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董事會特性對員工分紅與股東報酬關聯性之影響
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穩健會計與董事會特性對員工分紅盈餘貢獻度之影響

Accounting Conservatism, Corporate Governance and Contribution of Bonus to Earnings

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員工分紅盈餘貢獻度之探討：穩健會計與董事會特性之影響

摘要

本文從穩健會計與董事會特性之角度探討「員工分紅對企業盈餘貢獻（以下簡稱分紅貢獻度）」的影響。我們以「員工分紅前之會計淨利」除以「員工紅利」作為被解釋變數，該變數代表每一元的員工紅利之盈餘貢獻度。實證結果顯示，在其它條件不變的情況下，由於穩健原則認列收益較嚴謹的特性，使得分紅貢獻度與會計穩健程度呈現反向關係。此外，我們發現，出任董事會席位之經理人持股比率與分紅貢獻度呈顯著負向關係。此項結果隱喻，具影響力之高階經理人可能基於自利動機，而分配較多之員工分紅，造成投資人權益縮水，呈現員工分紅之稀釋效果。

關鍵詞：員工分紅盈餘貢獻度、穩健會計、董事會特性、稀釋效果

The impact of Accounting Conservatism and Board characteristics on Contribution of Bonus to Earnings

Abstract

This study investigates the effect of accounting conservatism, corporate governance on contribution of bonus to earnings (bonus-earnings contribution). The empirical results indicate that accounting conservatism is significantly negatively related to bonus-earnings contribution due to the asymmetric treatment of conservatism in more timely recognition of unrealized losses but not to unrealized income. With respect to shareholding by managers, the findings show that higher the shareholdings lower the bonus-earnings contribution. This evidence implies that influential managers could have power and self-interest motivation to give away more bonuses under the given level of accounting earnings. The dilutive effect of bonus on equity of shareholder is thus suggested.

Keywords: bonus, accounting conservatism, corporate governance, dilutive effect

壹、　研究動機與目的

本文探討穩健會計與董事會特性對「員工分紅對企業盈餘貢獻（以下簡稱分紅貢獻度）」的影響。過去有關員工分紅之研究，主要集中於員工分紅之決定因素與其經濟後果之探討，前者如實證研究發現財務數據與公司治理機制（Lambert and Larcker, 1987；Beatty and Zajac, 1994；許崇源、陳昭蓉，2008）為決定員工分紅多寡的重要因素；後者如員工分紅與企業股價或績效之相關性（Chen, 2003；范宏書、陳慶隆 2006；許崇源、陳昭蓉 2008）。本研究則直接探討穩健會計與董事會特性對員工分紅盈餘貢獻度之影響，期能充實員工分紅、公司治理與會計政策相關探討之學術文獻。我們將盈餘貢獻度定義為每一元的員工紅利可以創造盈餘的能力，係以「員工分紅前之會計淨利」除以「員工紅利」衡量。由於企業盈餘之認列受到穩健會計的影響，且因員工分紅具有連結員工利益與企業利益之激勵效果，但也有侵蝕股東權益之稀釋效果，制度之採用必須妥適，而董事會為股東的代理機構，係公司治理之核心，故本文探討穩健程度與董事會特性對分紅貢獻度的影響。

代理理論指出，董事會的監督角色與薪酬誘因契約皆為減緩股東與經理人代理問題的重要機制。其中，薪酬契約之設計係具有聯結員工利益與股東權益一致之效果，以和緩代理問題(林淑惠與胡星陽，2003)。文獻顯示，董事會的監督功能亦可替代部分薪酬誘因的使用(Beatty and Zajac, 1994；Kraft and Niederprum, 1999)。此外，Werner, Tosi & Gomez-Mejia (2005)發現，影響高階主管薪酬之因素將同樣影響員工薪資水準之決定。由於高階主管之薪酬政策係由董事會決定，而員工之薪資政策又由高階主管決定，因此高階主管薪酬政策與員工薪酬政策存在相關性，且受董事會特性(股權結構)所影響(Werner et al., 2005)。基於前述研究發現，本研究認為，董事會發揮之興利與監督效果，一方面決定員工薪酬及分紅政策，另方面亦同時影響公司整體之價值。換言之，具有效能之董事會應合理保障員工及股東之公平報酬。

本研究關切員工分紅對會計盈餘的影響而非經濟盈餘之主要原因如下。第一，Bushman and Indjejikian (1993a)認為，會計盈餘為企業各式契約機制之主要基礎。會計盈餘的決定受到一般公認會計原則之約束，以會計盈餘作為契約設計之主要機制，不僅可以合理評估管理階層的經營績效，亦得以作為股東評估董事會治理績效之基礎。Bushman and Smith (2001)的激勵假說(incentive hypothesis)更指出，企業常制訂以會計盈餘為基準之酬勞計畫，以驅使經理人或員工之利益與企業一致。第二，Banker and Datar (1989)及 Sloan (1993)提出之過濾假說(filtering hypothesis)指出，經濟盈餘同時包括公司的內含價值(intrinsic value)和市場雜訊。因此，採用會計盈餘可避免不必要的市場雜訊。第三，Watts and Zimmerman (1986)、Bushman and Indjejikian (1993)及 Feltham and Xie (1994)指出，影響企業市場價值之因素頗多，以會計盈餘評量員工績效表現較採用市場價值衡量為宜，故會計盈餘常作為評估員工績效的指標，並進而成為員工分紅之基礎。

因為本研究的被解釋變數(分紅貢獻度)包含會計盈餘，故納入穩健會計以瞭解其對分紅貢獻度之影響。從契約的觀點而論，穩健會計有助於降低契約、訴訟、租稅與管制議題中資訊不對稱的問題(Watts 2003a)；[1]從評價的角度而論，穩健會計將影響企業帳面價值與市場經濟價值的差距(Roychowdhury and Watts, 2007)。

過去探討誘因獎酬契約的研究主要探討公司高階主管薪酬水準之決定因素，以及高階獎酬與績效的連結程度。有別於過去的文獻，本文之主要貢獻在：(1)延伸 Watts (2003a and 2003b)的論點，分析穩健會計程度對員工分紅盈餘貢獻度的影響；(2)應用 Khan and Watts (2009)所發展衡量各公司年度別(firm-year specific)之穩健會計指標(*C-Score*)對員工分紅貢獻度之影響。

基於本文所建構的理論模型(詳見第三節)，以棋盤式迴歸(panel regression)模式進行分析，我們的實證結果顯示，盈餘穩健程度與分紅貢獻度呈負向關聯

[1] 穩健的認列會計盈餘可減少股東對公司的訴訟案件、公司的稅負及管理當局面臨公司浮列盈餘時須處理之市場風險。

性。此外，擔任董事之高階經理人，其持股比率或席次比率愈大者，對分紅盈餘貢獻度有負向的效果。換言之，無論會計屬性或董事會屬性均能系統性地解釋分紅貢獻度。

本文後續架構如下：第二部分為文獻探討，第三部分為研究設計，說明實證模型推導與設計，第四部分為報導實證結果，最後則為結論與建議。

貳、 文獻探討

一、員工分紅之相關文獻

過去關於員工分紅的文獻，約可分為：員工分紅之趨勢分析(鍾俊文與吳炳義 2004)、員工分紅之決定因素(許崇源與陳昭蓉 2008)及對企業生產力及經營績效之影響(汪美伶 2002；許崇源與陳昭蓉 2008；陳俊合、林嬋娟與蔡彥卿 2003)；以及員工分紅與股價的關聯性(張仲岳，1999；Chen 2003；范宏書、陳慶隆，2006)。

文獻顯示，國內上市櫃公司在實施員工分紅費用化之前，相對於現金分紅，股票分紅佔員工分紅總數之比率有逐年上升之趨勢(鍾俊文與吳炳義 2004)。而在設計不公平的薪酬制度下，員工拿股票、股東拿現金之作法成為稀釋股東權益最為嚴重的原因(鍾俊文 2004)。公司治理變數(如股權結構與家族控制)及經濟性變數（產業特性及成長機會）均影響員工紅利的發放(許崇源與陳昭蓉 2008)，且員工分紅與企業經營績效(許崇源與陳昭蓉 2008)；汪美伶 2002；陳俊合、林嬋娟與蔡彥卿 2003)及股價(張仲岳，1999；Chen 2003；范宏書、陳慶隆，2006)存在關聯性。

綜合前述文獻，過去研究均未探討員工分紅對會計盈餘貢獻度之影響因素。為了對員工分紅之經濟後果有更深入的瞭解，我們以員工分紅對盈餘的貢獻度作為本文的研究變數。

二、穩健會計

Feltham and Ohlson (1995)從資產負債表的觀點討論穩健性，並以淨值市價比作為衡量穩健會計之代理變數。至於 Basu（1997）則自損益表的觀點討論，並

強調條件性穩健(conditional conservatism)的概念，從不對稱的時效性(asymmetric timeliness)定義穩健會計。具體而言，相對於認列好消息的時效性，會計人員認列壞消息的時效性較為及時。

Watts (2003a)認為穩健性造成企業之帳面淨資產被系統性地降低。換句話說，淨資產的帳面值與市值的差距會隨著會計穩健程度的提高而擴大。穩健會計的特性可顯現於二種情況，其一是會計方法的選用，其二則為不對稱認列利益及損失。Beaver and Ryan（2005）區分條件式穩健（conditional conservatism）與非條件式穩健(unconditional conservatism)二種不同的概念。舉例而言，特定的穩健會計方法(如研發費用當期沖銷)屬非條件式穩健；不對稱認列利益及損失(如不認列或有利得而認列或有損失)則屬條件式穩健會計。Beaver and Ryan（2005）認為，條件式穩健較非條件式穩健重要，因其可增加債務契約的效率。相反的，非條件式穩健導致之淨資產帳面價值的低估則不具有此項功能。Basu (1997)所提出的不對稱時效性模型即屬條件式穩健。

由於傳統的 Basu（1997）模型無法為個別公司計算跨期間之盈餘穩健程度，於是 Khan and Watts (2009)延伸傳統的 Basu 模型，計算個別公司各年(firm-year)之穩健會計程度，並稱該變數為 C-Score (conservatism score)。Lai and Taylor（2008）利用澳洲的資料驗證 C-Score 的有效性，得到 C-Score 為有效的條件式穩健會計衡量值。Chi, Liu and Wang (2009)也分析 C-Score 與公司治理的關聯性。本文亦採用 C-Score 衡量樣本公司的穩健程度。

三、公司治理

代理理論指出，董事會的監督角色與薪酬誘因契約皆為減緩股東與經理人代理問題的重要機制。其中，薪酬契約之設計係具有聯結員工利益與股東權益一致之效果，以和緩代理問題(林淑惠與胡星陽，2003)。Werner et al. (2005)則指出，高階主管薪酬政策與員工薪酬政策均受董事會特性(股權結構)所影響。

基於前述研究發現，本研究認為，董事會之股權特性及組成特性影響董事會

監督功能之發揮，一方面決定員工薪酬及分紅政策，另方面亦同時影響公司整體之價值。由於高階主管薪酬政策與員工薪酬政策存在相關性，故亦將高階經理人之影響力納入分析。

(一) 董事會股權結構對員工分紅之影響

由於本文之員工分紅同時包括高階主管與員工之紅利，然二者均屬於以勞動者身份所獲得之勞務報酬，均決定於其績效與貢獻。就二者之決定性因素而言，Werner et al. (2005)發現，所有權結構不僅影響高階主管薪酬與會計績效間之關聯性，同時也影響一般員工的薪資政策。換言之，影響高階主管薪酬之因素亦同樣影響員工薪酬之決定，其中股權結構為重要之因素之一。

(二) 出任董事之高階經理人特性對分紅貢獻度之影響

依據Herzberg (1959)之雙因子理論，[2]保健因子與激勵因子對於員工的去留及表現有相輔相成之重要影響，滿足員工對於激勵因子及保健因子的需求，會激勵員工有更佳的表現。一般而言，高階經理人之保健因素大致滿足，本文之員工分紅屬於來自激勵因子的效應。由於員工分紅政策係由董事會所決定，故出任董事之高階經理人特性會影響分紅貢獻度。

本文從董事席位及持股二觀點來說明高階經理人之特性。就董事席位而言，一旦經理人出任董事，不僅由業務執行者晉升為決策者，同時滿足其對於激勵與保健因子的需求，且因參與董事會而有能力影響員工分紅政策的決定。就持股而言，經理人持股具有連結股東利益趨於一致的效果(Morck et al., 1988; McConnell and Servaes, 1990)，但也可能造成侵佔股東之效果(McConnell and Servaes, 1990; Firth et al., 1999)。

[2] Herzberg (1959)提出激勵-保健理論(又稱雙因子理論)，將工作變項區分為激勵因子(motivators)及保健因子(hygiene factors)兩類。激勵因子又稱為內在因子(intrinsic factor)，可以提供滿足的事物多與工作本身有關，包括成就感、認同感、升遷、成長可能性、責任等等。具備激勵因子可使員工感到滿足，但缺乏這些因素，亦不會讓員工覺得不滿足。保健因子又稱外在因子(extrinsic factor)，多半與工作本身無關，而與工作環境有關，包括薪資、公司政策及行政、技術監督、與上司或與下屬之人際關係、工作保障、工作環境等，這些因素不能促使員工賣力的工作，只能維持對工作的基本投入。提供保健因子給員工，員工不一定會滿足，但若不提供給員工，則員工必定會不滿足。

換言之，經理人出任董事，一方面有職權決定員工分紅政策，但另方面由於其本身亦具員工身份，有資格分享員工分紅，因此基於利益一致的激勵誘因效果，會提高分紅貢獻度。然而，出任董事之高階經理人也有可能基於自利動機，決定較多的員工分紅而降低分紅貢獻度。基於前述，我們對於出任董事之經理人特性對分紅貢獻度之影響不作方向之預期。

參、研究方法

一、 實證模型

本研究利用第(1)式說明經濟所得(economic earnings)與公司價值間的淨剩餘關係(net surplus relation):

(1)

其中 $V_{i,t}$ 與 $V_{i,t-1}$ 分別代表第 i 家公司於期末 (t) 以及期初 ($t-1$) 的公司價值；而 $SEO_{i,t}$、$Repurchase_{i,t}$ 以及 $Dividend_{i,t}$ 則依序代表該公司於第 t 期的現金增資(若減資，則此數為負值)、庫藏股買回與現金股利之金額，$Earnings_{i,t}^{\Pi}$ 則代表企業的經濟所得。

將式(1)針對 $Earnings_{i,t}^{\Pi}$ 移項可得式(2)，企業於當期之現金與股票員工分紅($Bonus_{i,t}$)之影響則反映於 中。[3]

$Earnings_{i,t}^{\Pi}$ = (2)

[3]舉例而言，對於一家 $SEO_{i,t} = Repurchase_{i,t} = Dividend_{i,t} = 0$ 的公司而言，若其期初市值 $V_{i,t-1}$ 與期末市值 $V_{i,t}$ 分別為\$13 與\$10，利用第(1)式移項可得經濟所得($Earnings_{i,t}^{\Pi}$)為\$3。

本研究再將經濟盈餘以員工分紅予以平準，可得經濟盈餘與員工分紅有以下的理論關係：

(3)

由於台灣 2008 年以後的會計盈餘才將員工分紅以費用入帳，2007 年以前的員工分紅皆以盈餘分配處理。有鑑於此，本研究令 $Earnings_{i,t}^{A}$ 代表會計盈餘，並假設 $Earnings_{i,t}^{A}$ 與 $Earnings_{i,t}^{E}$ 的關係如下：

(4)

式(3)中虛擬變數 $D_{i,t}$ 為 1 表示事件年度為 2007 年以前，反之則為 0；$\phi_{i,t}$ 則表除員工分紅 $\left[(Bonus)\right]_{i}(i,t)$)外，會計盈餘與經濟盈餘間之干擾項。

如果令 $EBB_{i,t}^{A}$ 代表未計入員工分紅費用前的會計盈餘，且邊際稅率為 $TAX_{i,t}$，則會計盈餘為：

(5)

換言之，若將第(5)式先行代入第(4)式之後，再代入第(3)式即可得：

(6)

整理式(6)可得：[4]

(7)

本研究將$\frac{EBB_{i,t}^{A}}{Bonus_{i,t}}$解讀為「名目上」每一元員工紅利對「稅前且分紅前」會計盈餘的貢獻，簡稱為分紅貢獻度。第(7)式顯示，若能控制的影響效果（將採固定效果之迴歸模型予以控制），將研究焦點放在$\frac{\phi_{i,t}}{Bonus_{i,t}}$可以協助我們瞭解決定分紅貢獻度的因素。

更具體來說，$\frac{EBB_{i,t}^{A}}{Bonus_{i,t}}$愈低，代表員工分紅貢獻度愈低，也意味著「超額」員工分紅愈大，因此若能瞭解$\frac{\phi_{i,t}}{Bonus_{i,t}}$的決定因素，將有助於我們分析影響員工分紅貢獻度的因素。

由於本研究的被解釋變數(分紅貢獻度)包含會計盈餘，而過去文獻亦指出會計方法與公司治理機制均會影響企業的盈餘，因此，本研究納入穩健會計及公司治理相關變數，以瞭解這二類因素對分紅貢獻度之影響。我們假設穩健會計

($CA_{i,t}$)、公司治理($CG_{i,t}$)因素與　　：

4

$$\frac{\phi_{i,t}}{Bonus_{i,t}} = \beta_0 + \beta_1 CA_{i,t} + \beta_2 CG_{i,t} \quad (8)$$

