squared	0.789	0.773	0.652	0.789	0.773	0.651

Notes: 2SLS regressions for dividend payers. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses. Performance variables are winsorized at the 5th and 95th percentile.

* Significance at 10% level.

** Significance at 5% level.

*** Significance at 1% level.

that *Change in Government* does not have any effect on the probability of a change in *Government Official on the Board*. However, this may be due to the low number of cases for which there was a change in government. When we consider the results for the probit regressions with *Elections*, we find that they increase the probability that there will be government official on the board of a bank in the next year.²⁷ However, when we include *Elections* in the regressions on dividend payouts, *Elections* does not have any impact on *DPE* (Ln), and the results for the other coefficients remain substantially unaltered.

4.3. Robustness tests

In this section we present robustness tests to allow for other determinants of dividend policy that may have not been considered in the regressions reported in Sections 4.1 and 4.2.

We start from the possibility of tax clienteles (Elton and Gruber, 1970). In Table 12 we report robustness tests using 2SLS models considering the effect of the tax differential (*Tax Differential*) between capital gains and dividends.²⁸ To further increase the robustness of our findings, we also consider the effect of using the natural logarithm of *CEO Ownership*. The coefficients on *Tax Differential* tend to be negative but statistically indistinguishable from zero. This finding is consistent with DeAngelo et al. (2008) who found that taxes may not be first-order determinant of the choice between dividends and stock repurchases. The magnitude and significance of the coefficients on the other variables are substantially the same as those reported in Tables 4 and 5. In Table 13, following Hirtle (2014), we investigate the impact of considering total payouts on our analysis. We replace *DPE* (cash dividends to bank equity)

²⁷ We also find evidence of a negative impact of *Elections* on bank profitability (as measured by *Market-to-Book* and *Tobin Q*), consistent with Iannotta et al. (2013).

²⁸ The data on the tax rates for dividends and capital gains is taken from Carroll et al. (2012).

Table 9Determinants of current and future performance: *Unforced CEO Turnover* and *CEO Tenure*.

Performance proxy	Market-to-Book	Market-to-Book	Market-to-Book	Tobin Q	Tobin Q	Tobin Q
Period	<i>t</i>	<i>t</i> + 1	<i>t</i> + 2	<i>t</i>	<i>t</i> + 1	<i>t</i> + 2
Unforced CEO Turnover	1.107 [*] (1.801)	0.528 [*] (1.718)	−0.065 (−0.116)	1.075 [*] (1.815)	0.520 [*] (1.708)	−0.077 (−0.138)
Founder CEO	<i>1st Stage</i> −0.284 ^{***} (−3.885)	<i>1st Stage</i> −0.377 ^{***} (−5.834)	<i>1st Stage</i> −0.425 ^{***} (−6.878)	<i>1st Stage</i> −0.290 ^{***} (−3.956)	<i>1st Stage</i> −0.377 ^{***} (−5.832)	<i>1st Stage</i> −0.425 ^{***} (−6.876)
Controls and crisis included	Yes	Yes	Yes	Yes	Yes	Yes
Year and bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	291	268	236	290	266	236
Banks	56	56	50	56	55	50
Kleibergen-Paap	15.08	34.03	47.18	15.64	33.99	47.18
R-squared	0.440	0.701	0.657	0.460	0.700	0.657
CEO Tenure	−0.194 [*] (−1.953)	−0.103 [*] (−1.816)	0.015 (0.122)	−0.191 ^{**} (−1.965)	−0.102 [*] (−1.808)	0.017 (0.144)
Founder CEO	<i>1st Stage</i> 1.609 ^{***} (7.875)	<i>1st Stage</i> 1.921 ^{***} (11.420)	<i>1st Stage</i> 1.933 ^{***} (12.842)	<i>1st Stage</i> 1.629 ^{***} (8.031)	<i>1st Stage</i> 1.921 ^{***} (11.411)	<i>1st Stage</i> 1.933 ^{***} (12.839)
Controls and crisis included	Yes	Yes	Yes	Yes	Yes	Yes
Year and bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	290	267	235	289	265	235
Banks	56	56	50	56	55	50
Kleibergen-Paap	62.00	130.5	164.5	64.47	130.2	164.5
R-squared	0.747	0.761	0.658	0.751	0.761	0.658

Notes: 2SLS regressions for dividend payers. The controls include *RetVol*, *Board size*, *Treasury securities*, *Size*, and *Year > 2010*. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses. Performance variables are winsorized at the 5th and 95th percentile.