將這個結果直接代回第(7)式，並加入控制變數 $CV_{i,t}$ (詳細的變數定義見研究設計)對 $\frac{EBB^A_{i,t}}{Bonus_{i,t}}$ 之影響，輔以迴歸模型表達可得式(9)：

$$\frac{EBB^A_{i,t}}{Bonus_{i,t}} = \alpha_0 + \beta_1 CA_{i,t} + \beta_2 CG_{i,t} + \beta_3 \Phi_{i,t} + \beta_4 CV_{i,t} + \epsilon_{i,t} \quad (9)$$

其中。由於截距項會受到公司　　期間 t 影響，因此本研究進行同時考量公司與期間的棋盤式資料迴歸分析(panel regression)。

本研究主要關切的估計係數為　。愈穩健之會計盈餘認列壞消息的時效性愈快，因此我們預期 β_1 方向為負。至於正的 β_2 代表該公司治理機制係傾向保護股東；而負的　　代表此公司治理機制係傾向對員工有利。

二、　變數定義與衡量

(一)、被解釋變數：分紅貢獻度($EBB^A/Bonus$)

本研究以「企業會計淨利」(EBB^A)除以員工紅利(*Bonus*)作為被解釋變數，該變數代表每一元的員工紅利創造盈餘的能力。員工紅利(*Bonus*)包括現金分紅與股票分紅，其中，股票分紅之金額係依據股票面額而得。[5]

(二)、解釋變數

1. 穩健會計（*C-Score*）

Basu（1997）利用股價領先會計盈餘（stock lead accounting earnings）現象，配合穩健會計所強調的及時認列預期損失，主張相較於好消息（股票報酬為正），

[5] 我們另以除權市價計及期末市價計算員工分紅股票價值進行敏感性測試（參見表七）。

具穩健特性的會計盈餘對壞消息（股票報酬為負）的反應較為及時，設定以下迴歸模型:

（10）

第（10）式中之 X_t 代表第 t 期的會計盈餘、表示期初的股價、R_t 為該期之股票報酬、D_t 為分類該筆觀察值是否為壞消息的虛擬變數（若 $R_t < 0$ 則 $D_t = 1$ 反之則為 0）、係數代表會計盈餘 X_t 對於好消息的敏感程度，β_1 則代表會計盈餘 X_t 對於壞消息的增額敏感程度，因此，若實證結果顯示 $\beta_1 > 0$ 則支持會計盈餘具備穩健的盈餘屬性。

由於 Basu（1997）公式係彙集所有公司盈餘穩健性求算綜合衡量值，無法衡量各別公司分年之盈餘穩健程度，於是，Khan and Watts（2009）發展出個別公司各年度（firm-year specific）之穩健程度衡量值 *C-Score*。以下說明 *C-Score* 衡量方式：

$$X_{i,t} = \beta_{1,t} + \beta_{2,t}D_{i,t} + R_{i,t}(\mu_{1,t} + \mu_{2,t}Size_{i,t} + \mu_{3,t}MB_{i,t} + \mu_{4,t}Lev_{i,t})$$

(11)

將第(11)式展開並進行迴歸估計，分年蒐集 λ_1 至 λ_4 之估計係數（分別表為 $\hat{\lambda}_1$ 至 $\hat{\lambda}_4$），再利用第(12)式可以計算各公司分年之穩健會計程度：

C- (12)

第（11）式係Khan and Watts（2009）基於Basu（1997）所發展。[6]第（11）

[6] Khan and Watts（2009）說明過去文獻於實證上及理論上皆提出這些公司特性變數（公司規模、市價淨值比與負債比率）與穩健會計存在關聯性。

式之下標*i*與*t*分別代表公司與年度。Khan and Watts （2009）並加入公司規模（*Size*）、市價淨值比（*MB*）及槓桿比率（*Lev*）等公司特性，其中*NI*代表非常項目前淨利除以期初普通股權益總市值；*Lev*表示長期負債加流動負債除上當期市值；*Size*是當期公司市值取自然對數；*MB*是由當期市值除以期末股東權益；其他變數之定義則與Basu （1997）所採變數定義相同。*C-Score*的計算係分年度估計第（11）式，將迴歸分析所得估計係數 $\hat{\lambda}_1$、$\hat{\lambda}_2$、$\hat{\lambda}_3$、$\hat{\lambda}_4$分年度帶入第（12）式，再透過與各公司個別特性交乘計算而得。

至於年度股票報酬率(R_{LC})的計算方式則與 Khan and Watts（2009）之概念相同。以國內會計年度結束後四個月內應公開年度財務報表之曆年制公司為例，係指以 5 月 1 日至隔年 4 月 30 日買進並持有之股票報酬（buy-and-hold return）。

2. 董事會特性變數

(1) 董監持股比率(*BD_OWN*)

董事會成員身負議定公司重大決策之職責，包括薪酬制度的制訂，當公司董監事平均持股越高，其個人利益與公司目標越趨一致，將發揮董事會的監督功能，使董監酬勞水準較低。因此，本研究參考相關文獻（Cyert, Kang, and Kuma, 2002），將董監持股比率(*BD_OWN*)列入考量。

(2) 獨立董監席次比率(*IND_BD*)

董事會成員之專業性與獨立性決定董事會決策品質之良窳(Davidson et al., 1998)。本研究對獨立董監事之定義，係依據「台灣證券交易所股份有限公司有價證券上市審查準則」第九條第十二項，及其補充規定「台灣證券交易所股份有限公司有價證券上市審查準則補充規定」第十七條所載事項，予以認定。本研究採用獨立董監事占全體董事會之席次比率(*IND_BD*)衡量董事會之獨立性。

(3) 高階經理人之影響力(*INFL*)

Imhoff (2003)指出，董事長兼任總經理的公司，因為監督者和執行者是同一人，因此可能會使董事會的監督功能受到傷害，也容易造成超額薪酬的情況(Cyert, Kang & Kumar, 2002; Grinstein & Hribar, 2004)。高階主管運用其權力去影響薪酬制度之設計，將扭曲薪酬制度的功能，削弱誘因契約對高階主管的影響，導致高階主管逕行私利之行為，而由投資大眾承受高階主管自利行為的後果(Bebchuk & Fried, 2005)。

依我國公司法規定，董事如未兼任員工(包括經理人)身分，則不具領取員工紅利資格，但董事如兼具員工身分，則可領取員工紅利。依據代理理論自利假說的推論，董事長兼任總經理，則很可能分配較多紅利，以極大化其個人的總報酬。經理人在董事會所佔席次越高，其權力越大，愈能影響董事會的決策。本研究以出任董事之經理人持股(*MRG_OWN*)與席次比例(*MGR_BD*)衡量經理人特性。

A. 經理人持股比率(*MRG_OWN*)

Werner et al. (2005)發現，高階主管薪酬政策與員工薪酬政策存在相關性，且受股權結構型態之影響。本研究以出任董事之經理人持股比率（經理人期末持股數除以公司期末流通在外股數）衡量經理人特性，並測試其對員工分紅貢獻度之影響。

B. 經理人出任董事席次比率(*MRG_BD*)

由於員工分紅政策係由董事會決策，故本研究另以經理人出任董事席次比率衡量經理人特性，測試其對員工分紅貢獻度之影響。本研究以經理人出任董事席次數除以董事總席次數加以衡量。

(二)、控制變數

1. 公司治理相關控制變數：

(1) 外部大股東持股比率(*BLOCK*)

存在外部大股東之公司可以較有效地監督其高階主管(Tosi and Gomez-Mejia, 1989)，因而有較低之薪酬水準(Dyl, 1988; Hambrick & Finkelstein, 1995)及執行業

務董事酬勞(Jensen & Murphy, 1990; Abdullah, 2004)。本研究預期，外部大股東之持股愈多，愈具權力與動機可以有效監督董事會成員，應可強化員工分紅貢獻度。本研究係以台灣證交所定義之外部大股東期末持股數除以公司期末流通在外股數(*BLOCK*)衡量。

(2) 家族企業(*FAMILY*)

林穎芬和劉維琪（2003）指出，非家族企業薪酬激勵以公平為原則，但家族企業卻是以追求成員的安定與和諧為目的，故本研究預期員工分紅對於非家族企業的激勵效果會高於家族企業，將之納入作為控制。國內董事會決策係採表決制，因此以家族控制席次來衡量是否存在控制家族。本研究採林宛瑩與許崇源(2008)對家族企業之定義，依據年報中揭露之董監事及部門主管之親屬關係，凡與董事長或其家族具有親屬關係之自然人董事成員，及法人股東之主要股東若為本公司之控制股東，其關係企業或家族成員，則該法人股東所推派之董監事代表，均視為家族席次。本研究以家族席次數占全體董事會席次超過五成以上者，定義為家族控制企業，則*FAMILY*等於1；以席次未過五成者，定義為非家族控制企業，則*FAMILY*等於0。

(3) 董事會規模(*BD_SIZE*)

董事會規模過大時，組織內部易生派系而不易整合意見，反而降低決策效率(Jensen, 1993)。Bacon (1973)及Zahra & Pearce (1989)則認為，較多的董事會人數可容納不同專業領域的專家，決策品質較佳。當董事會成員探討薪酬制度時，可能會因董事會的規模而對員工分紅政策有所影響，故本研究以董事及監察人席次合計數衡量董事會規模，並將*BD_SIZE*作為控制變數。

2. 公司特性相關控制變數

(1) 會計績效(*ROA*)

公司績效為決定經理人獎酬之重要因素(洪玉舜和王泰昌，2005a)，本研究以資產報酬率作為會計績效之代理變數。會計績效（ROA）之定義為稅前息前淨利

除以平均資產總額。

(2) 公司成長機會(GROWTH)

公司的成長機會較多，所面臨的風險也較高，因此公司會透過獎酬吸引經理人以促使其制定對公司有利的決策。Baber, Janakiramn and Kang (1996)發現，成長機會高之公司，其高階主管薪酬與績效間呈現顯著正向關聯性。Smith and Watts (1992)指出，相較於非成長型的公司，成長型公司會傾向於採用較高比率以股價為基礎之薪酬獎勵計劃。故本研究預期成長機會較多之公司，較有採取員工分紅制度之動機。

本研究以研發支出密度(*RD*)及市價淨值比(*MB*)作為公司未來成長機會的代理變數，其衡量方式分別為研發支出除以銷貨淨額（*RD*）以及期末每股市價除以期末每股淨值（*MB*）。

(3) 公司資產規模(*ASSET*)

Clinch (1991)發現，公司規模影響薪酬與績效之關聯性，因此本研究將公司資產規模（*ASSET*）納入作為控制變數，並以期末資產總額取自然對數衡量。

(4) 負債比率(*LEV*)

負債比率影響高階主管薪酬之決定(Finkelstein & Hambrick, 1989；Smith and Watts, 1992)，也可能影響員工分紅政策。因此本研究將之納入作為控制變數，並以期末總負債金額對期末總資產之比率衡量公司負債比率(*LEV*)。

(5) 員工固定薪資費用比率(*WAGE*)

員工分紅為員工勞務代價之一部分，性質屬於薪資費用。我國現行實務將員工分紅部分列為盈餘分配，其他部分才作為薪資費用。前者依盈餘情況發給，屬或有薪資部分，後者則屬確定薪資部分，兩者間具有互補關係，故將其納入作為控制變數。本研究以當年度薪資費用除以當年度銷貨淨額衡量*WAGE*。

(6) 上市櫃年限(*LISTY*)

本研究認為企業員工分紅對會計盈餘之貢獻程度，將隨著企業之成熟度產生

變異，故將上市櫃年限(*LISTY*)納入控制變數，並預期歷史愈久之公司其員工分紅創造會計盈餘之效果將較低。

三、 樣本選取與資料來源

本研究係以 1996 年至 2008 年台灣證券交易所上市、上櫃之公司為樣本，並排除下市、非曆年制與產業特性較為特殊的金融業、證券業及保險業之公司，扣除研究變數有遺漏值之樣本公司後，共得 3,802 筆觀察值。茲將本文之研究樣本依產業(依台灣經濟新報之產業分類)與年度之分布，整理於表 1。

表 1 顯示，研究樣本中屬於電子業之比重最高(達 48.79%)。就年度分配而言，自 2002 年起，每年都有 300 筆以上之觀察值。除了 2008 年發放家數明顯低於 2007 年外，發放員工分紅之公司家數呈現逐年增加的趨勢。我們認為，2008 年的現象可能受到金融海嘯與員工分紅費用化之共同影響。為了排除本文之結論可能受到特定產業(即電子業)或特定年度(即 2008 年)的影響，我們在敏感性分析一節，針對下列情況：(1) 排除 2008 年之觀察值，(2)以扣除員工分紅後之盈餘衡量分紅貢獻度，及(3)以除權市價及期末市價計算員工分紅股票價值衡量分紅貢獻度，進行額外測試。

[插入表 1]

肆、 實證結果

一、 敘述性統計

表 2 報導各變數的基本統計量。首先，被解釋變數(亦即$\frac{EBB^A}{Bonus}$)之平均數 46.736，代表企業每分配$1 的員工紅利，可以創造平均$46.736 分紅前之會計盈餘。這個數值的倒數顯示，員工紅利占該分紅前盈餘的比重約為 2.14%。此外，$\frac{EBB^A}{Bonus}$之中位數(19.506)小於平均數(46.736)代表該變數的分布為右偏的分配。至於穩健會計程度(C-Score)的平均數與中位數分別為 0.025 與 0.022。此外，C-Score 的第一個四分位數（Q1＝0.004）仍為正值，代表整體而言，本

研究樣本之盈餘具穩健性。

[插入表 2]

就經濟盈餘(即Φ)而論，由於該變數的平均值(34.055)大其中位數(24.406)，Φ 的分布仍為右偏的分配。最後，由於股價的波動幅度較高，所以經濟盈餘的標準差(555.378)明顯地高於會計盈餘的標準差(85.023)。

董事會特性中，董監持股比率(*BD_OWN*)、獨立董監席次比率(*IND_BD*)、經理人持股比率(*MGR_OWN*)與經理人席次比率(*MGR_BD*)之平均數(中位數)分別為 25.267% (22.355%)、11.756% (0.000%)、1.877% (0.710%)與 11.575% (10.000%)。前述董事會特性變數之敘述統計值大致與文獻發現一致。簡要來說，本研究樣本之平均董監持股率為 25.267%。此外，雖然獨立董監的平均席次比率為 11.756% ，但是仍有五成以上的公司未設置獨立董監(因中位數為 0)。最後，經理人持股比率的平均水準(1.877%)遠低於董監持股比率的平均水準(25.267%)，但是就席次比率而言，經理人席次比率(11.575%)與獨立董監席次比率(11.756%)相當。從股權與席次偏離的角度而言，經理人可以用一單位的持股取得約六單位的決策權力(11.575 ÷ 1.877 = 6.17)。因此，經理人如何影響員工分紅制度的設計，為重要的研究議題。

就控制變數而言，雖然外部大股東(即不含董監事及經理人)之平均持股比率(*BLOCK*)為 1.456%，但是資料也同時顯示至少有 75%的公司並不存在外部大股東(因 Q3 仍為 0)。此外，本研究樣本中有 41.1%之樣本屬於家族企業(*FAMILY*)、董事會平均規模(*BD_SIZE*)約為 10 人。最後，就公司特性之控制變數而言，平均資產報酬率(*ROA*)為 7.184%、研發密度比率(*RD*)為 2.308%、市值淨值比為 1.814 倍(*MVBV*)、負債比率(*LEV*)為 41.204%、取自然對數後之平均公司規模(*SIZE*，以仟元表達)為 15.458、員工固定薪資費用比率(*WAGE*)為 4.964%，上市櫃年限(*LISTY*)約為 8 年。

表 3 報導前述變數的相關係數矩陣，其中右上半為 Spearman 相關係數矩陣，

左下半為 Pearson 相關係數矩陣。表 3 顯示，員工分紅盈餘貢獻度(EBB^A_i *Bonus*)與穩健性(*C-Score*)、經濟盈餘(Φ)、董監持股(*BD_OWN*)呈顯著正相關(p 值< 0.01)，支持我們的預期。亦即，穩健會計及公司治理與分紅盈餘貢獻度有顯著的關聯性。至於與分紅盈餘貢獻度關聯性呈現負向關聯性(p 值均小於 0.01)之公司治理變數，則包括獨立董監席次比率(*IND_BD*)與經理人持股率(*MGR_OWN*)。

此外，穩健會計(*C-Score*) 與經濟盈餘(Φ)不具顯著相關；獨立董監席次比率(*IND_BD*)、經理人持股比率(*MGR_OWN*)則與經濟盈餘呈顯著負相關(p 值 < 0.01)。就控制變數而言，公司規模(*SIZE*)與上市櫃年限(*LISTY*)皆與分紅盈餘貢獻度呈顯著正相關(p 值< 0.05)，至於公司成長機會的代理變數(*MVBV*、*RD*)則與分紅盈餘貢獻度呈顯著負相關(p-value < 0.01)。最後，未製表之結果顯示，解釋變數間應無嚴重之共線性問題。

[插入表 3]

二、 迴歸結果

基於第(9)式的說明，本研究利用棋盤式資料迴歸模式(同時考量公司與期間的潛在影響)進行估計，並報導固定效果(fixed effect)與隨機效果(random effect)的估計結果。[7]表4彙總實證分析的結果。

（插入表4）

針對整體樣本，首先我們討論經理人持股(*MGR_OWN*)與經理人席次(*MGR_BD*)對分紅貢獻度的影響。由於本研究關切的員工分紅與高階經理人的行為與誘因有高度的關聯性，我們於表 4 模型 1 報導針對經理人持股(*MGR_OWN*)為主的實證結果，至於經理人席次(*MGR_BD*)的單獨效應則列示於模型 2。模型 3 則整理合併分析 *MGR_OWN* 與 *MGR_BD* 的實證結果。本研究發現，模型 1 中

[7]未製表的 Hausman 檢定(卡方值為 151.88，對應的雙尾 p 值小於 1%)亦支持應採用固定效果模型。雖然如此，我們也曾經改以隨機效果(random effect)模型進行分析。我們發現本文關於公司治理效果影響的主要結論並不改變。

MGR_OWN 的估計係數(-6.262，p-值<0.01) 以及模型 2 中 *MGR_BD* 的估計係數(-0.430，p-值<0.01) 均為顯著負值。這些估計結果代表經理人持股愈高或者經理人席次愈大，分紅貢獻度愈低。然而，基於這二變數有一定程度的關聯性(Pearson 相關係數= 0.523，p 值<0.01，見表 3)，在合併分析的模型 3 中顯示，具增額解釋能力的變數為經理人持股(估計係數-6.076，p 值<0.01)而非經理人席次(估計係數-0.127，p 值= 0.58)。亦即，在其他條件不變下，經理人影響力高之公司會有較低的分紅貢獻度(即給予員工較高的紅利)。這個實證結果支持「利益掠奪假說」，亦即，當經理人持股比率較高或其出任董事席次比率較高時，較有可能藉由其較鞏固的權力去圖利自己。這個論述也具體地反映在本研究之實證發現：經理人持股比率與分紅貢獻度間呈現顯著的負向關聯性。

其次分析穩健會計程度(*C-Score*)的影響。基於本文之研究假說與理論推演，在其他條件不變下，穩健會計與盈餘呈負相關，因此會造成較低之員工分紅貢獻度。迴歸結果顯示，穩健會計(*C-Score*) 之估計係數於模型 1 (-74.253)、模型 2 (-70.236)、模型 3 (-74.351)均顯著為負值，且所有 p 值皆小於 0.01，實證結果支持我們的研究預期。

接著分析董監持股(*BD_OWN*)與獨立董監席次(*IND_BD*)對分紅貢獻度的影響。本研究所關切的董事會特性中，董監持股(*BD_OWN*)之估計係數於各模型中均不具統計顯著性(p 值皆大於 0.10)。獨立董監席次(*IND_BD*)變數於各模型中之迴歸係數雖為正值(表示設置獨立董監可提高分紅貢獻度)，惟不具顯著性(p 值皆大於 0.10)。換言之，在員工分紅貢獻度之議題上，我們未能發現獨立董監具有顯著效能。

最後，我們報導控制變數的實證發現。我們首先說明與公司治理有關之控制變數的結果，再分析與公司特性有關之控制變數的結果。公司特性控制變數部分，分紅經濟貢獻度(EBB^E/*Bonus*)與分紅貢獻度(EBB^A/*Bonus*)呈顯著正向關係(三個模型之估計係數均為 0.007，p 值<0.01)，表示員工分紅對經濟盈餘貢獻與會計

盈餘貢獻有同方向的影響。就有關公司特性之控制變數而言，除了研發密度(*RD*)之估計係數方向與預期相反外，其餘變數之估計係數皆與預期相符。具體而言，公司獲利能力(*ROA*)、市價淨值比(*MVBV*)、負債比率(*LEV*)與公司上市櫃年限(*LISTY*)均達 1%顯著水準。其中，公司獲利能力(*ROA*)之係數為正，代表獲利能力與分紅貢獻度有正向關聯性。市價淨值比(*MVBV*)之係數為負與我們的預期相符，亦即，在其他條件不變下，市價淨值比較高之公司會提高員工分紅之金額，因此造成較低的分紅貢獻度。至於負債比率(*LEV*)之係數為正，則顯示舉債愈多之公司，於固定會計盈餘下，將發放較少的員工紅利。上市櫃年限(*LISTY*)係數為負，表示較平均而言，歷史較久的公司會有較低的員工分紅貢獻度。最後，公司規模(*SIZE*)、固定員工薪資費用比率(*WAGE*)與研發密度(*RD*)與分紅貢獻度無顯著關聯性。

三、敏感性分析

我們發現在研究期間中，2008 年發放員工分紅之家數明顯少於 2007 年，中斷了逐年增加的趨勢。我們認為，2008 年的現象可能受到金融海嘯與員工分紅費用化之共同影響。為了排除我們的結論可能受到特定年度(即 2008 年)與變數衡量方法的影響，我們分別針對：(1) 排除 2008 年之觀察值，(2)以扣除員工分紅後之盈餘衡量分紅貢獻度，及(3)分別以除權市價及期末市價計算員工分紅股票價值衡量分紅貢獻度，進行額外的分析。相關實證結果分別報導於表 4 至表 7。

表 4 之右方大欄額外報導剔除 2008 年樣本的迴歸分析結果。該表顯示，穩健會計(*C-score*)於各模型中之迴歸係數仍為顯著負值(p 值<0.00)，經理人持股比率(*MGR_OWN*)之係數皆為顯著負向(p 值<0.00)，且於模型 2 中之經理人董監席次比率(*MGR_BD*)之係數亦顯著為正。至於其他控制變數部分，不含 2008 年之迴歸結果與包含 2008 年之迴歸結果一致，顯示本研究之結論不受到員工分紅費用化年度之影響。

表 5 報導以扣除員工分紅後之盈餘($Earnings^{A}/_{Bonus}$，即會計淨利)作為被

解釋變數之實證結果。與表 4 結果一致，在三個模型下，*C-Score* 的估計係數均為顯著負值(p 值均小於 0.10)；*MGR_OWN* 在模型 1 與模型 3 以及 *MGR_BD* 在模型 2 之估計係數亦均為顯著負值(p 值均小於 0.10)。就控制變數而言，在三個模型下，*ROA* 與 *LEV* 之估計係數均為正值(p 值均小於 0. 01)；而 *MVBV* 與 *LISTY* 之估計係數亦均為顯著負值(p 值均小於 0. 05)。

(插入表 5)

表 6 及表 7 則分別報導以除權市價及期末市價計算員工分紅股票價值衡量 $Earnings^{A}/Bonus$ 之實證結果。我們發現，不論在何種模型，*C-Score* 與 *MGR_OWN* 均為顯著負值。換言之，本文關於穩健會計與公司治理對分紅貢獻度之結論，具有穩固性(robustness)。整體而言，不論員工股票分紅係按面額、除權價格或期末市價計算，本文之主要研究結論均具一致性。

(插入表 6 及表 7)

伍、 結論

本研究以 1996 年到 2008 年台灣上市(櫃)公司為研究對象，探討穩健會計與董事會特性（經理人持股比率、經理人董事席次比率、董監持股比率與獨立董監席次比率）對員工分紅貢獻度（以分紅前會計淨利除以員工紅利衡量）之影響。我們亦分別針對：排除 2008 年(員工分紅費用化制度實施年度)樣本、以扣除員工分紅後之盈餘衡量分紅貢獻度，及以除權市價及期末市價計算員工分紅股票價值衡量分紅貢獻度等情況，進行敏感性測試。

相較於過去文獻只探討員工分紅與會計績效之關聯，本文在探討穩健會計對分紅貢獻度之影響時，除加入穩健會計變數外，並同時控制股價波動產生之經濟盈餘。本研究之實證結果顯示，穩健會計與分紅貢獻度間呈顯著負向關係，亦即較穩健的公司，其員工分紅對會計盈餘的貢獻度較低。Watts (2003b)指出，契約需求導致穩健會計的特性，本研究之實證結果延伸了 Watts (2003b)的論點。本研

究並進一步發現，愈穩健的會計盈餘會降低盈餘的水準，因而導致較低的員工分紅盈餘貢獻度。我們建議，未來與經理人獎酬有關之研究應將穩健會計的可能影響納入考量。

除了穩健會計外，實證結果亦顯示，經理人持股比率變數具有顯著降低分紅貢獻度之影響，支持侵佔假說性。亦即，出任董事之高階經理人影響力愈高，與分紅貢獻度呈現負向的關係。

本研究之主要限制如下，理論上，應以直接分發給出任董事高階經理人的紅利為被解釋變數，更能直接測試潛在的代理問題與利益衝突。然而，囿於資料取得之限制，我們係利用員工分紅作為衡量變數。雖然員工分紅包含給予出任董事之高階經理人之紅利分配，但是也包含其他經理人與一般員工之紅利。本文無法控制此項潛在衡量誤差對本研究結論之影響。

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表 1:樣本公司產業、年度分布狀況

產業別	年度													總計	%
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
水泥工業	0	1	1	1	0	0	2	5	5	3	5	6	1	30	0.79
食品工業	3	6	5	7	7	6	8	10	10	8	13	14	8	105	2.76
塑膠工業	3	4	2	5	2	1	13	16	16	14	18	18	9	121	3.18
紡織纖維	10	11	9	4	4	4	16	16	15	8	15	22	8	142	3.73
電機機械	6	3	6	5	9	9	26	31	31	23	36	43	18	246	6.47
電器電纜	3	6	4	5	2	2	8	8	8	5	7	6	2	66	1.74
化學生技	5	9	5	6	6	14	21	27	39	31	45	50	20	278	7.31
玻璃陶瓷	2	2	1	1	0	0	1	1	2	2	3	3	1	19	0.50
造紙工業	1	1	0	1	1	0	2	3	4	3	4	4	1	25	0.66
鋼鐵工業	3	7	5	10	6	6	19	19	21	13	23	23	6	161	4.23
橡膠工業	2	2	2	2	1	1	1	6	8	6	8	9	4	52	1.37
汽車工業	1	1	2	2	0	0	3	3	4	4	4	4	2	30	0.79
電子工業	7	9	10	12	24	21	133	207	241	251	365	396	179	1,855	48.79
營造業	4	7	7	3	5	7	12	13	22	22	29	34	14	179	4.71
航運業	4	7	5	6	5	4	7	13	12	6	9	8	2	88	2.31
觀光事業	2	2	3	3	2	4	4	6	6	7	6	7	6	58	1.53
貿易百貨	3	3	2	5	4	3	0	6	8	8	11	11	4	68	1.79
公用事業	1	3	3	5	6	7	9	6	8	4	8	10	3	73	1.92
其他	1	1	2	0	1	6	18	27	30	27	37	38	18	206	5.42
合計	61	85	74	83	85	95	303	423	490	445	646	706	306	3,802	100.00

表 2 敘述統計量

變數(n=3802)	平均數	標準差	Q1	中位數	Q3
[illegible]	46.736	85.023	11.057	19.506	48.154
C-SCORE	0.025	0.043	0.004	0.022	0.037
[illegible]	34.055	555.378	-61.263	24.406	122.453
BD_OWN(%)	25.267	13.873	15.040	22.355	32.310
IND_BD(%)	11.756	15.788	0.000	0.000	25
MGR_OWN(%)	1.877	2.902	0.130	0.710	2.370
MGR_BD(%)	11.575	12.657	0.000	10	20
BLOCK(%)	1.456	5.555	0.000	0.000	0.000
FAMILY	0.411	0.492	0.000	0.000	1.000
BD_SIZE	9.726	3.227	8.000	9.000	10.000
ROA(%)	7.184	5.781	3.230	5.715	9.450
RD(%)	2.308	3.864	0.037	1.063	2.857
MVBV	1.814	1.388	0.970	1.450	2.190
LEV(%)	41.204	15.519	29.144	41.692	52.369
SIZE	15.458	1.328	14.524	15.246	16.120
WAGE(%)	4.963	15.337	1.646	3.494	6.432
LISTY	7.826	7.349	3.000	6.000	10.000

註:變數定義

[illegible]分紅前會計盈餘除員工現金紅利與員工股票紅利(按面額計)合計數；*C-Score*:穩健會計；[illegible]:經濟盈餘除員工現金紅利與員工股票紅利(按面額計)合計數；*BD_OWN*:董監持股率；*IND_BD*:獨立董監席次率；*MGR_OWN*:經理人持股率；*MGR_BD*:經理人之董監席次率；*BLOCK*:證交所公布不含董監事及經理人持股之外部大股東持股比率；*FAMILY*:家族企業虛擬變數；*BD_SIZE*:以董事及監察人席次合計數衡量得董事會規模；*ROA*:會計績效；*RD*:研發支出除銷貨淨額；*MVBV*:期末每股市值除每股淨值；*SIZE*:期末總資產除自然對數；*LEV*:負債比率；*WAGE*:員工固定薪資費用除以當年度銷貨淨額；*LISTY*:公司上市櫃年限。

表 3 相關係數矩陣

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1		0.135***	0.167***	0.209***	-0.360***	-0.377***	-0.174***	0.100***	0.301***	-0.010	0.089***	-0.468***	-0.166***	0.132***	-0.005	0.032**	0.267***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.53)	(0.00)	(0.00)	(0.00)	(0.00)	(0.75)	(0.05)	(0.00)
2	0.055***		-0.023	-0.007	-0.149***	-0.065***	0.011	0.008	0.088***	0.014	-0.087***	-0.131***	-0.172***	0.196***	0.184***	-0.023	0.068***
	(0.00)		(0.15)	(0.68)	(0.00)	(0.00)	(0.51)	(0.62)	(0.00)	(0.39)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.16)	(0.00)
3	0.116***	-0.023		0.014	-0.071***	-0.102***	-0.047***	0.021	0.059***	-0.010	0.173***	-0.127***	0.324***	0.052***	0.030***	-0.019	0.065***
	(0.00)	(0.16)		(0.40)	(0.00)	(0.00)	(0.00)	(0.19)	(0.00)	(0.55)	(0.00)	(0.00)	(0.00)	(0.00)	(0.07)	(0.23)	(0.00)
4	0.091***	-0.005	0.010		-0.058***	-0.111***	-0.107***	-0.051***	0.052***	0.116***	0.003	-0.113***	-0.040***	-0.200***	-0.039**	0.048***	-0.134***
	(0.00)	(0.75)	(0.54)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.85)	(0.00)	(0.01)	(0.00)	(0.02)	(0.00)	(0.00)
5	-0.163***	-0.114***	-0.023	-0.050***		0.235***	-0.020	-0.042***	-0.274***	0.016	0.118***	0.289***	0.208***	-0.220***	0.012	-0.035**	-0.413***
	(0.00)	(0.00)	(0.16)	(0.00)		(0.00)	(0.22)	(0.01)	(0.00)	(0.31)	(0.00)	(0.00)	(0.00)	(0.00)	(0.45)	(0.03)	(0.00)
6	-0.083***	-0.057***	-0.049***	-0.066***	0.125****		0.604***	-0.128***	-0.378***	-0.004	0.108***	0.270***	0.110***	-0.186***	0.006	-0.117***	-0.330***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	(0.00)	(0.00)	(0.81)	(0.00)	(0.00)	(0.00)	(0.00)	(0.72)	(0.00)	(0.00)
7	-0.024	-0.010	-0.018	-0.116***	-0.058***	0.523***		-0.041***	-0.356***	0.048***	0.095***	0.154***	0.059***	0.020	-0.020	-0.101***	-0.112***
	(0.13)	(0.55)	(0.26)	(0.00)	(0.00)	(0.00)		(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.21)	(0.21)	(0.00)	(0.00)
8	0.050***	0.020	0.003	-0.078***	-0.047***	-0.087***	-0.047***		0.084***	-0.078***	-0.023	-0.105***	-0.042***	0.030*	-0.001	-0.014	0.080***
	(0.00)	(0.21)	(0.86)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	(0.00)	(0.15)	(0.00)	(0.01)	(0.07)	(0.96)	(0.39)	(0.00)
9	0.115***	0.073***	0.024	0.050***	-0.274***	-0.289***	-0.348***	0.099***		-0.155***	-0.074***	-0.243***	-0.115***	0.168***	0.010	0.021	0.301***
	(0.00)	(0.00)	(0.14)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.55)	(0.20)	(0.00)
10	0.042***	0.029*	0.014	0.112***	-0.096***	-0.059***	0.036**	-0.054***	-0.091***		0.000	0.020	0.014	0.189***	-0.021	0.080***	0.017
	(0.01)	(0.08)	(0.40)	(0.00)	(0.00)	(0.00)	(0.03)	(0.00)	(0.00)		(0.99)	(0.21)	(0.40)	(0.00)	(0.20)	(0.00)	(0.29)
11	-0.022	-0.142***	0.103***	-0.002	0.134***	0.117***	0.118***	-0.044***	-0.099***	-0.051***		0.178***	0.605***	0.006	-0.239***	-0.094***	-0.209***
	(0.18)	(0.00)	(0.00)	(0.90)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)		(0.00)	(0.00)	(0.71)	(0.00)	(0.00)	(0.00)

12	-0.154***	-0.138***	-0.022	-0.105***	0.215***	0.188***	0.155***	-0.076***	-0.195***	-0.054***	0.166***		0.241***	-0.150***	-0.268***	0.162***	-0.226***
	(0.00)	(0.00)	(0.17)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
13	-0.080***	-0.180***	0.202***	-0.027*	0.173***	0.082***	0.045***	-0.028*	-0.105***	-0.052***	0.581***	0.191***		0.052***	-0.034**	-0.088***	-0.260***
	(0.00)	(0.00)	(0.00)	(0.10)	(0.00)	(0.00)	(0.01)	(0.08)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	(0.03)	(0.00)	(0.00)
14	0.126***	0.205***	0.030*	-0.134***	-0.195***	-0.156***	0.069***	0.027*	0.161***	0.239***	-0.009	-0.157***	0.038**		0.292***	-0.143***	0.473***
	(0.00)	(0.00)	(0.07)	(0.00)	(0.00)	(0.00)	(0.00)	(0.10)	(0.00)	(0.00)	(0.59)	(0.00)	(0.02)		(0.00)	(0.00)	(0.00)
15	0.002	0.239***	0.005	-0.029*	0.006	-0.056***	-0.036**	0.013	0.009	-0.042***	-0.284***	-0.316***	-0.069***	0.288***		-0.125***	0.001
	(0.91)	(0.00)	(0.78)	(0.07)	(0.72)	(0.00)	(0.03)	(0.42)	(0.56)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)		(0.00)	(0.95)
16	0.009	0.026	0.003	-0.004	-0.020	-0.041***	-0.043***	-0.006	0.023	0.035**	-0.037**	-0.017***	-0.029*	-0.028*	-0.026*		0.037**
	(0.59)	(0.12)	(0.84)	(0.81)	(0.21)	(0.01)	(0.01)	(0.70)	(0.15)	(0.03)	(0.02)	(0.31)	(0.08)	(0.08)	(0.10)		(0.02)
17	0.197***	0.097***	0.026*	-0.097***	-0.340***	-0.220***	-0.096***	0.075***	0.279***	0.219***	-0.174***	-0.167***	-0.180***	0.496***	-0.007	0.034**	
	(0.00)	(0.00)	(0.10)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.67)	(0.03)	