^{*} Significance at 10% level.

^{**} Significance at 5% level.

^{***} Significance at 1% level.

with the sum of cash dividends and the cash distributed through stock repurchases divided by total equity (*TP*).²⁹ The coefficients on the CEO power proxies remain significant and with the expected sign.³⁰

We further examine the sensitivity of our results to changes in the dependent variable by substituting *DPE* (Ln) with the ratio of dividends to total assets. The results for the CEO power proxies and for director ownership remain substantially unaltered, as shown in Table 14.

Finally, we carry out further robustness tests on the effect of capital requirements, loans growth, and the proxy for profitability.³¹

First, to examine the impact of capital requirements (Onali, 2014), we include in the 2SLS regressions with the CEO power proxies (including the log of *CEO Ownership*) the dummy variable *Close*, which takes the value one if the Tier 1 ratio is less or equal to six percent and zero otherwise. The coefficients on *Close* are negative and either weakly significant or insignificant, and the magnitude and sign of the coefficients on the CEO power proxies remain virtually unaltered.

Second, we run again the 2SLS regressions with the CEO power proxies (including the log of *CEO Ownership*) after replacing *Market-to-book* and *Tobin Q* with the variables *ROA* (Return on Assets) and *Loans Growth* (the percentage change in loans from *t* − 1 to *t*). *ROA* is a proxy for performance and *Loans Growth* is a proxy for growth opportunities. The coefficients on the CEO power proxies

²⁹ We download data on share repurchases from SNL Financial.

³⁰ We also run again the 2SLS regressions with *Government Ownership* and *Government monitoring*, adding the tax differential as an explanatory variable, and considering the total payout ratios instead of cash dividends only. The results remain substantially the same as those reported in Tables 10 and 11.

³¹ These results are untabulated for the sake of space but available upon request from the authors.

Table 10
Impact of government monitoring on dividend payout ratio.

	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	2SLS DPE (Ln)	3SLS DPE (Ln)	3SLS DPE (Ln)	3SLS DPE (Ln)	3SLS DPE (Ln)
Government Ownership (Ln)	-0.175^{**} (-1.975)	-0.171[*] (-1.909)			-0.213^{***} (-3.127)	-0.134^{**} (-2.819)		
Government monitoring			-1.311^{**} (-2.046)	-1.278^{**} (-1.970)			-1.638^{***} (-2.932)	-1.664^{***} (-4.076)
Market-to-Book	0.424^{***} (4.071)		0.392^{***} (3.469)		2.501^{***} (2.874)		2.214^{**} (2.569)	
Tobin Q		0.446^{***} (4.179)		0.415^{***} (3.627)		0.342^{***} (2.875)		-0.057 (-0.454)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crisis (2008–2009) included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HHI (Ln)	<i>1st stage</i> 1.253 ^{***} (3.198)	<i>1st stage</i> 1.252 ^{***} (3.191)	<i>1st stage</i> 0.167 ^{***} (3.262)	<i>1st stage</i> 0.167 ^{***} (3.256)	<i>1st stage</i> 1.367 ^{***} (6.733)	<i>1st stage</i> 1.367 ^{***} (6.875)	<i>1st stage</i> 0.164 ^{***} (5.742)	<i>1st stage</i> 0.104 ^{***} (3.709)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	450	446	450	446	303	302	303	302
Banks	77	76	77	76	65	65	65	65
Kleibergen-Paap weak IV test	10.23	10.18	10.64	10.60	–	–	–	–
R-squared	0.350	0.357	0.245	0.256	0.341	0.709	0.352	0.623