註：1=$EBB^{A}/Bonus(\Phi)$；2=*C-Score*:穩健會計；3=$EBB^{B}/Bonus(\Phi)$；4=*BD_OWN*；5=*IND_BD*；6=*MGR_OWN*；7=*MGR_BD*；8=*BLOCK*；9=*FAMILY*；10=*BD_SIZE*；11=*ROA*；12=*RD*；13=*MVBV*；14=*SIZE*；15=*LEV*；16=*WAGE*；17=*LISTY*。*,**,***:分別表示達雙尾 10%、5%、1%顯著水準，左下為 Pearson 相關係數矩陣，右上為 Spearman 相關係數矩陣

表 4 迴歸結果

變數	預期符號	完整期間			剔除 2008 年觀察值		
		模型 1	模型 2	模型 3	模型 1	模型 2	模型 3
截距項	?	179.011**	153.741**	179.681**	66.719	49.997	66.481
		(0.02)	(0.04)	(0.02)	(0.40)	(0.53)	(0.40)
CSCORE	−	-74.253***	-70.236***	-74.351***	-72.005***	-69.712***	-72.231***
		(0.00)	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)
MGR_OWN	?	-6.262***		-6.076***	-4.246***		-3.676***
		(0.00)		(0.00)	(0.00)		(0.00)
MGR_BD	?		-0.43**	-0.127		-0.575***	-0.385
			(0.05)	(0.58)		(0.01)	(0.11)
BD_OWN	?	0.056	-0.114	0.047	0.071	-0.051	0.047
		(0.82)	(0.64)	(0.85)	(0.78)	(0.84)	(0.85)
IND_BD	?	0.1	0.027	0.092	0.133	0.063	0.107
		(0.53)	(0.86)	(0.56)	(0.44)	(0.72)	(0.54)
EBB Bonus Φ	+	0.007***	0.007***	0.007***	0.009***	0.009***	0.009***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
BLOCK	?	0.339	0.246	0.339	0.392	0.339	0.396
		(0.29)	(0.44)	(0.28)	(0.23)	(0.30)	(0.23)
FAMILY	?	-2.099	-2.337	-2.575	-2.001	-3.465	-3.569
		(0.64)	(0.61)	(0.58)	(0.67)	(0.47)	(0.46)
BD_SIZE	?	-1.386	-1.524	-1.41	-1.843	-1.995	-1.931
		(0.24)	(0.20)	(0.23)	(0.13)	(0.10)	(0.11)
ROA	+	2.086***	1.965***	2.084***	1.825***	1.742***	1.815***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
RD	−	1.27	1.318	1.28	1.155	1.171	1.151
		(0.23)	(0.21)	(0.22)	(0.36)	(0.36)	(0.37)
MVBV	−	-4.863***	-4.919***	-4.875***	-4.437***	-4.440***	-4.480***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
SIZE	−	-8.364	-6.548	-8.267	-0.438	1.147	0.044
		(0.10)	(0.20)	(0.10)	(0.94)	(0.83)	(0.99)
LEV	+	0.736***	0.672***	0.734***	0.763***	0.719***	0.756***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
WAGE	−	-0.034	-0.031	-0.034	-0.03	-0.027	-0.03
		(0.62)	(0.66)	(0.62)	(0.66)	(0.69)	(0.67)
LISTY	−	-1.955***	-1.896***	-1.982***	-3.241***	-3.329***	-3.355***
		(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
R^2:Overall		0.0103	0.0263	0.0104	0.0153	0.0239	0.0156
N			3802			3496	

註:變數定義請參表 2。
*,**,***:分別表示達雙尾 10%、5%、1%顯著水準

表 5 以員工分紅費用化之會計盈餘()計算員工分紅貢獻度之迴歸結果

		Earning[A]/Bonus		
變數	預期符號	模型 1	模型 2	模型 3
截距項	?	117.11	104.75	117.59
		(0.10)	(0.14)	(0.10)
SCORE	−	-49.33**	-47.21*	-49.47**
		(0.05)	(0.06)	(0.05)
EBB/Bonus(-1)	+	0.00	0.00	0.00
		(0.12)	(0.13)	(0.12)
BD_OWN	?	0.20	0.12	0.19
		(0.41)	(0.63)	(0.44)
IND_BD	?	0.02	-0.03	0.00
		(0.92)	(0.85)	(0.99)
MGR_OWN	?	-3.45***		-3.05***
		(0.01)		(0.02)
MGR_BD	?		-0.38*	-0.23
			(0.09)	(0.31)
BLOCK	?	0.22	0.18	0.23
		(0.49)	(0.57)	(0.48)
FAMILY	?	-3.35	-4.17	-4.24
		(0.45)	(0.35)	(0.34)
BD_SIZE	?	-1.26	-1.33	-1.30
		(0.31)	(0.28)	(0.29)
ROA	+	1.80***	1.73***	1.79***
		(0.00)	(0.00)	(0.00)
RD	−	1.43	1.42	1.42
		(0.31)	(0.31)	(0.31)
MVBV	−	-3.76***	-3.82***	-3.82***
		(0.02)	(0.02)	(0.02)
SIZE	−	-4.41	-3.38	-4.19
		(0.37)	(0.49)	(0.39)
LEV	+	0.50***	0.47***	0.49***
		(0.00)	(0.01)	(0.00)
WAGE	−	-0.04	-0.06	-0.04
		(0.94)	(0.91)	(0.94)
LISTY	−	-1.94***	-1.93***	-1.99***
		(0.00)	(0.00)	(0.00)
N			3802	

註:變數定義:
Earnings[A]/EBB/Bonus(-1)員工分紅後會計盈餘除員工現金紅利與員工股票紅利(面額)合計數；*C-Score*:穩健會計；EBB/Bonus(-1):經濟盈餘除員工現金紅利與員工股票紅利(面額)合計數；其他變數定義同表 2。

表 6 以除權市價計算員工股票分紅價值並以之衡量分紅貢獻度之迴歸結果

變數	預期符號	EBB/Bonus			Earnings[A]/Bonus		
		模型 1	模型 2	模型 3	模型 1	模型 2	模型 3
截距項	?	154.786*	135.469*	154.724*	154.114*	134.772*	154.052*
		(0.06)	(0.10)	(0.06)	(0.06)	(0.10)	(0.06)
CSCORE	−	-55.165**	-52.843*	-55.369**	-55.461**	-53.135*	-55.665**
		(0.05)	(0.06)	(0.05)	(0.05)	(0.06)	(0.05)
EBB/Bonus[Φ]	+	0.002	0.002	0.002	0.002	0.002	0.002
		(0.40)	(0.38)	(0.41)	(0.41)	(0.39)	(0.41)
BD_OWN	?	-0.084	-0.169	-0.097	-0.085	-0.17	-0.098
		(0.76)	(0.53)	(0.72)	(0.75)	(0.53)	(0.72)
IND_BD	?	0.066	0.011	0.052	0.06	0.005	0.045
		(0.70)	(0.95)	(0.77)	(0.73)	(0.98)	(0.80)
MGR_OWN	?	-4.104***		-3.683***	-4.109***		-3.688***
		(0.00)		(0.02)	(0.00)		(0.02)
MGR_BD	?		-0.425*	-0.239		0.354	0.403
			(0.08)	(0.35)		(0.34)	(0.28)
BLOCK	?	0.401	0.357	0.406	0.398	-2.29	-2.455
		(0.28)	(0.34)	(0.28)	(0.28)	(0.64)	(0.62)
FAMILY	?	-1.519	-2.228	-2.392	-1.582	-1.206	-1.126
		(0.75)	(0.65)	(0.63)	(0.74)	(0.39)	(0.42)
BD_SIZE	?	-1.071	-1.203	-1.123	-1.075	2.174***	2.235***
		(0.44)	(0.39)	(0.42)	(0.44)	(0.00)	(0.00)
ROA	+	2.248***	2.179***	2.239***	2.244***	3.24**	3.257**
		(0.00)	(0.00)	(0.00)	(0.00)	(0.04)	(0.04)
RD	−	3.275**	3.245**	3.262**	3.27**	-5.345***	-5.301***
		(0.04)	(0.04)	(0.04)	(0.04)	(0.00)	(0.00)
MVBV	−	-5.199***	-5.277***	-5.234***	-5.266***	-4.989	-6.241
		(0.00)	(0.00)	(0.00)	(0.00)	(0.37)	(0.27)
SIZE	−	-6.507	-4.989	-6.24	-6.509	0.502***	0.539***
		(0.24)	(0.37)	(0.26)	(0.24)	(0.01)	(0.01)
LEV	+	0.542***	0.503***	0.539***	0.542***	-0.402	-0.388
		(0.00)	(0.01)	(0.01)	(0.00)	(0.50)	(0.52)
WAGE	−	-0.388	-0.403	-0.39	-0.386	-2.38***	-2.44***
		(0.52)	(0.50)	(0.51)	(0.52)	(0.00)	(0.00)
LISTY	−	-2.42***	-2.416***	-2.476***	-2.384***	-0.425*	-0.239
		(0.00)	(0.00)	(0.00)	(0.00)	(0.08)	(0.35)
N				3802			

註:變數定義:
Earnings[A]/Bonus:員工分紅後會計盈餘除以員工現金紅利與員工股票紅利(按除權價計)合計數；*C-Score*:穩健會計；EBB/Bonus[Φ]:經濟盈餘除員工現金紅利與員工股票紅利(按除權價)合計數；其他變數定義同表 2。

表 7 以期末市價計算員工股票分紅價值並以之衡量分紅貢獻度之迴歸結果

變數	預期符號	EBB/Bonus			Earnings[A]/Bonus		
		模型 1	模型 2	模型 3	模型 1	模型 2	模型 3
截距項		264.184***	244.65**	264.642***	264.927***	245.402**	265.386***
	?	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)	(0.01)
CSCORE		-66.554**	-64.098*	-66.871**	-66.984**	-64.529*	-67.3**
	−	(0.05)	(0.06)	(0.05)	(0.05)	(0.06)	(0.05)
EBB[I]/Bonus(Φ)		0.003	0.003	0.003	0.003	0.003	0.003
	+	(0.29)	(0.28)	(0.29)	(0.29)	(0.29)	(0.30)
BD_OWN		0.074	-0.016	0.058	0.073	-0.016	0.057
	?	(0.82)	(0.96)	(0.86)	(0.83)	(0.96)	(0.86)
IND_BD		0.05	-0.005	0.034	0.041	-0.013	0.026
	?	(0.82)	(0.98)	(0.87)	(0.85)	(0.95)	(0.9)1
MGR_OWN		-4.092**		-3.607**	-4.091**		-3.605**
	?	(0.02)		(0.05)	(0.02)		(0.05)
MGR_BD			0.459	0.509		0.456	0.506
	?		(0.31)	(0.27)		(0.32)	(0.27)
BLOCK		0.504	-5.014	-5.134	0.501	-5.057	-5.176
	?	(0.27)	(0.41)	(0.40)	(0.27)	(0.40)	(0.39)
FAMILY		-4.089	-1.953	-1.86	-4.132	-1.946	-1.852
	?	(0.49)	(0.25)	(0.28)	(0.49)	(0.26)	(0.28)
BD_SIZE		-1.807	2.000***	2.057***	-1.8	1.992***	2.05***
	?	(0.29)	(0.00)	(0.00)	(0.29)	(0.00)	(0.00)
ROA		2.067***	4.133**	4.145**	2.059***	4.135***	4.147***
	+	(0.00)	(0.04)	(0.03)	(0.00)	(0.04)	(0.03)
RD		4.166***	-7.716***	-7.71***	4.168***	-7.892***	-7.886***
	−	(0.03)	(0.00)	(0.00)	(0.03)	(0.00)	(0.00)
MVBV		-7.667***	-11.819***	-13.127***	-7.843***	-11.922***	-13.229***
	−	(0.00)	(0.09)	(0.06)	(0.00)	(0.09)	(0.06)
SIZE		-13.405***	0.631***	0.667***	-13.508***	0.632***	0.668***
	−	(0.05)	(0.01)	(0.01)	(0.05)	(0.01)	(0.01)
LEV		0.671***	-0.782	-0.769	0.672***	-0.777	-0.765
	+	(0.01)	(0.29)	(0.30)	(0.01)	(0.29)	(0.30)
WAGE		-0.768	-2.229***	-2.284***	-0.763	-2.192***	-2.247***
	−	(0.30)	(0.01)	(0.01)	(0.30)	(0.01)	(0.01)
LISTY		-2.221***	-0.462	-0.283	-2.184***	-0.462	-0.283
	−	(0.01)	(0.13)	(0.37)	(0.01)	(0.13)	(0.37)
N				3682			

變數定義: Earnings[A]/Bonus:員工分紅後會計盈餘除員工現金紅利與員工股票紅利(按期末市價計)合計數；*C-Score*:穩健會計； EBB[I]/Bonus(Φ):經濟盈餘除員工現金紅利與員工股票紅利(按期末市價)合計數；其他變數定義同表 2。

參與國際研討會之經費結案報告
提交人：林宛瑩

一、參與之國際研討會議及發表之論文：

第二屆＜中國金融評論＞2009 年國際研討會，妤 2009 年 7 月 17-18 日在上海交通大學安泰經濟與管理學院舉行。主辦單位包括：上海交通大學安帶經濟與管理學院、上海交通大學現代金融研究中心，以及＜中國金融評論＞學術期刊雜誌社。協辦單位包括：美國密西根大學經濟研究中心、香港大學中國金融研究中心、中國風險投資研究院，以及國泰安金融學院。

本人於 7 月 18 日下午排定之 13：15-14：45 時段發表論文，題目爲：Too Much Pay to Board Members and Too Little pay to Shareholders— Does Governance Help?—（論文如附件 A）

二、與會心得：

本次國際研討會會議係從政策、實務及學術三個角度來探討全球金融危機、公司治理的功能與危機後的金融創新與安全問題，與會人士包括金融政策制定者、國外著名學者及學術期刊主編、學術界及實務界人士，有極爲良好的交流與互動，研討會議程及討論內容如附件 B。

針對本人發表之論文，評論人及與會人士亦提供建設性的建議與想法分享，將有助於本文做進一步的修改。有機會與大陸學術界交流，對於日後以大陸議題進行研究時，對尋求諮詢或合作對象有所助益。

上海交通大学 安泰经济与管理学院
Antai College of Economics & Management, Shanghai Jiao Tong University

中国上海市法华镇 535 号　　邮编:200052
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第二届（2009）《中国金融评论》国际研讨会

邀请函

尊敬的**老师**：

您好！

《中国金融评论》创办两年多来，已成为国际与国内金融学者具有国际一流水平的学术交流平台。它从多角度、多层次、多领域综合反映中国金融问题的最新、最前沿的理论研究成果。

第二届（2009）《中国金融评论》国际研讨会将于 2009 年 7 月 17-18 日在上海交通大学安泰经济与管理学院举行，研讨会从政策、实务、学术三个角度来探讨中国在全球金融危机后的**金融创新与金融安全**问题。我们将分别邀请两位中国金融政策制定者，两位国内外顶尖的学者及两位业界精英来担任主题演讲，同时邀请八位国内外知名金融学者作学术专题报告。17 日下午的全体会议分为两场：**上半场为政策、实务篇**，上海市金融服务办公室主任方星海、国务院发展研究中心金融研究所副所长巴曙松、香港科技大学商学院院长郑国汉、瑞士信贷董事总经理陈昌华、渣打银行中国区首席经济学家王志浩、博时基金首席投资总监张志峰将做主题演讲；**下半场为学术篇**，*Review of Quantitative Finance and Accounting* 的主编 Cheng-Few Lee， *Journal of Futures Market* 的主编 Robert I. Webb，*The Financial Review* 主编 Arnold R. Cowan，《经济研究》的副主编王诚、《管理世界》的总编谢悦，《管理科学学报》副主编张维，以及本刊主编吴冲锋将做主题演讲。此外，我们将从众多征稿中挑选 24 篇优秀的学术论文作会议报告，其中包括最佳论文 1 篇，优秀论文 2 篇。所有入选论文将优先考虑发表在《中国金融评论》上。预计参加本次研讨会的学者、政策制定者、业界精英将近 400 人。

本次研讨会期间将组织一次专题会议，议题为：**对话国际一流杂志主编**，国外著名刊物 *Review of Quantitative Finance and Accounting* 的主编 Cheng-Few Lee， *Journal of Futures Market* 的主编 Robert I. Webb，*The Financial Review* 主编 Arnold R. Cowan，国内权威刊物《经济研究》的副主编王诚、《管理世界》的总编谢悦，《管理科学学报》副主编张维，以及本刊主编吴冲锋将分别就各期刊情况以及论文创作等做主题演讲。另外此专题会议还增设了对话交流的互动环节，您将有机会和各位主编一起探讨学术论文创作，以及在 SSCI 和国内顶级期刊上发表文章对论文水平的要求和创作技巧。我们相信本次专题会议定会为您的学术创作提供有价值的建议。

在此，我谨代表学术研讨会筹备顾问委员会及组委会所有成员、安泰经

济与管理学院，诚挚地邀请您出席本届研讨会。

我们相信，本次研讨会将为中国金融学者提供一个很好的交流平台，定将成为国内外金融学者的一次年度盛会。您的支持将对本届研讨会的成功举办至关重要。**请在 7 月 12 号之前将参会回执传回。**

欲了解更多有关 2009 年“中国金融评论”国际研讨会参会详情，请参阅附件 2 或直接登陆网页 http://cfr.sjtu.edu.cn/Meeting.asp?id=7。

致

礼！

《中国金融评论》执行主编

第二届（2009）《中国金融评论》国际研讨会组委会主任

2009 年 6 月 25 日

附件 2：研讨会议程（拟）

第二届（2009）《中国金融评论》国际研讨会
2009 *China Finance Review* International Conference

中国·上海

2009 年 7 月 17-18 日

主办单位

上海交通大学安泰经济与管理学院

上海交通大学现代金融研究中心

《中国金融评论》杂志社

协办单位

美国密歇根大学经济研究中心

香港大学中国金融研究中心

中国风险投资研究院

国泰安金融学院

学术顾问委员会（按姓氏笔画顺序排列）

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宋　敏 《中国金融评论》编委、香港大学中国金融研究中心教授

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吴冲锋 《中国金融评论》主编、上海交通大学安泰经济与管理学院副院长、教授

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周　林 上海交通大学经济学院院长

樊　纲 《中国金融评论》主编、国民经济研究所所长

潘英丽 上海交通大学经济学院教授、现代金融研究中心主任

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潘英丽　上海交通大学经济学院教授、现代金融研究中心主任

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主　任：陈工孟

副主任：谈　毅，冯　芸

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第二届（2009）《中国金融评论》国际研讨会

研讨会议程（拟）

（2009-7-17）

8:00—14:00	注 册	
安泰楼一楼大厅		
9:30—11:00	对话国际一流杂志主编(拟)	
主持人：陈工孟 地点：安泰演讲厅	Cheng-Few Lee	*Review of Quantitative Finance and Accounting* 主编
	Robert I. Webb	*Journal of Futures Market* 主编
	Arnold R. Cowan	*The Financial Review* 主编
	王　诚	《经济研究》副主编
	谢　悦	《管理世界》总编
	冯　芸	《中国金融评论》副主编
	张　维	《管理科学学报》主任
11：00-11：30	*互动对话*	
地点：安泰演讲厅		
9：00-12：00	圆桌会议：沪港国际金融中心建设——竞争还是合作？（与会者凭邀请函参加）	
地点：安泰楼 101		
13:30—14:00	开 幕 式	
主持人：陈　宪 上海交通大学经济学院执行院长 地点：安泰演讲厅	上海交通大学安泰经济与管理学院领导致词、《中国金融评论》2008年度最佳论文及年会最佳论文颁奖仪式	
14:00—17:00	主题报告（全体会议）(拟)	
主持人：陈工孟 上海交通大学教授 地点：安泰演讲厅	方星海	上海市金融服务办公室主任
	巴曙松	国务院发展研究中心金融研究所副所长
	郑国汉	香港科技大学商学院院长
	陈昌华	瑞士信贷董事总经理
	王志浩	渣打银行中国区首席经济学家
	张志峰	博时基金首席投资总监
主持人：吴冲锋 上海交通大学教授 地点：安泰演讲厅	Cheng-Few Lee	*Review of Quantitative Finance and Accounting* 主编
	Robert I. Webb	*Journal of Futures Market* 主编
	Arnold R. Cowan	*The Financial Review* 主编
	王　诚	《经济研究》副主编

	谢　悦　　《管理世界》总编
17:15—17:30	互动对话
地点：安泰演讲厅	
18:00—19:30	晚宴（主讲嘉宾和特邀嘉宾）
20:00—21:30	《中国金融评论》编委会年会

研讨会议程（拟）

（2009-7-18）

8:30—10:00	专题学术研讨会（A、B 场）
A 场 资产定价&资本市场 I 主持人：冯芸 上海交通大学教授 地点：北楼 104	专题学术报告（30 分钟）： 徐叶晓　美国德克萨斯大学管理学院教授，《中国金融评论》编委 论文宣讲： 1. The good, the bad or the expensive? Which mutual fund managers join hedge funds?（15 分钟） Prachi Deuskar, Z. Jay Wang,Univ. of Illinois, USA;Joshua M. Pollet,Emory University,USA;Lu Zheng, University of California Irvine,USA. 2. An empirical analysis of industry momentum in Chinese stock market（15 分钟） Zhongzhi He, Brock University, Canada;苏冬蔚,暨南大学. 3. 卖空约束、市场质量与资产价格（15 分钟） 刘波、曾勇、李平,电子科技大学经济与管理学院. 论文点评（30 分钟）
B 场　金融衍生产品 主持人：郑旭 上海交通大学教授 地点：北楼 106	专题学术报告（30 分钟）： 劳兰珺　复旦大学管理学院教授 论文宣讲： 1. Economic determinants of default risks and their impacts on credit derivative pricing(15 分钟) Szu-Lang Liao,台湾国立政治大学 Jui-Chen Chang，国立政治大学 2. 模型风险以及对衍生品定价的影响（15 分钟） 郑振龙、刘杨树,厦门大学金融系. 3. 引入外部性效应的期货市场保证金分析（15 分钟） 万迪昉、杨阳、方栋,西安交通大学管理学院. 论文点评（30 分钟）
C 场 资产定价&资本市场 II	专题学术报告（30 分钟）：

主持人：谈毅 上海交通大学教授 地点：北楼 102	论文宣讲： 1.Side-by-side management of hedge funds and mutual funds（15 分钟） Tom Nohel,Loyola University,USA;Z. Jay Wang, University Of Illinois,USA;Lu Zheng,University of California,USA. 2. Restriction tightness, bargaining power, and the valuation of restricted shares by conflicting shareholders in the split share structure reform（15 分钟） Wenxuan Hou,Durham University,UK;Sydney Howell,University of Manchester,UK. 3. 基于价值无差异的资产定价模型（15 分钟） 陈小悦、孙力强,清华大学会计研究所. 4. 风险投资的参与对中资企业首次公开发行折价的影响（15 分钟） 陈工孟，上海交通大学；俞欣,南京大学商学院;寇祥河,中国人民大学财政金融学院. 论文点评（30 分钟）
10:00—10:15	**茶 歇**
10:15—11:45	**专题学术研讨会（A、B 场）**
A 场　行为金融 **主持人：吴文锋** 上海交通大学副教授 地点：北楼 104	专题学术报告（30 分钟）： 徐信忠　北京大学光华管理学院副院长、金融学教授 论文宣讲： 1. 异质信念、卖空限制与我国股市的暴跌现象研究（15 分钟） 陈国进,厦门大学王亚南经济研究院. 2. Tickle symbol and comovement: Evidence from a unique dataset in China（15 分钟） 李广子、Guozheng Tang、Li Liu,北京大学. 3. 承销商分析师的盈利预测行为分析（15 分钟） 王瑞、洪剑峭,复旦大学管理学院. 论文点评（30 分钟）
B 场 市场微观结构 **主持人：刘海龙** 上海交通大学教授 地点：北楼 106	专题学术报告（30 分钟）： 刘　俏　香港大学经济及工商管理学院教授 论文宣讲： 1. The optimal trading with a Time-varying signal in the presence of transaction costs（15 分钟） Ming Guo、Ou-Yang Hui, Peking University. 2. The stock market volatility, Fund behavior and market quality（15 分钟） 张宗新, 复旦大学金融研究院. 朱伟骅，上海证券交易所 刘逖，上海证券交易所 王晓，复旦大学

	3. Speed, distance, and electronic trading: new evidence on why location matters（15 分钟） Ryan Garvey，Duquesne University Wu Fei,Massey University,New Zealand. 论文点评（30 分钟）
12:00—13:00	午餐会
13:15—14:45	专题学术研讨会（A、B 场）
A 场　公司金融Ⅰ 主持人：杨朝军 上海交通大学教授 地点：北楼 104	专题学术报告（30 分钟）： 陈　超　　复旦大学管理学院会计学系特聘教授 论文宣讲： 1. 大股东减持：动机与对象特征（15 分钟） 黄志忠,汕头大学商学院;张程睿,华南师范大学经济管理学院. 2. 金融合同：一个事后无效率的理论（15 分钟） 郑育家，上海交通大学安泰经济与管理学院. 李双金，上海社会科学院经济研究所 3. 终极所有权、制度环境与上市公司债务融资（15 分钟） 俞红海、徐龙炳，上海财经大学金融学院 陈百助，美国南加州大学. 论文点评（30 分钟）
B 场　公司金融Ⅱ 主持人：郭丽虹 上海财经大学教授 地点：北楼 106	专题学术报告（30 分钟）： 吴世农　厦门大学副校长、教授 论文宣讲： 1.Too much pay to board members and too little pay to shareholders（15 分钟） Wuchun Chi、Chung-Yuan Hsu、Wan-Ying Lin, Chung-Hua Shen， National Chengchi University. 2. An Empirical Study on Large shareholder’s Assets Injection under the Post-period of Non-tradable Share Reform in China（15 分钟） Liu Ting、Tang Zongming,Shanghai Jiaotong University. 3. 股权制衡会影响高层管理人员变更吗：基于上市公司的实证分析（15 分钟） 谢军，华南师范大学经济与管理学院. 论文点评（30 分钟）
14:45—15:00	茶　歇
15:00—16:30	专题学术研讨会（A、B 场）
A 场　中国金融问题	专题学术报告（30 分钟）： 潘英丽　上海交通大学经济学院教授、现代金融研究中心主任 论文宣讲：

主持人：胡海鸥 上海交通大学教授 地点：北楼 104	1. 基于实物期权视角的中国农村劳动力转移分析（15 分钟） 蒋贤锋，东北财经大学应用金融研究中心、人民银行金融研究所. 2. Maro-economic fluctuations and governance of China's privatized firms（15 分钟） 钟宁桦，香港科技大学金融学院. 3. 住房资产、金融资产与居民消费：中国财富效应的实证检验（15 分钟） 陈杰, 朱爱勇, 张卫涛, 复旦大学管理学院产业经济学系. 论文点评（30 分钟）
B 场　银行与保险 **主持人：陈工孟** 上海交通大学教授 地点：北楼 106	专题学术报告（30 分钟）： 宋敏　　香港大学中国金融研究中心教授 论文宣讲： 1. 所有制、债权人保护与企业信用贷款（15 分钟） 魏锋、沈坤荣，南京大学经济学院. 2. 抵押贷款拖欠行为的实证研究（15 分钟） 周天芸、周先波，中山大学岭南学院金融系. 3. 农信社新一轮制度变迁摆脱路径依赖了吗---以农村商业银行模式为例（15 分钟） 张兵、曹阳，南京农业大学经管学院. 论文点评（30 分钟）

Too Much Pay to Board Members and Too Little Pay to Shareholders

– Does Governance Help? –

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Too Much to Board Members and Too Little to Shareholders— Does Governance Help?

Abstract: Board members may well be responsible for dissension between themselves and shareholders since they are simultaneously the setters and receivers of both board remuneration and dividends. They may act out of their own personal interest at the expense of external shareholders. Using payment asymmetry between board and outside shareholders as our proxy for the agency problem leads to several findings: payment asymmetry exists, and it is more severe when board members hold fewer shares of equity. In addition, good governance diminishes the severity of payment asymmetry, and poor governance aggravates such asymmetry. We call these two effects the *few-shares effect* and the *good governance effect*. Finally, we further provide evidence that these two effects are *asymmetric*. While prior research has primarily focused on board-manager agency issues, the board-shareholder perspective should not be ignored, since the board's role as the most directly delegated agent of shareholders does not preclude a conflict of interest between the board and the shareholders whose interests it is supposed to represent.

JEL: G32; G34; M41

Keywords: board effectiveness, payment asymmetry, board compensation, ownership and board structure, control deviation

1. Introduction

With its focus on the corporate board, this study explores one potential source of conflict between board members and external shareholders. The traditional wisdom has it that a corporate board, as the most directly delegated agent of shareholders, should not use its position of trust and confidence to further its personal interests. The effects of a derelict board, evidenced by the recent turmoil at a number of well-known American companies including Enron, WorldCom, Tyco and Merck, to give a few examples, have given rise to a growing body of literature on agency problems. The many studies include research on the conflicts of interest between the shareholders and managers of a company, the underwriting and stock recommendations of the investment banks, and so on. Few, however, have studied the possibility that the board members may maximize their private benefits at the expense of the minority shareholders through the directors' remuneration packages.

Authorizing excessive compensation for company board members at the expense of shareholders is prevalent in developing countries. In Malaysia, for example, Tan (2002) finds that one CEO in Malaysia was paid more than 1 million Ringgit in salary while the company suffered a loss. Abdullah (2006) also mentions that directors' remuneration is not associated with the firm's profitability. Similar excessive compensations are also often reported in Taiwan. For example, the *Commercial Times*[1] reported that "there is a large number of firms whose board members receive huge remunerations without matching performance" (May 12, 2007). Taiwan's *Business Weekly* (2004) has provided

[1] The *Commercial Times* is a business-oriented newspaper in Taiwan, which reports exclusively on business, and capital and financial markets.

similar reports.[2] Since 2006, the Financial Supervisory Commission (FSC) in Taiwan has made regular announcements regarding firms with board members whose remuneration is higher than the industry average.[3] This is because the appropriateness of the higher pay, if not accompanied by a strong firm performance, is open to question since the board members' pay is decided by the board itself.

The situation becomes even worse if excessive remuneration is paid to the company's board members but, at the same time, few or no dividends are paid to its shareholders. This asymmetry gives rise to substantial conflicts of interest because board members are simultaneously the setters and the recipients of compensation and dividends (the latter of which the board members, as stockholders themselves, must consider as part of the overall benefit of their position). In other words, board members confront a tradeoff between board compensation and dividends for themselves. Hassan, Christopher and Evans (2003) note a steady growth in directors' remuneration against a deteriorating return on equity, which strongly suggests that the board directors' remuneration has increased at the expense of the shareholders' return. Misappropriation by directors is evident in a survey by Barrock (2002), who shows that one company in Malaysia did not pay dividends to its shareholders for several years but its directors received more than comfortable salaries.[4] HannStar Display Corporation, a listed Taiwanese firm, reported a net loss of NT$9.6 billion for the year 2005, and a reduction in the return on equity of 16.56%. However, the chairman of the board saw his compensation increase from

[2] *Business Weekly* reports that for a large portion of listed companies in Taiwan, board members tend to behave indolently when it comes to receiving unusually high compensation regardless of the poor performance and deteriorating return on equity of the firm. *Business Weekly* is a well-known financial publication with wide readership in Taiwan (http://www.businessweekly.com.tw).

[3] The Financial Supervisory Commission in Taiwan is similar to the Securities Exchange Committee in the U.S.

[4] This example is cited from Abdullah (2006) as the original article is no longer available.

NT$3.82 million in 2004 to NT$13.25 million in 2005. Thus, board compensation, as a potential source of conflict between board members and shareholders, is worth careful investigation.

While this asymmetry in remuneration has recently received more attention both from businesses and from regulators, few academic studies have delved into this issue. The foci of the academic studies regarding ownership and board structure include firm value (Brown and Caylor 2006; Coles, Daniel and Naveen 2007), operating performance (Bhagat and Black 2002; Fich and Shivdasani 2006), cost of capital (Anderson, Mansi and Reeb 2003), credit rating (Ashbaugh-Skaife, Collins and LaFond 2006), pay-for-performance relationships (Werner, Tosi and Gomez-Mejia 2005), corporate failure (Parker, Peters and Turetsky 2002; Lee and Yeh 2004), informativeness of earnings (Fan and Wong 2002), dividends (Francis, Schipper and Vincent 2005), earnings quality (Wang 2006), and accounting conservatism (Ahmed and Duellman 2007). To the best of our knowledge, none of these studies has placed the board itself at the front or center of its investigation. That is to say, studies that have focused primarily on opportunistic behaviors directly related to the board have been scarce.

We define payment asymmetry as existing when a firm's yearly dividend payout ratio is less than the industry median and at the same time its board's remuneration is greater than the industry median. We first examine the existence of payment asymmetry, and then investigate whether corporate governance helps alleviate it. Our analysis yields several key findings. First, we find that payment asymmetry indeed exists between board members and external shareholders, according to Taiwan data. Furthermore, we find variables that capture aspects of corporate governance related to ownership and board

structure that help explain the severity of payment asymmetry between board members and shareholders. Specifically, we find that the severity of payment asymmetry is negatively associated with board stock ownership. By holding board stock ownership constant, we find that the severity of payment asymmetry is: (1) positively related to representation ratios of independent board members, to board size, and to the deviation of board seat control from voting control; and (2) negatively related to the dual roles of the CEO and chairman, to stock ownership by foreign financial institutional investors, and to the representation ratio of executives on the board. Based on a division of the sample according to the level of board stock ownership, we find that the effects on payment asymmetry both of board stock ownership and of other governance depend on the level of board stock ownership.

As staff compensation committees are not a standard feature of the boardrooms of companies in Taiwan, the scenario where the board sets both the board compensation and the dividend policies provides us with an ideal research setting that can shed light on factors that affect payment asymmetry. We contend that an in-depth understanding of the rationale behind and the determinants of payment asymmetry is sure to enhance our knowledge of the role of ownership structure and of board structure in the board-shareholder agency framework.