Notes: The controls include *Retained earnings ratio*, *Size*, and *Year > 2010*. *Government monitoring* is a dummy equal to one if government ownership is above 3% or there is a government official on the board of the bank. HHI stands for Herfindahl–Hirschman Index. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses (for 2SLS models). For the sake of space, we do not report the results for the regressions on the performance variables, *Market-to-Book* and *Tobin Q*, and the government monitoring variables, *Government Ownership* and *Government monitoring*. However, we report the coefficients (and related standard errors) for the HHI in the regressions on the government monitoring variables. As for Table 5–9, for the 3SLS models the regressions on the performance variables include *RetVol* and *Treasury securities*. *DPE (Ln)*, performance, and control variables are winsorized at the 5th and 95th percentile.

- * Significance at 10% level.
- ** Significance at 5% level.
- *** Significance at 1% level.

remain negative and significant. The coefficient on ROA is insignificant, while the coefficient on *Loans Growth* is negative and significant. A negative coefficient on growth opportunities is consistent with the findings reported in the non-financial literature (Fama and French, 2001). When we repeat estimations using the proxy *CEO Duality* (a dummy variable that takes that value one if the CEO is also the chairman of the board and zero otherwise), instrumented by number of independent directors³² divided by the total number of board members, the results remain qualitatively the same.

5. Conclusions

In this paper, we investigate the effects of CEO power on dividend policy in banks from EU-15 countries. We use a unique hand-collected data set with information on board composition and ownership structure for European listed banks over the period 2005–2013. We exploit detailed bank-level data on government ownership and officials represented on bank boards to investigate the impact of government monitoring on bank dividend policy. This sample is merged with data from Bankscope and bank annual reports that provides information on dividends and other financial characteristics.

According to the (non-bank) managerial entrenchment literature, dividend payout ratios are positively related to CEO power since dividends discourage monitoring from minority shareholders. The non-bank evidence from Europe also suggests that dividends dampen expropriation of minority shareholders consistent with a positive relation between dividend payout ratios and expropriation incen-

³² For an explanation of how we define independent directors, see Appendix A.4.

Table 11Determinants of current and future performance: *Government Ownership* and *Government monitoring*.

Performance proxy Period	Market-to-Book t	Market-to-Book $t + 1$	Market-to-Book $t + 2$	Tobin Q t	Tobin Q $t + 1$	Tobin Q $t + 2$
Government Own. (Ln)	0.009 (0.165)	0.063 (1.059)	0.132 (1.183)	0.009 (0.180)	0.062 (1.059)	0.131 (1.185)
	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>
HHI (Ln)	1.382*** (3.122)	1.250*** (3.196)	0.942** (2.156)	1.382*** (3.123)	1.250*** (3.196)	0.942** (2.155)
Controls and crisis included	Yes	Yes	Yes	Yes	Yes	Yes
Year and bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	294	271	239	293	269	239
Banks	56	56	50	56	55	50
R-squared	0.782	0.739	0.548	0.783	0.739	0.546
Kleibergen-Paap	9.743	10.22	4.635	9.752	10.21	4.635
Government monitoring	0.074 (0.165)	0.511 (1.090)	0.976 (1.222)	0.078 (0.180)	0.504 (1.089)	0.968 (1.224)
	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>	<i>1st Stage</i>
HHI (Ln)	0.165*** (2.794)	0.153*** (2.755)	0.127** (2.063)	0.165*** (2.794)	0.153*** (2.755)	0.127** (2.062)
Controls and crisis included	Yes	Yes	Yes	Yes	Yes	Yes
Year and bank FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	294	271	239	293	269	239
Banks	56	56	50	56	55	50
R-squared	0.781	0.736	0.551	0.781	0.736	0.549
Kleibergen-Paap	7.802	7.591	4.245	7.806	7.586	4.245

Notes: 2SLS regressions for dividend payers. The controls include *RetVol*, *Board size*, *Retained earnings ratio*, *Size*, and *Year > 2010*. Standard Errors clustered on the bank level, heteroskedasticity-robust t -statistics in parentheses. Performance variables are winsorized at the 5th and 95th percentile.

* Significance at 10% level.

** Significance at 5% level.

*** Significance at 1% level.

tives. However, we find that monitoring from the government leads to an inverse relation between CEO power and dividend payouts. Entrenched bank CEOs pay lower dividends and in doing so are less likely to attract undesired attention from government regulators.

Our main findings document a negative relation between CEO ownership and CEO tenure and payout ratios, and a positive link between unforced CEO turnover events and dividend payout ratios. CEO ownership and CEO tenure are also negatively related to bank performance, while unforced CEO turnover events are associated with increases in bank performance. These findings suggest that entrenched CEOs in European banks do not have the incentive to increase payout ratios to discourage monitoring from shareholders. We also provide evidence that director ownership improves performance (as suggested by the non-financial literature) and reduces dividend payout ratios. According to the non-financial literature, the more effective internal governance mechanisms are, the larger the payouts required for entrenched managers to discourage monitoring. Our findings, on the other hand, suggest that in European banks the members of the board of directors tend to prefer low dividend payout ratios to support the capital position of the bank.

We also document that government monitoring does not have a significant effect on bank performance but impinges on payout ratios. In line with the view that the government puts the interests of depositors before that of bank shareholders, we provide evidence of a negative relation between government ownership and payout ratios. When there is a government official on the board banks make lower dividend payouts. In conclusion, these results are consistent with the view that in banking, entrenched CEOs do not have a strong incentive to pay large dividends, because of a combination of weak minority shareholders regulation, an inefficient market for corporate control, and concerns of the government over bank soundness. These factors lead to the negative relation between CEO power and dividend payouts.

Table 12
Robustness tests considering the effect of the tax differential between capital gains and dividends.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	DPE (Ln)	DPE (Ln)	DPE (Ln)	DPE (Ln)	DPE (Ln)	DPE (Ln)	DPE (Ln)	DPE (Ln)	DPE (Ln)	DPE (Ln)
CEO Ownership	−0.237 ^{***} (−2.699)	−0.214 ^{**} (−2.412)								
CEO Ownership (Ln)			−0.113 ^{**} (−2.510)	−0.103 ^{**} (−2.231)						
Unforced CEO turnover					2.102 ^{**} (2.067)	2.080 [*] (1.765)				
CEO tenure (Ln)							−0.373 ^{***} (−2.716)	−0.333 ^{**} (−2.374)		
Director Ownership €									−0.023 ^{***} (−3.194)	−0.025 ^{***} (−2.929)
Market-to-Book	0.471 ^{***} (4.744)		0.431 ^{***} (3.884)		0.365 ^{***} (2.935)		0.408 ^{***} (3.713)		1.107 ^{**} (2.516)	
Tobin Q		0.493 ^{***} (4.921)		0.456 ^{***} (4.170)		0.366 ^{***} (2.688)		0.434 ^{***} (3.938)		1.238 ^{**} (2.445)
Tax differential	−0.006 (−0.498)	−0.005 (−0.456)	−0.001 (−0.069)	−0.001 (−0.053)	0.012 (0.484)	0.008 (0.338)	−0.004 (−0.304)	−0.006 (−0.529)	−0.005 (−0.441)	−0.006 (−0.483)
Founder CEO	<i>1st Stage</i> 2.131 ^{***} (12.551)	<i>1st Stage</i> 2.124 ^{***} (10.976)	<i>1st Stage</i> 4.464 ^{***} (6.204)	<i>1st Stage</i> 4.403 ^{***} (5.643)	<i>1st Stage</i> −0.241 ^{***} (−2.928)	<i>1st Stage</i> −0.219 ^{**} (−3.056)	<i>1st Stage</i> 1.357 ^{***} (5.850)	<i>1st Stage</i> 1.369 ^{***} (5.796)		
CEO Ownership €									0.055 ^{***} (3.908)	0.052 ^{***} (3.467)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crisis (2008–2009) included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank and Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	443	439	443	439	443	439	442	438	430	426
Banks	76	75	76	75	76	75	76	75	73	72
R-squared	0.339	0.348	0.265	0.285	−0.470	−0.445	0.209	0.241	−0.108	−0.169
Kleibergen-Paap	157.7	120.6	38.53	31.87	8.583	9.347	34.26	33.63	15.28	12.03