To date, research on the value of corporate governance has centered mostly on the shareholder's perspective (e.g., Gompers, Ishii and Metrick 2003), the bondholder's perspective (e.g., Ashbaugh-Skaife, Collins and LaFond 2006) and the minority owner's perspective (e.g., Bates, Lemmon and Linck 2006). This study contributes to a third line of research by investigating how various characteristics of ownership and board structure

could affect the relationship between internal and external shareholders.

It is true that there is a substantial body of research on corporate governance issues involving board members of large publicly-held companies. However, with a few exceptions (e.g., Dalton and Daily 2001; Hassan, Christopher and Evans 2003), the available evidence of the extent to which board compensation policy effectively aligns board interests with shareholders' interests is largely anecdotal (Kaback 1996). To fill this gap, our empirical research investigates the phenomenon of payment asymmetry between board members and shareholders using readily available data on listed companies in Taiwan as our sample.[5]

Our paper contributes to the literature in three respects. First, to be sure, board compensation is an important context in which to investigate board behavior. While Main, Bruce and Buck (1996) and Conyon and Peck (1998) reported a significantly positive correlation between firm performance and board remuneration, this still does not exclude the possibility of payment asymmetry between board members and shareholders. Our findings provide empirical evidence for the presence of agency cost in the board-shareholder context. Second, the evidence supports our hypothesis that the degree of payment asymmetry is more severe when board members hold fewer shares of the firm's stock (the "few-shares" hypothesis). Obviously, this agency cost can be alleviated by the board members holding more shares, which is consistent with the traditional alignment perspective. Third, we report findings to confirm that the relationship between

[5] Information regarding board directors is publicly available from various sources, including annual reports and prospectuses provided by publicly-held companies, survey reports of Taiwanese business groups released by the China Credit Information Service, Ltd. (a private institute) and the database of the Commerce Industrial Services Portal (http://gcis.nat.gov.tw/index.jsp) of the Ministry of Economic Affairs, Taiwan.

the shares held by the board members and the degree of payment asymmetry is stronger (weaker) for firms with better (worse) governance (the "good governance" hypothesis). Finally, we document evidence supporting our contention that the degree to which corporate governance alleviates payment asymmetry depends on the level of shares held by board members (the "asymmetric governance" hypothesis). Specifically, the role of corporate governance is more critical for firms with low levels of shares held by their board members, who in such cases have less incentive to increase share value or dividends.

The remainder of this paper is organized as follows. Section 2 provides some institutional background on Taiwan. Section 3 explains our research hypotheses. Section 4 focuses on issues related to the research design. Section 5 offers descriptive statistics and reports the empirical findings. Section 6 concludes the study with a summary of its major findings and suggestions for future research.

2. The Role of Corporate Boards in Taiwan

The basic legal framework for listed companies in Taiwan to implement corporate governance practices includes the Company Law, the Securities and Exchange Act and various listing regulations.[6] Taiwan is a civil law jurisdiction and its Company Law follows the models of continental Europe and Japan. However, in recent years, both the Company Law and the Securities and Exchange Act have been influenced by the common law world, especially the United States. In Taiwan, listed companies have a two-tier

[6] The listing criteria set forth by the Taiwan Stock Exchange and the GreTai Securities Market, similar to the NYSE and NASDAQ in the U.S., together with the Company Law, the Securities and Exchange Act, and other ordinances for public companies, guide listed companies in the establishment, implementation and practice of the corporate governance system.

board with a board of directors and a group of supervisors.[7] Both directors and supervisors are elected from among the shareholders. Article 202 of the Company Law in Taiwan states that the business of the company shall be conducted by the board of directors, and unless the Company Law or the Articles of Incorporation request that decisions be made in the shareholders' meeting, all matters may be decided by resolutions of the board of directors. The distribution of annual earnings as bonuses to board members and dividends to shareholders constitutes one of the decisions made by the board members.

Since the system of independent directors and supervisors is a significant part of corporate governance, the regulations and rules promulgated by the Taiwan Stock Exchange and the GreTai Securities Market in 2002 stipulate that a company applying for a listing for the first time must set aside certain seats for independent directors and supervisors.[8] Those provisions also specify the qualifications and independent status of such directors and supervisors. Since the passage of the new regulations, companies that apply for a listing are required to comply with the new rules, while already-listed companies are encouraged to comply with them. Based on our investigation, over the 2001-2005 period, the composite ratios of board members of these Taiwan listed firms were 59%, 30.20% and 10.80% for inside, outside and independent members, respectively.[9]

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[7] The term "two-tier" is used loosely due to the lack of a better description. There are not really two tiers because the second tier does not function as a board.

[8] For further details, refer to Item 12, Paragraph 1, Article 9 of the Taiwan Stock Exchange's *Criteria for the Review of Securities Listings* as well as the revised Article 17 of its *Supplemental Provisions to the Criteria for the Review of Securities Listings*, and to Article 10 of the GreTai Securities Market's *Criteria Governing the Review of Securities Traded in the Over-the-Counter Market* as well as its revised *Standards for Determining the Conditions for a Denied Listing Provided in Paragraph 1 of Article 10.*

[9] Lin and Hsu (2007) conducted a series of case studies on Taiwanese business groups. They found that

Compensation is to be made to the board members unless otherwise stipulated in the Articles of Incorporation (Articles 196 and 227) and is first proposed by the board and then resolved and adopted by shareholders at the shareholders' meeting. With respect to the form that board remuneration takes, this normally includes a fixed salary and a variable bonus. For non-executive board members (i.e., outside and independent board members), the salaries are usually meager and the bonuses are proportional to annual earnings and are allocated among board members. Executive board members, in addition to the salaries paid to them as employees of the company and the cash bonus shared by board members, are eligible for an employee bonus based on earnings.[10] Clearly, these two types of board members will not necessarily share the same considerations about board remuneration.

Regulators in Taiwan impose certain requirements on independent board members. One of their concerns is that if board members were able to have a high level of equity investment in the firm, they could be significantly influenced by potential financial gains. For this very reason, the Securities and Exchange Law of Taiwan stipulates that the maximum number of stocks that can be held by an independent board member must be limited to one percent of the firm and that an independent board member cannot be employed by that company.[11] In other words, except for the cash package in their

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boards of Taiwanese companies are commonly composed of inside members (executives, controlling family members, past employees or employees from affiliated companies), outside members, and independent bodies. As required by the Securities and Exchange Law of Taiwan, independent board members shall have shareholdings of less than 1%.

[10] Some firms specify that their executive directors are not entitled to cash package remuneration. Also of note here is a difference in accounting practices in Taiwan and in the U.S. In Taiwan, such employee bonuses are considered earnings distribution and so are not reflected in the calculation of earnings. Starting from 2006, however, Taiwan practices were brought into line with those of the U.S.

[11] Readers are referred to "Regulations Governing the Appointment of Independent Directors and Compliance Matters for Public Companies" for detailed information on the qualifications for independent board members in Taiwan. In brief, Article 2 defines the expertise requirement of independent board

remuneration, independent board members receive no employee bonus and at most a very small amount in dividends. Compared to the remuneration received by executive board members (usually an employee stock bonus plus a cash bonus and dividends), independent board members' remuneration is meager. However, if the board fails in its duties, the same legal repercussions are imposed on all of the members of the board.

3. Governance Role in Payment Asymmetry

In Taiwan, a proposal for the distribution of annual earnings is put forward by the corporate board. In the proposal, the corporate board suggests the amount of earnings to be allocated and also the fraction of that allocation that will make up bonuses for employees and board members and dividends for shareholders. As staff compensation committees are not a standard feature of the boardrooms of Taiwanese companies, board members set their own compensation, as specified in the firms' Articles of Incorporation.[12] The proposal will be ratified by the shareholders at the annual meeting, but, due to the prevalent application of proxy votes and weak shareholder activism, the corporate board encounters hardly any difficulty in getting ratification from shareholders regarding their compensation. The distribution of earnings is generally a discretionary decision made by the board. This is made more controversial by the fact that the board members are also the setters of the company's dividend policy. In other words, because board members are simultaneously the setters and receivers of both compensation and dividends, they face a tradeoff between board compensation and dividends for themselves.

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members, and Article 3 stipulates the conditions that disqualify would-be candidates.

[12] Some firms specify a ratio that is a fixed number or a minimum or maximum ratio to distributable earnings, while others specify a ratio in the form of a range (e.g., 2~5% of earnings).

Previous studies have demonstrated that corporate governance features related to ownership and board structure are important elements of an examination of agency issues involving shareholders (e.g., Gompers et al. 2003; Bates et al. 2006). Good governance mechanisms can help reduce, if not prevent, hidden actions aimed at procuring board members' private benefits rather than benefits shared by external shareholders. As the distribution of earnings is a decision made by the board members, board control is by far the most important factor. Conflict of interest arises between the board's compensation and the dividend payout, with the latter dependent on the level of the board members' ownership. We focus on shareholdings by the board members and other governance attributes related to ownership and board structure in order to define board control.[13] To be specific, we argue that board members with a small number of shares tend to favor more generous board compensation, which—in the eyes of external shareholders—constitutes unfair payment. By contrast, board members with a significant proportion of shares are less likely to permit such unfair payment, given that they can receive a considerable amount in dividends.

3.1 The Effect of Shareholdings by Board Members on Payment Asymmetry

Two competing arguments, the entrenchment effect and the alignment effect, are conventionally adopted in studies that explore the effects of ownership on agency problems (Shleifer and Vishny 1997). The entrenchment effect argues that large inside shareholders in firms with concentrated ownership have greater incentives to maximize their own gains at the cost of other shareholders. Against this, the alignment effect

[13] Ittner, Larcker and Rajan (1997) used (1) shares held by the board members and shares held by the CEO, and (2) the ratio of the board members who are "hired" by the CEO to independent board members to serve as a proxy for the power of the CEO. We adopt these concepts and apply them to describe the power of the board.

contends that large inside shareholders monitor management more thoroughly than minority shareholders, and that this careful monitoring carries potential benefits for all shareholders. There is convincing evidence for both effects: for the entrenchment effect, see, for example, Fama and Jensen 1983; Morck, Shleifer, and Vishny 1988; Claessens et al. 2002, and for the alignment effect, see, for example, Demsetz and Lehn 1985.

This study adopts the argument of the alignment effect to explain the relationship between board ownership structure and payment asymmetry. As a general rule, the principal and the agent are distinct roles, but in our setting, the role of the board and that of shareholders could overlap a great deal depending on the number of shares held by board members. On the one hand, if fewer stocks are held by board members, the agency problem in the form of payment asymmetry would be more severe, and the reason for this is simple: board members would have a greater incentive to maximize their own compensation rather than increase the dividends of shareholders. On the other hand, if board members are also large shareholders, it is expected that such behavior would be less likely and, when it does exist, less severe. Since firm value and dividends are more important to board members with a large amount of shares, overpayment to board members will be detrimental to firm value. We maintain, therefore, that the alignment effect is much more applicable than the entrenchment effect in the present study.

Though not exactly using the same setting as ours, Elson (1993) showed that firms with compensation committee members that have high equity ownership are less likely to overcompensate corporate executives; this conclusion is in line with the argument that board members with greater equity investment in the firm develop shareholder-like interests, which reduce the possibility and severity of asymmetric payments. Based on the

alignment effect, we predict that the greater the number of shares held by the board, the less severe will be the payment asymmetry. For convenience, we refer to the effect of board stock ownership on the severity of payment asymmetry as the "few-shares" hypothesis.

3.2. The Effect of Governance on Payment Asymmetry

Prior studies on corporate governance have tended to focus on a single governance attribute effect, e.g., board size or board independence, intended to protect claims to firms' resources. As some governance attributes may complement each other whereas others may serve as substitutes, we incorporate other governance attributes into our study to investigate how payment asymmetry is affected by various governance mechanisms other than shareholdings by the board members that are intended to control agency conflicts between management and shareholders.

We hypothesize that good governance helps reduce the agency problem resulting from board members having few shares. By holding the level of shareholdings by board members constant, we predict that good governance can lessen agency problems by reducing the severity of payment asymmetry. For example, Shen and Chang (2005) find that the negative effect of restrictions on banking activities engaged in securities, insurance and real estate is reduced by sound governance.[14] The severity of payment asymmetry, on the other hand, is expected to increase when governance is poor. We hypothesize that, depending upon the level of shares held by the board members, governance attributes intended to mitigate agency conflict would help to reduce the

[14] Shen and Lee (2006) also find that governance could lower the unfavorable effect of low financial development on economic growth.

severity of payment asymmetry. We refer to this hypothesis as the "good governance" hypothesis.

3.3 The Asymmetry of the Governance Effect

Since there is a competing view in the literature that suggests that concentrated ownership allows controlling shareholders to exercise undue influence to secure benefits that are detrimental to minority shareholders (Shleifer and Vishny 1997), there is the possibility that the effect of good governance may be conditional upon the level of concentration of shares held by the board members. We expect that the effect of good governance on the severity of payment asymmetry is stronger for firms in the low-share regime, as compared to firms in the high-share regime.[15] In cases where the small amount of shares held by the board members significantly affects the severity of payment asymmetry, we further argue that good governance should provide more value to firms in a less desirable situation (e.g., the low-share regime in this study). In other words, good governance mitigates the negative effect of low shareholdings by board members *asymmetrically*. We hypothesize that the good governance effect is subject to change depending on the level of shares held by the board members. We refer to this as the "asymmetric governance" hypothesis.

4. Payment Asymmetry and the Econometric Model

To investigate the existence of payment asymmetry between board members and shareholders, we develop two measures to gauge the severity of payment asymmetry, PAS1 and PAS2. To simplify the presentation, we use PAS to denote both PAS1 and

[15] We divide the shares held by board members into a low-share and a high-share regime, and hypothesize that good governance has an asymmetrical impact in these two regimes.

PAS2.

4.1 Payment Asymmetry

Recall that our definition of payment asymmetry employs the industry median as the criterion to assess insufficient payout ratio and excessive board remunerations. The industry median is used because there might be differences in dividend policies across industries. To calculate insufficient payout ratio and excessive board remunerations, we first calculate industry-adjusted dividend payout ratio by deducting its industry median from payout ratio and industry-adjusted board compensation by deducting the industry median from board compensation. $\text{Rank}^{+}_{compensation}$ represents the ascending rank of the industry-adjusted board compensation level (scaled by net earnings), and $\text{Rank}^{-}_{dividend}$ denotes the descending rank of the industry-adjusted dividend payout ratio. Thus, a higher rank by compensation (i.e., a larger Rank^{+}) means a more excessive level of compensation. Conversely, a higher rank by dividend (i.e., a larger Rank^{-}) represents a lower dividend payout ratio. Thus, our measure of payment asymmetry is defined as follows.

Payment Asymmetry 1 (PAS1): Our PAS1 is obtained based on the following formula:

$$\text{PAS1} = \text{Rank}^{+}_{compensation} \times \text{Rank}^{-}_{dividend} \tag{1}$$

where Rank^{+} and Rank^{-} are the rank operators that convert the numerical value into rank in an ascending and descending order, respectively. We multiply these two ranks and then rank the products to yield PAS1, a variable which effectively reduces two variables in different dimensions to a single number. The higher the PAS1, the more severe the payment asymmetry is.

While the PAS1 is intuitive, it has certain drawbacks. With soaring stock prices, investors may not feel short-changed even when they receive only small dividends. Furthermore, the payment of small dividends may be attributed to the preservation of funds for future investment opportunities. In other words, to measure the severity of payment asymmetry, PAS1 does not take capital gains or future investment opportunities into consideration. Our second payment asymmetry index (PAS2) is developed to address these concerns.

Payment Asymmetry 2 (PAS2): The variable PAS 2 excludes from the dividend the effect of *capital gains* (i.e., dividends excluded) and future *investment opportunities* (proxied by Tobin's Q, which is equal to market value divided by the book value of equity). This exclusion is achieved by regressing dividends (in terms of their deviation from the industrial median) on capital gains and investment opportunities. The resulting residuals represent the adjusted dividend payout. Using these regression residuals to replace dividends, we then repeat equation (1). Finally, PAS2 is obtained by multiplying the descending rank of this adjusted dividend payment and the ascending rank of board compensation. In short, the difference between PAS1 and PAS2 is that PAS1 is calculated using the original dividends, while PAS2 is measured using the capital-gains and the investment-opportunity adjusted dividends.

4.2 Econometric Model

We use model 1 to test our few-shares hypothesis, which suggests an inverse relationship between shareholdings by board members and PAS:

MODEL 1:

$$PAS_{it} = \beta_0 + \beta_1 B\_SHARE_{it} + \beta_2 SIZE_{it} + \varepsilon_{it} \quad (2)$$

where PAS indicates PAS1 or PAS2 and the subscripts i and t denote firm i and period t, respectively.

B_SHARE = percentage of shares held by board members.

SIZE = natural log of total assets in thousands of NT dollars

The coefficient of B_SHARE, β_1, is expected to be negative, because a lower level of shares held by board members is expected to escalate the severity of payment asymmetry. In addition, we incorporate SIZE as a control variable due to its role in determining board compensation.

To test the good governance hypothesis, we first define β_1 in equation form as shown in equation (3), and plug equation (3) back in to replace β_1 in equation (2):

$$\begin{aligned}\beta_1 = {} & \theta_0 + \theta_1 B\_SHARE_{it} + \theta_2 BLOCK_{it} + \theta_3 IND\_SEAT_{it} + \theta_4 V\_CF_{it} \\ & + \theta_5 ST\_VOTE_{it} + \theta_6 FAMILY_{it} + \theta_7 B\_SIZE_{it} + \theta_8 DUAL_{it} + \theta_9 INST_{it} \\ & + \theta_{10} MANG_{it}\end{aligned} \quad (3)$$

where:

BLOCK = percentage of shares held by outside blockholders;

IND_SEAT = percentage of independent members on the board;

FAMILY = one if the firm is a family-controlled firm, and zero otherwise;

V_CF = voting deviation, measured by voting right minus cash flow right;

ST_ VOTE = seat-control deviation, measured by seat control right minus voting right;

B_SIZE = number of board members;

DUAL = one if the CEO simultaneously serves as chair of the board, and zero otherwise;

INST = percentage of shares held by foreign financial institutional investors; and

MANG = percentage of executives on the board.