Notes: 2SLS regressions. The controls include *Retained earnings ratio*, *Size*, and *Year > 2010*. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses. *DPE* (Ln), performance, and control variables are winsorized at the 5th and 95th percentile.

^{*} Significance at 10% level.

^{**} Significance at 5% level.

^{***} Significance at 1% level.

Table 13Robustness tests: regressions results for the ratio of cash dividends plus share repurchases divided by equity (*TP*).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	TP (Ln)	TP (Ln)	TP (Ln)	TP (Ln)	TP (Ln)	TP (Ln)	TP (Ln)	TP (Ln)	TP (Ln)	TP (Ln)
CEO Ownership	−0.206 ^{***} (−2.774)	−0.170 ^{**} (−2.488)								
CEO Ownership (Ln)			−0.091 ^{***} (−2.740)	−0.076 ^{**} (−2.421)						
Unforced CEO turnover					1.429 ^{***} (2.919)	1.335 ^{**} (2.309)				
CEO tenure (Ln)							−0.314 ^{***} (−2.822)	−0.269 ^{**} (−2.423)		
Director Ownership ϵ									−0.023 ^{***} (−3.218)	−0.026 ^{***} (−2.970)
Market-to-Book	0.447 ^{***} (4.755)		0.419 ^{***} (4.068)		0.383 ^{***} (3.769)		0.395 ^{***} (3.913)		1.065 ^{***} (2.598)	
Tobin Q		0.477 ^{***} (4.961)		0.452 ^{***} (4.488)		0.402 ^{***} (3.777)		0.428 ^{***} (4.211)		1.204 ^{**} (2.571)
Founder CEO	<i>1st Stage</i> 2.159 ^{***} (12.406)	<i>1st Stage</i> 2.157 ^{***} (11.056)	<i>1st Stage</i> 4.859 ^{***} (7.046)	<i>1st Stage</i> 4.837 ^{***} (6.460)	<i>1st Stage</i> −0.311 ^{***} (−4.383)	<i>1st Stage</i> −0.275 ^{***} (−4.468)	<i>1st Stage</i> 1.417 ^{***} (6.727)	<i>1st Stage</i> 1.365 ^{***} (6.331)	<i>1st Stage</i>	<i>1st Stage</i>
CEO Ownership ϵ									0.056 ^{***} (4.183)	0.054 ^{***} (3.707)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crisis (2008–2009) included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank and Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	447	443	447	443	447	443	446	442	434	430
Banks	77	76	77	76	77	76	77	76	74	73
R-squared	0.301	0.315	0.264	0.291	−0.003	0.040	0.231	0.259	−0.132	−0.191
Kleibergen-Paap	153.9	122.2	49.65	41.73	19.21	19.96	45.27	40.09	17.49	13.74

Notes: 2SLS regressions. The controls include *Retained earnings ratio*, *Size*, and *Year > 2010*. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses. *TP* (Ln), performance, and control variables are winsorized at the 5th and 95th percentile.

* Significance at 10% level.

** Significance at 5% level.

*** Significance at 1% level.

Table 14
Determinants of dividend payout: dividends to total assets (*DTA*).

	2SLS DTA	2SLS DTA	2SLS DTA	2SLS DTA	2SLS DTA	2SLS DTA	2SLS DTA	2SLS DTA	2SLS DTA	2SLS DTA
CEO Ownership	−0.065 ^{***}	−0.057 ^{***}	−0.100 ^{***}	−0.087 ^{***}						
	(−4.103)	(−3.734)	(−4.213)	(−4.237)						
Unforced CEO turnover					0.454 ^{***}	0.449 ^{**}				
					(3.466)	(2.757)				
CEO tenure (Ln)							−0.100 ^{***}	−0.091 ^{***}		
							(−3.815)	(−3.229)		
Director Ownership €									−0.004 ^{**}	−0.005 ^{**}
									(−2.264)	(−2.128)
Market-to-Book	0.051 [*]		0.214 [*]		0.031		0.034		0.158 ^{**}	
	(1.718)		(1.910)		(0.902)		(1.053)		(2.057)	
Tobin Q		0.057 [*]		0.152 [*]		0.032		0.040		0.186 ^{**}
		(1.805)		(1.858)		(0.878)		(1.175)		(2.094)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Crisis (2008–2009) included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Founder CEO	<i>1st stage</i> 2.159 ^{**}	<i>1st stage</i> 2.157 ^{***}	<i>1st stage</i>	<i>1st stage</i>	<i>1st stage</i> −0.311 ^{***}	<i>1st stage</i> −0.275 ^{**}	<i>1st stage</i> 1.417 ^{**}	<i>1st stage</i> 1.365 ^{***}	<i>1st stage</i>	<i>1st stage</i>
	(12.406)	(11.056)			(−4.383)	(−4.468)	(6.727)	(6.331)		
Treasury securities			0.213 ^{***}	0.238 ^{***}						
			(4.624)	(6.114)						
CEO Ownership €									0.056 ^{***}	0.054 ^{***}
									(4.183)	(3.707)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	447	443	315	312	447	443	446	442	434	430
Banks	77	76	61	60	77	76	77	76	74	73
Kleibergen-Paap weak IV test	153.9	122.2	21.37	37.37	19.21	19.96	45.27	40.09	17.49	13.74
R-squared	0.363	0.355	0.307	0.371	−0.341	−0.364	0.195	0.207	0.000	−0.084

Notes: 2SLS regressions for dividend payers. The controls include *Retained earnings ratio*, *Size*, and *Year > 2010*. Standard Errors clustered on the bank level, heteroskedasticity-robust *t*-statistics in parentheses. *DTA*, performance, and control variables are winsorized at the 5th and 95th percentile.

- * Significance at 10% level.
- ** Significance at 5% level.
- *** Significance at 1% level.

Appendix A

Definition of Unforced CEO Turnover, Government Officials, Board Members and Independent Directors.

In this section we briefly describe the criteria employed to determine whether there is a government official on the board of directors (BoD) and whether a member of the BoD is ‘independent’.

A.1. Unforced CEO turnover

To collect data on CEO turnover, we use LEXIS/NEXIS, and employ a key-word search procedure based on [Schaeck et al. \(2012\)](#) to distinguish between forced and unforced CEO turnovers during 2005–2010. After collecting data on the year of the CEO turnover and the CEO name, we look for CEO turnover based on the following keywords: ‘management change’, ‘forced resignation’, ‘turnover’, ‘separation’, ‘ousted’, ‘early retirement’, ‘step down’, ‘mandatory separation’, ‘voluntary separation’, ‘fired’, ‘made redundant’, ‘departure’, ‘management succession’, ‘executive change’ and ‘tenure’. These data are matched with the bank name.

Following [Schaeck et al. \(2012\)](#), we classify a turnover as ‘forced’ if the CEO is reported to have been dismissed, forced to resign or to have left the bank due to undisclosed policy differences. We define all remaining CEO turnovers as unforced, unless they meet at least one of the following criteria ([Schaeck et al., 2012](#)):

- (a) the reason for the CEO turnover is declared *not* to be: death, poor health, or acceptance of a position either elsewhere or within the bank;
- (b) it is reported that the reason for the CEO turnover is retirement, but retirement is not announced until at least six months prior to succession.