Equation (3) specifies coefficient β_1 as a function of the corporate governance variables. By plugging equation (3) into (2), we obtain the interaction of the corporate governance variables with B_SHARE.[16] Whether the sign of the coefficients of θ_i (i=1-10) is positive or negative tests our good governance hypothesis. When the good governance hypothesis holds true, the good governance variables make the baseline coefficient (which is the result of regressing PAS on B_SHARE in equation (2)) *more* negative. Governance variables that aggravate the severity of PAS, on the other hand, will make the baseline coefficient *less* negative, which means that the coefficients of such governance variables will be positive. For instance, if outside blockholders confirm the good governance hypothesis, making the payment asymmetry less severe, then the sign of θ_2 in equation (3) is predicted to be negative. By contrast, if V_CF introduces the entrenchment effect, then the sign of θ_4 should be positive.

Finally, to examine the asymmetric governance hypothesis we separate our full sample into two subgroups, a low-share regime and a high-share regime, based on the median of the B_SHARE. Then, we re-perform the test to examine the good governance hypothesis.[17] The asymmetric governance hypothesis predicts that the good governance effect should be more evident in the low-share regime than the high-share regime.

4.2 Independent Variables

BLOCK: Stocks held by outside blockholders (BLOCK) are used to proxy the ownership structure. Previous research substantiates that outside blockholders play a

[16] Shen and Chih (2007) have employed a similar approach for earnings management and corporate governance in Asia's emerging markets.

[17] This partition is arbitrary and we therefore conduct several sensitivity tests by using different percentiles as the cutoff.

positive role in corporate governance. In an extensive survey on blockholders and corporate control, for instance, Holderness (2003) points out that blockholders have the incentive and opportunity to monitor management and thus enhance a firm's expected cash flow, with the resulting benefits that accrue to all shareholders. By extending Holderness' conclusion, we expect that outside blockholders also have a strong incentive to monitor the board. To capture this monitoring power of outside blockholders, this study includes the shareholdings of outside blockholders. We hypothesize that the severity of the asymmetry in the board's payment is negatively related to the level of shareholdings of outside blockholders.

IND_SEAT: If we consider the purpose of setting up an independent board—to enhance corporate governance—there exists no reason to expect this system to have bad consequences. There are, however, articles that debate the effectiveness of an independent board. Even on a nominally independent board, the lack of a truly independent voice, coupled with a lack of incentives for board members to operate for their own personal gain, may give rise to somewhat irresponsible behavior on the part of corporate boards (Jensen and Meckling 1976; Tirole 2005).[18]

While the importance of board independence in corporate governance has been noted by regulators, academics, and business stakeholders alike, the empirical evidence of the effectiveness of independent board members regarding firm performance, the dismissal of ineligible executives and CEO compensation has been mixed. Some studies have shown that the role of independent board members is positive (e.g., Borokhovich, Parrino and

[18] According to Tirole (2005 pp.30-32), the lack of independence and insufficient incentives are two of many factors that result in the ineffectiveness of the board.

Trapani 1996; Cotter, Shivdasani and Zenner 1997; Byard, Li, and Weintrop 2006),[19] while others have found no such evidence (Yermack 1996, Hermalin and Weisbach 1988, Bhagat and Black 2002). In addition, as executives or controlling owners may handpick independent board members from among their personal friends or from social networks outside, yet close to, the firm, independent board members may actually be "independent" only in name. Despite these potential problems, Bhojraj and Sengupta (2003) find that firms with a higher percentage of outside directors on the board enjoy lower bond yields and higher ratings on their new debt issues.

It could be that the imbalance between the small pecuniary reward and the heavy work load may tempt certain independent board members to pursue their own personal interests at the expense of the external shareholders, despite the risk of legal repercussions and damage to their reputation.

Following our few shares hypothesis, we predict that firms with a greater number of independent board members, who receive no employee bonus and little in dividend revenue, are associated with greater payment asymmetry. Such negative effects of board independence do not appear in prior research, which provides either positive or no solid results on the impact of independent board members on the effectiveness of the board and on agency costs. Furthermore, independent board members may prefer to avoid legal repercussions and safeguard their personal reputations rather than receive a personal monetary reward. Considering the previous arguments, we therefore leave ambiguous the association between independent board members and the severity of payment asymmetry.

[19] To be more specific, the positive effect of outside directors has been found in certain research contexts, such as management turnover (Weisbach 1988; Borokhovich et al. 1996), anti-takeover provisions (Brickley, Coles and Terry 1994) and negotiations on takeover premiums (Byrd and Hickman 1992; Cotter et al. 1997).

V_CF Shleifer and Vishny (1997) argue that large shareholders have incentives to maximize their own benefits even at the expense of other shareholders. In fact, it has been shown both theoretically and empirically that joint ownership and control create greater agency conflicts (e.g., Fama and Jensen 1983; Morck et al. 1988).[20] La Porta et al. (2002) and Claessens et al. (2002) show that a high deviation of cash flow rights from voting rights has a negative effect on firm performance and shareholder value. Those studies suggest that pyramid and cross-holding structures broaden the difference between voting rights and ownership for firms in East Asian economies. Based on a sample of firms in seven East Asian economies, Fan and Wong (2002) find that the deviation of control from ownership creates agency conflicts between controlling owners and outside investors, which may well result in the controlling owners reporting favorable earnings information even when it might lack credibility. Francis, Schipper, and Vincent (2005) also find that, compared to firms with single-class stocks, firms with dual-class stocks, with a higher separation of cash flow rights from voting rights, have lower earnings quality; however, they also present evidence showing that dual-class stocks have higher dividend informativeness.

As regards ownership structure, it is possible to categorize a firm as a widely-held company based on an academic definition (e.g., La Porta et al. 1999; Claessens et al. 2002).[21] However, ownership structure aside, virtually every company—publicly held or not—must have an authority (an individual or a group of people) that is responsible for

[20] Morck et al. (1988) report that managers' and shareholders' interests become more aligned as managerial ownership increases. They also find that managers' interests begin to diverge from those of shareholders as their equity stakes continue to grow.

[21] Based on shareholdings, La Porta et al. (1999) classify ultimate owners into five types: (1) a family or an individual; (2) the State; (3) a widely-held financial institution; (4) a widely-held corporation; and (5) miscellaneous.

making final or ultimate decisions. Under the traditional definition, we might be led to the conclusion that, in widely-held companies, no one has such authority. Yet, by no means would it be reasonable to assume that no one holds decision-makers accountable. Thus, this study defines this individual (or group of individuals) as the controlling owner(s). Furthermore, it is critical for controlling owners to have seat control in order to increase and exercise their influence over board decisions. Details regarding the identification of the controlling owners are provided in the next section.

ST_CF Controlling owners have advantages in terms of obtaining information and using the resources of the firm (e.g., the register of shareholders) to gather critical and incremental proxy votes, advantages which lead to even greater deviation between voting rights and seat-control rights. Seat-control deviation represents the most effective way of obtaining *excess* control, which further inflates the controlling owner's power over board decisions. In other words, when voting deviation is kept constant, seat-control deviation further erodes the one-share-one-vote principle. Hence, unlike previous studies, this paper employs seat-control deviation in addition to voting deviation to measure the full range of influence of controlling shareholders.

Seat-control and voting deviation is calculated according to the following procedure. First, assume that the voting, cash flow and seat-control rights of the controlling owner of Company A are 20%, 13% and 60% (with six out of 10 board members (60%) controlled by the controlling owner), respectively. In this case, the *seat-control deviation* is 40% (i.e. 60% minus 20%), while *voting deviation* is 7% (i.e., 20% minus 13%). A higher voting deviation is indicative of a greater violation of the one-share-one-vote principle. The traditional wisdom has it that a voting deviation represents an asymmetric distribution

between capital invested and the power of control. Nevertheless, the actual power of the vote is exercised through the board. We believe that seat-control deviation more accurately gauges the difference between the actual power of seat-control rights (60% in this example) and the nominal power of voting rights (20%) exercised by the ultimate owner. More specifically, a higher seat-control deviation means that when the controlling owners have the same voting rights, they have excess control—that is, control that goes beyond their ownership rights—by virtue of proxy votes that inflate their short-term influence. Power-inflated controlling owners are typically more focused on personal benefits, and as a consequence they are likely to behave more myopically, behavior which in this study is typically associated with payment asymmetry. In sum, we posit that for boards with either higher voting or higher seat-control deviations, the board members are inclined to make more severely asymmetric payments.

FAMILY Family ownership possibly affects governance-related issues in two ways, i.e., through the entrenchment (wealth-depriving) effect or the alignment (monitoring) effect. The alignment effect is more applicable in this setting because greater board compensation results in there being less revenue for dividends. What is pertinent here is that Wang (2006) has provided evidence that the founding family is associated with higher earnings quality but states that "…it is unclear whether higher earnings quality is a result of the demand for greater earnings quality from family firms [i.e., the entrenchment effect] or a result of the supply of greater earnings quality by family firms [i.e., the alignment effect]" (p. 653). If the impact of family board members is in agreement with the alignment effect in our study, then the findings in Wang (2006) can of course be interpreted as a product of the alignment effect.

Prior studies have classified a company as family-owned or not based on the type of ultimate controllers, using shareholdings as the cutoff (e.g., 10% or 20%). We argue that, when it comes to reaching major decisions, such as those pertaining to board compensation and dividends as well as operations, investment and other financing activities, the real power of control is wielded at the board meeting (seat control) rather than at the shareholder meeting (voting control). We believe that seat control is a better criterion for deciding whether a company is family-owned. Thus, we depart from previous studies by defining firms as family-controlled if 50 percent or more of the board members are members of the same family. In this study, the firm's control status is expressed by the dummy variable FAMILY. The reason we use a dummy variable instead of the number of shares to indicate a family-controlled company is that the latter approach would give rise to the double counting problem. That is, shares owned by a controlling family would be included in shareholdings of either board members (if the family members are on the board) or outside blockholders (if the family members are outside the board). Were we to adopt this conventional measure, it would inflate the effect of family ownership. Therefore, we adopt a dummy approach.

Since the TSEC, founded in 1962, has a significantly shorter history than the NYSE, which was founded in 1792, it is less useful to distinguish between family membership and founding family membership, as must be done in studies of NYSE firms. In fact, Lin and Hsu (2008) report that, for most listed companies in Taiwan, the controlling families are the founding families.[22] Therefore, we assume that family membership is equivalent to founding family membership in Taiwan. As founding family companies exhibit

[22] Lin and Hsu (2008) survey 14 of the top 50 Taiwanese business groups and find that there are 11 family-controlled business groups. They further show that the controlling families are all the founding families.

greater concern about the preservation of their family name (Anderson et al. 2003), than do their non-family-controlled counterparts, family-controlled companies are more likely to forego short-term benefits (Wang 2006). Thus, we predict that the interests of family-controlled companies (usually also founding family companies in Taiwan) are more closely aligned, and that those companies have stronger incentives to monitor the board. To be more precise, this study hypothesizes that family-controlled firms are less likely to take on the practice of asymmetric payments.

B_SIZE While many studies have found that firm value decreases as board size increases (e.g., Yermack 1996; Eisenberg, Sundgren and Wells 1998), Coles et al. (2007) have documented that larger firms, diversified firms and firms that rely more on debt financing benefit from having larger boards. To examine the potential effect of board size on the severity of payment asymmetry, we include board size (*BDSZ*) in our regression model.

DUAL and **MANG** As related in the background information on the boards of Taiwanese firms in Section 2, three stakeholders related to the earnings distribution are shareholders (who receive dividends), employees (who receive bonuses), and board members (who receive remuneration). Prior studies (e.g., Florou 2005) consider an individual having the dual role of both chairman of the board and CEO as a poor governance mechanism due to the resulting lack of proper monitoring. However, a chairman of the board who is also CEO will collect a CEO's salary, and therefore have less incentive for payment asymmetry in his position as chairman. A chairman of the board who is not also CEO, on the other hand, is not entitled to the CEO's salary, and will therefore have a greater incentive for payment asymmetry. With this possibility in mind,

we examine the impact of the following two employee-related governance variables on payment asymmetry: DUAL, which is a dummy variable to indicate whether the CEO is also the chairman of the board, and MANG, which indicates the percentage of representation of executives on the board.

INST The percentage of shares held by institutional investors (INST) is included to examine the monitoring effect of these investors on board effectiveness. This variable has been used by (for example) Almazan, Hartzell, and Starks (2005) to find the monitoring role of active institutional investors in the context of executive compensation.

Finally, the relevant literature notes that firm size (SIZE) is significantly associated with CEO compensation; hence it is possible that firm size is also a significant determinant of board compensation and thus has an impact on the severity of PAS. We therefore incorporate SIZE as our control variable.

5. Basic Statistics and Empirical Results

5.1 A Graphical View of our Research Results

The first payment asymmetry index (PAS1) provides an intuitive sense of asymmetry. However, PAS1 does not take capital gains and future investment opportunities into account. Our second payment asymmetry index (PAS2) is developed to address these concerns. A higher value of PAS1 or PAS2, which means higher board compensation together with lower dividend payouts, indicates a more severe payment asymmetry between the board and the shareholders. We use Figures 1 and 2 to present our preliminary research results.

Figure 1 plots PAS1 against B_SHARE. The payment asymmetry argument suggests

that smaller size of board tend to give higher board compensation and lower dividend payouts. Thus, PAS1 should be negatively related to B_SHARE. As shown in Figure 1, the bold line between PAS1 and B_SHARE is clearly negatively associated, supporting our argument of few-shares hypothesis.

[Insert Figure 1]

By means of a comparison between the slope of the dotted line and the solid line in Figure 1, we delineate the good governance hypothesis. Along with an increase in B_SHARE, firms with good governance (the lower dotted line) have a more negative regression slope, indicating a rapid reduction in PAS. By contrast, firms with poor governance (the upper dotted line) have a less negative slope, i.e., a slow reduction in PAS. In short, the *negative* relationship between B_SHARE and PAS will be greater (less) for firms with good (poor) governance structures.

The solid line shown in Figure 2 represents the few-shares hypothesis, as in Figure 1. As regards the good governance effect, which does not follow exactly the line in Figure 1, the asymmetric governance hypothesis predicts different slopes as shown in Figure 2, where the slope is steeper in the low-share regime on the left-hand side of the figure. On the other hand, in the high-share regime on the right-hand side of the figure, the asymmetry is less severe, suggesting that good governance provides less incremental value in mitigating the PAS.

[Insert Figure 2]

In other words, our few shares hypothesis predicts that firms in the low-share regime will have a higher PAS, while firms in the high-share regime will have a lower PAS. The good governance hypothesis suggests that the negative effect on PAS of the board

holding few shares will be reduced for firms with better governance. However, the good governance effect is asymmetric, depending on which share regime a firm is in. It should be noted that, along with the good governance effect, there is the possibility that a poor governance effect also exists.[23] Poor governance weakens the effect of the B_SHARE on the PAS, while good governance strengthens such an effect (as shown by a steeper slope in Figure 1).

Like the good governance effect, the poor governance effect is asymmetric regarding the negative effect of board members holding few shares. In particular, poor governance has an aggravating effect on the PAS for firms in the low-share regime, while such an effect is mitigated for firms in the high-share regime.

5.2 Basic Statistics

We choose the Taiwanese companies listed over the 1997-2005 period from the Taiwan Economic Journal Database (TEJ) as our research sample. The original number of observations is 10,306. We exclude firms in the banking and financial industries, firms with insufficient data with regard to the corporate governance variables, and firms that experienced a net loss and distributed no dividends, and thus we arrive at a final sample of 5,354 observations.

The descriptive statistics for the explanatory variables in the analysis are reported in Table 1. The average values for B_SHARE, BLOCK, and IND_SEAT are 29.78%, 15.34%, and 8.68%, respectively. With respect to the two deviation measures, the mean for the voting deviation (V_CF), 6.52%, is not large, compared to the 28.17% for the seat

[23] In order to show our few-shares hypothesis and good governance hypothesis more clearly, we do not portray the poor governance effect in Figure 1. We do, however, show the asymmetric poor governance effect in the upper part of Figure 2.

deviation (ST_V). Around 53% of our observations belong to family-controlled companies. The average board size is 9.51 and the proportion of the observations for which the CEO is the chair of the board is 29%. The average percentage of shares held by the foreign institutional investors is 1.63%. The average seat representation ratio of executive board members is 13%. The average natural logarithm of firm size is 15.06.

[Insert Table 1]

Table 2 provides a preliminary mapping among the PAS1, dividend payout, compensation, and the B_SHARE. The first column classifies the PAS1 into 10 sub-groups in ascending order. The second column reports the corresponding yearly industry-median-centered dividend payout ratio, which exhibits a descending pattern. The third column reports the yearly industry-median-centered compensation, which appears in ascending order. The fourth column reports the percentage of shares held by board members. We observe that the higher the PAS1, the more severe the payment asymmetry is. That is to say, firms in the top group favor the outside shareholders the most (a less severe agency problem) and those in the bottom group favor the board members the most (a more severe agency problem).[24] Finally, the percentage of shares held by board members decreases as the number of groups increase, suggesting that the fewer the shares held by board members, the more severe the agency problem is. The findings here are consistent with our few-shares hypothesis.