Moreover, if a reason for CEO turnover is not provided, we assume that the turnover is forced due to disciplining actions or due to company policy disputes.

Following the criteria listed above, we classify 86 CEO turnovers, of which 22 are forced (which occurred mainly in the period 2008–2010). We classify the remaining 64 CEO turnovers as unforced.

A.2. Government officials

We qualify a board member as a government representative if any individual is described in the annual report of the bank by one of the following combination of words: ‘Government commissioner’, ‘Government representative’, ‘Representatives of the regulatory authority’, and ‘Deputy government commissioner’. In certain cases, the government official is identified by a combination of words that includes the name of the country. For instance, for Lloyds Banking Group Plc, the government official is identified by the words ‘Board Representative for Scotland’, while for the Greek bank Alpha Bank AE, the government official is identified by the words ‘representative of the Hellenic Republic’. For 15 banks in our sample the variable *Government Official on the Board* is equal to one in at least one year during the sample period for a total of 60 bank-year observations (as reported in [Table 3](#), for which 7.7% of the total available observations for *Government Official on the Board* (775) take on the value one). Out of this 60 observations, 52 refer to the period 2008–2013, suggesting that in most cases government officials were appointed as a result of the financial crisis and the recent sovereign debt crisis in the EU. The countries for which the dummy variable is equal to one in at least one year are: Austria, Belgium, Greece, Netherlands, Portugal, Sweden, and the UK.

A.3. Board members

EU banks can have a one-tier or two-tier corporate governance structure (or board structure). As the name suggests, a two-tier governance structure is one with two boards of directors. The management and monitoring function are performed by the two boards in a separate fashion in the two-tier case, and by different members of the board in the one-tier case ([Arnaboldi and Casu, 2011](#)).

The definitions of one-tier and two-tier structure vary according to country. For banks in our sample, the management function is performed by a board usually named the ‘management board’ or ‘executive board’, while the monitoring function is performed by a board usually named the ‘Board of Directors’, or ‘non-executive supervisory board’.

For banks with a two-tier board structure, we use the following keywords to identify members of the ‘management board’: ‘Management board’, ‘Executive board’, ‘Executive management’, ‘Executive team’, ‘Executive committee’, ‘Board of Directors’, ‘CEO & CFO’, ‘Managing director’, and ‘General manager’. For banks with a one-tier board structure we use the following keywords to identify members of the ‘management board’: ‘Executive committee’, ‘Management committee’, ‘Delegated committee’, ‘Executive board’, ‘Management board’, ‘General management’, ‘General manager’, ‘Management’, ‘General directors’, ‘Group executive management’, and ‘Group executive committee’.

For banks with a two-tier board structure, we use the following keywords to identify members of the ‘supervisory board’: ‘Supervisory board’, ‘Board of Directors’, ‘Advisory board’. As explained in Section A4, we consider all members of the ‘supervisory board’ as ‘independent directors’ for banks with a two-tier board structure.

For banks with a one-tier board structure, we use the criteria set out in Section A4 to identify ‘independent directors’, i.e. directors with a monitoring role.

A.4. Independent directors

We define ‘independent directors’ as reported in a bank’s annual report. A member of the Board of Directors (BoD) is deemed to be independent if such persons do not have any business or personal relations with the company or its management board. In many cases, banks self-report the degree of board independence of their own BoD. This is usually defined as the number of independent directors divided by number of BoD members *excluding* employee representatives and government representatives. We use the same approach for board independence calculation for comparability of the results across different banks. For example, in Nordea Bank’s annual report, independent directors are defined as ‘[...] the number of Board members who are independent in relation to the Company and its executive management as well as independent in relation to the Company’s major shareholders.’ For banks with a two-tier corporate governance structure, we consider as independent directors the members of the supervisory board. For banks with a one-tier board structure, we define independent directors according to the criteria listed above.

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