[Insert Table 2]

Following the same approach described above, we further classify the full sample into 100 subgroups. Figure 3 portrays the scatter plot for PAS1 and B_SHARE. As in our

[24] The patterns are robust when dividends and compensation are used at their original values.

findings in Table 2, our few-shares hypothesis still holds here.

[Insert Figure 3]

5.3 Empirical Results

Tables 3 and 4 report the estimated results using PAS1 and PAS2 as the respective dependent variables. In each table, we consider 13 model specifications to examine the validity of the few-shares hypothesis and the good governance hypothesis. In the first two specifications we consider only B_SHARE and/or its squared form as the explanatory variable. As to the following nine specifications, we incorporate governance variables one by one to show the specific effect of each. The last two columns report the results of the complete model by including all explanatory variables with and without the SIZE variable. Our final conclusions are based on the complete model (column 13), and the other specifications serve as benchmarks.

[insert Table 3]

Here we first explain the findings for PAS1 in Table 3, and then continue on to PAS2 below. For PAS1, the coefficients of B_SHARE are overwhelmingly negative and significant in all columns. Thus, the few -hares hypothesis is strongly supported. The results indicate that the fewer the shares held by board members, the more severe the payment asymmetry is, thereby indicating an aggravation of the board-shareholder agency problem. To investigate whether there is a second-order effect between PAS1 and B_SHARE, we also consider the squared form of B_SHARE. The negative relation between PAS1 and B_SHARE remains unchanged through all other columns. These conclusions are qualitatively the same in Table 4, which provides the estimated results

using PAS2 as the dependent variable. Therefore, consistent with our few-shares hypothesis, the board-shareholder agency problem increases as the number of shares held by board members decreases.

We next discuss the good governance hypothesis in Table 3, where PAS1 is examined. If the good governance hypothesis is to be supported in the case of the governance variables that help mitigate the severity of PAS, we expect the coefficients of the interaction terms—the B_SHARE multiplied by governance variables—to be *negative*. For governance variables that aggravate the severity of PAS, on the other hand, we expect the coefficients of the interaction terms—the B_SHARE multiplied by these governance variables—to be *positive*. That is, good (poor) governance variables mitigate (aggravate) the severity of payment asymmetry.

Our empirical results show that three governance variables that interact with B_SHARE, namely, FAMILY (coefficient -0.529, p-value < 1%), DUAL (coefficient -0.819, p-value < 1%), and MANG (coefficient -4.952, p-value < 1%), are significantly and negatively associated with PAS1. Therefore, we find that family-controlled companies have less severe payment asymmetry. In addition, DUAL and MANG are efficient governance mechanisms for mitigating the board-shareholder agency problem. It is worth noting that DUAL is typically thought to be harmful from the point of view of governance. However, in our case, a chair-CEO also represents the labor side, and the responsibilities of this role may reduce the tendency to allow an asymmetric payment. As to the coefficient of SIZE (-19.088, p-value < 1%), the significantly negative result reveals that larger firms tend to avoid asymmetric payment due to their increased visibility and the resulting social pressure (the so-called “political cost effect”).

By contrast, three more governance variables that interact with B_SHARE, namely, ST_V, IND_SEAT and B_SIZE, are positively associated with PAS1. Interestingly, ST_V (coefficient 0.023, p-value < 1%) is significantly positive, while the traditional measure for entrenching controlling shareholders, V_CF (coefficient -0.001, p-value = 0.795), is insignificantly related to the severity of payment asymmetry. Therefore, in stark contrast to the insignificant effect of voting deviation, seat-control deviation does indeed explain the severity of payment asymmetry.

The significantly positive coefficients of B_SHARE×IND_SEAT (0.085, p-value < 1%) and B_SHARE×B_SIZE (0.116, p-value < 1%) deserve more explanation. Conventional wisdom has it that independent directors are expected to enhance the effectiveness of the board. Nevertheless, in Taiwan, the percentage of shares held by independent directors is less than one percent, so the finding here is in fact consistent with our few-shares hypothesis, which argues that monitors with small equity holdings have less incentive to perform their roles effectively. Thus, the effectiveness of independent directors with small equity holdings merits further study. As to B_SIZE, we find that the size of corporate boards is related to payment asymmetry. Finally, we find no significant effect of B_SHARE×INST on PAS1.

The analysis here leaves us room to re-examine the dual role of a CEO. Traditional wisdom has it that the dual role of a CEO has a negative effect on monitoring. However, a CEO who also has a role on the board will receive both an employee bonus (as an employee) and board remuneration (as a board member). The particular context of this study allows us to examine how the CEO who has a dual role is able to alleviate conflicts among stockholders, board members, and employees.

Most of the findings reported in Table 3 are qualitatively similar to those in Table 4, where PAS2 is examined. The only exception is that the explanatory power of B_SHARE × FAMILY (coefficient -0.257, p-value < 0.167) is reduced to a one-tailed significance. Overall, we obtain similar conclusions from Tables 3 and 4.

[insert Table 4]

Table 5 presents the estimated results when sample observations are divided into a low-share and a high-share regime based on the median of B_SHARE. Our asymmetric governance hypothesis leads us to expect that our previous findings on the good governance effect will be more conclusive in the low-share regime than in the high-share regime.

The left and right parts of Table 5 report the results of using PAS1 and PAS2, respectively. To facilitate the discussion, we provide the last column of Table 3 (Table 4) in the whole sample column of PAS1 (PAS2) in Table 5. Since PAS2 controls for capital gains and future investment opportunities, and also since the primary results are similar, we focus our discussion on PAS2. It is interesting to note that the coefficients of B_SHARE are negative for the whole sample (-3.067), the low-share subsample (-2.600) and the high-share subsample (-3.316). However, the significant results for B_SHARE can be found only in the whole sample (p-value<0.01) and the low-share subsample (p-value<0.10). The insignificant evidence on B_SHARE in the high-share subsample (p-value = 0.416) implies that a decrease in shares held by board members does not significantly increase the payment asymmetry when board members hold a sufficiently high level of shares. Alternatively, for firms in the low-share regime, a decrease in the shares held by board members will heighten the severity of payment asymmetry. The

findings for B_SHARE suggest that the good governance effect substantiates itself in the low-share regime only, which is consistent with our asymmetric governance hypothesis.

With respect to the relationship between other governance variables and PAS2, of the evidence reported in the whole sample, it is the observations in the low-share regime that provide the primary support for the good governance hypothesis. For example, the significantly positive effect of B_SHARE×ST_V in the whole sample (0.022, p-value <0.01) and the low-share subsample (0.023, p-value <0.01) cannot be found in the high-share subsample (0.008, p-value=0.590). The same situation can also be found for B_SHARE×FAMILY (with one-tailed significance), B_SHARE×DUAL, and B_SHARE×MANG. The only exception is B_SHARE×BLOCK. The variables of interest B_SHARE×IND_SEAT and B_SHARE×B_SIZE, as well as the control variable SIZE, are found to be significant for the two sub-samples. In other words, the evidence partially supports our asymmetric governance hypothesis.[25]

6. Conclusion

On the heels of the OECD's plea for corporate boards to be responsible for aligning key executive and board remuneration with the longer-term interests of their company and its shareholders (OECD 2004), this study examines how corporate governance affects the fairness of payments between board members and shareholders. By examining issues that pertain to payment asymmetry, this study contributes to the line of research on board effectiveness in the context of minority shareholders.

[25] The findings for PAS1 are qualitatively similar to those for PAS2 except for B_SHARE×BLOCK and B_SHARE×V_CF. We cannot provide any explanation except that PAS2 is a better proxy for payment asymmetry. In addition, the coefficient of B_SHARE×FAMILY, which is one-tailed significant in the PAS2 analysis, becomes two-tailed significant (-0.523, p-value<0.05) in the PAS1 analysis.

Several major findings emerge from our analysis. First, using Taiwan data, we demonstrate that payment asymmetry indeed exists between board members and external shareholders. Next, we find compelling evidence to support our few-shares hypothesis; that is, the percentage of shares held by board members is inversely associated with the severity of payment asymmetry.

Third, we provide evidence that the agency cost of the few-shares effect is reduced by good governance attributes, thereby supporting our good governance hypothesis. Fourth, we find partial evidence that both the few-shares effect and the good governance effect are asymmetric depending on the level of shares held by board members.

Finally, we go beyond traditional measures by providing a new measure of the deviation between ownership and control. In the payment asymmetry context, we find that the conventional measure (vote deviation) does not have the ability to explain payment asymmetry, while the new measure (seat-control deviation) has some explanatory power in regard to payment asymmetry.

Our study contributes to our understanding of the effectiveness of corporate boards. We formally document the factors affecting payment asymmetry, which is one of the core governance principles underscored by the OECD (1999, 2004). The prior literature has mainly focused on how the board interacts with other agents (e.g., executives and auditors), while ignoring the board *per se*. This paper is unique in large measure because it investigates a situation in which the self-interest of the board predominates, with the consequence that the board's behavior could become a source of dissension between board members and shareholders.

One caveat must be taken into consideration when interpreting the results of this study.

Some important implications concerning board effectiveness emerge from our findings, but, due to expected institutional differences across countries, caution should be taken before making any generalizations based on our conclusions. To cite a few examples, La Porta et al. (1999, 2000, 2002) document cross-country differences in legal institutions and investor protection, and Shleifer and Wolfenzon (2002) identify differences in investor protection and in equity markets. Moreover, there are reportedly differences with respect to earnings management (Leuz, Nanda and Wysocki 2003; Chih, Shen and Kang 2007) as well as disclosure incentives and their effects on the cost of capital (Francis, Khurana and Pereira 2005) around the world.

In light of such differences, it would be valuable in future research to re-examine issues surrounding payment asymmetry in a cross-country context. In addition, it would be equally enlightening to examine the economic consequences of payment asymmetry, such as the effects on the cost of capital and the impact on analyst ratings.

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Table 1 Basic Mean Statistics

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	Full
B_SHARE	33.00	33.44	33.45	32.60	31.41	29.80	28.07	26.61	25.45	29.78
BLOCK	9.67	11.40	12.77	13.34	14.66	16.96	18.29	17.61	17.52	15.34
IND_SEAT	0.03	0.00	0.02	0.02	0.05	10.32	15.85	17.50	18.09	8.68
V_CF	6.59	6.50	7.13	7.78	7.26	6.24	6.23	6.03	5.76	6.52
ST_V	32.84	32.05	33.47	32.40	30.10	26.03	24.45	24.82	24.78	28.17
FAMILY	0.53	0.54	0.52	0.56	0.55	0.54	0.51	0.54	0.52	0.53
B_SIZE	9.72	9.20	9.29	9.33	9.29	9.50	9.68	9.71	9.63	9.51
DUAL	0.24	0.27	0.28	0.28	0.29	0.33	0.34	0.30	0.28	0.29
INST	1.29	1.31	1.22	1.46	1.25	1.72	1.62	1.76	2.49	1.63
MANG	0.12	0.13	0.14	0.15	0.14	0.13	0.12	0.11	0.11	0.13
SIZE	15.18	15.07	15.10	15.08	14.93	14.89	14.97	15.11	15.19	15.06
Number of Obs.	429	433	490	516	514	665	761	796	750	5,354

Variable definitions:
B_SHARE: percentage of shares held by board members
BLOCK: percentage of shares held by outside blockholders
IND_SEAT: percentage of independent members on the board
FAMILY: one if the firm is a family-controlled firm, and zero otherwise
VOTE_CF: voting deviation, measured by voting right minus cash flow right
SEAT_ VOTE: seat-control deviation, measured by seat control right minus voting right
B_SIZE: number of board members
DUAL: one if the CEO simultaneously serves as chair of the board, and zero otherwise
INST: percentage of shares held by foreign financial institutional investors
MANG: percentage of executives on the board
SIZE: natural log of total assets (in thousands).

Table 2: PAS1 and Its Corresponding Dividend Payout Ratio and Remuneration

Group	Dividend (Median –Centered)	Compensation (Median –Centered)	B_SHARE
1	0.2309	-0.0168	31.210
2	0.1244	-0.0097	28.500
3	0.0775	-0.0085	28.340
4	0.0407	-0.0067	27.280
5	0.0119	-0.0011	28.220
6	-0.0008	0.0000	26.530
7	-0.0309	0.0021	26.300
8	-0.0651	0.0048	25.165
9	-0.0548	0.0054	23.570
10	-0.1161	0.0096	22.240

Table 3: Using PAS1 to Test the Few Shares Hypothesis and Good Governance Hypothesis

	Pred.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Constant	?	682.004	666.931	673.809	593.406	685.521	669.592	675.745	746.648	713.855	691.464	692.333	360.972	666.809
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
B_SHARE	–	-2.586	-1.977	-2.642	-2.935	-2.641	-2.560	-2.471	-4.304	-2.449	-2.656	-2.342	-1.961	-3.533
		(0.000)	(0.0010)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.008)	(0.000)
B_SHARE^2	?		-0.008										-0.007	0.0008
			(0.303)										(0.456)	(0.933)
B_SHARE × BLOCK	–			0.010									0.001	0.002
				(0.206)									(0.872)	(0.842)
B_SHARE × IND_SEAT	?				.0.075								0.091	0.085
					(0.000)								(0.000)	(0.000)
B_SHARE × V_CF	+					0.002							-0.005	-0.001
						(0.642)							(0.285)	(0.795)
B_SHARE × ST_V	+						-0.012						0.019	0.023
							(0.004)						(0.001)	(0.000)
B_SHARE × FAMILY	–							-0.159					-0.702	-0.529
								(0.336)					(0.000)	(0.007)
B_SHARE × BRD_SIZE	+								0.162				0.065	0.116
									(0.000)				(0.011)	(0.000)
B_SHARE × DUAL	–									-0.886			-0.673	-0.819
										(0.000)			(0.000)	(0.000)
B_SHARE × INST	–										0.043		-0.031	-0.011
											(0.046)		(0.156)	(0.626)
B_SHARE × MANG	–											-2.718	-2.527	-2.646
												(0.000)	(0.000)	(0.000)
SIZE	–	-18.940	-18.545	-18.569	-13.601	-19.102	-17.634	-18.574	-22.911	-20.830	-19.560	-19.446		-19.088
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)
F-statistics		128.49	86.01	86.20	151.44	85.72	88.57	85.97	100.04	93.63	87.04	92.48	42.57	45.28
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Adj. R^2		0.0455	0.0455	0.0456	0.0778	0.0453	0.0468	0.0455	0.0526	0.0494	0.0460	0.0488	0.0787	0.0903

Variable definitions: see Table 1.

Table 4 Using PAS2 to Test the Few Shares Hypothesis and Good Governance Hypothesis

	Pred.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Constant	?	635.474	620.711	640.769	581.321	626.490	632.555	643.356	713.797	663.179	646.015	652.986	360.714	670.822
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
B_SHARE	–	-2.677	-2.079	-2.641	-2.890	-2.537	-2.671	-2.821	-4.759	-2.558	-2.754	-2.262	-1.398	-3.067
		(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.056)	(0.000)
B_SHARE^2	?		-0.008										-0.017	-0.009
			(0.315)										(0.061)	(0.317)
B_SHARE × BLOCK	–			-0.007									-0.016	-0.011
				(0.416)									(0.085)	(0.220)
B_SHARE × IND_SEAT	?				0.046								0.060	0.054
					(0.000)								(0.000)	(0.000)
B_SHARE × V_CF	+					-0.006							-0.008	-0.004
						(0.237)							(0.156)	(0.456)
B_SHARE × ST_V	+						-0.003						0.018	0.022
							(0.498)						(0.001)	(0.000)
B_SHARE × FAMILY	–							0.201					-0.497	-0.257
								(0.227)					(0.012)	(0.169)
B_SHARE × BRD_SIZE	+								0.197				0.105	0.158
									(0.000)				(0.000)	(0.000)
B_SHARE × DUAL	–									-0.771			-0.454	-0.631
										(0.003)			(0.016)	(0.001)
B_SHARE × INST	–										0.048		-0.018	-0.005
											(0.027)		(0.385)	(0.804)
B_SHARE × MANG	–											-4.614	-4.297	-4.540
												(0.000)	(0.000)	(0.000)
SIZE	–	-15.612	-15.230	-15.849	-12.351	-15.187	-15.306	-16.068	-20.428	-17.260	-16.307	-16.476		-19.187
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)
F-statistics		125.81	84.21	84.09	107.70	84.34	84.02	84.36	104.86	89.84	85.57	103.50	34.77	38.30
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Adj. R^2		0.0445	0.0445	0.0445	0.0564	0.0446	0.0444	0.0446	0.0550	0.0474	0.0452	0.0543	0.0637	0.0771

Variable definitions: see Table 1.

Table 5: Test of Asymmetric Governance Hypothesis

		PAS1			PAS2		
	Pred.	Whole Sample	High-Share Regime	Low-Share Regime	Whole	High Share Regime	Low Share Regime
Constant	?	666.809	840.751	548.865	670.822	794.260	564.178
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
B_SHARE	–	-3.533	-6.257	-4.023	-3.067	-3.316	-2.600
		(0.000)	(0.107)	(0.006)	(0.000)	(0.416)	(0.080)
B_SHARE^2	?	0.0008	0.008	0.012	-0.009	-0.111	-0.007
		(0.933)	(0.939)	(0.400)	(0.317)	(0.291)	(0.639)
B_SHARE×BLOCK (+)	–	0.002	-0.088	0.024	-0.011	-0.062	-0.001
		(0.842)	(0.000)	(0.017)	(0.220)	(0.002)	(0.958)
B_SHARE × IND_SEAT (–)	?	0.085	0.145	0.075	0.054	0.122	0.043
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
B_SHARE × V_CF (–)	+	-0.001	0.067	-0.003	-0.004	-0.002	-0.004
		(0.795)	(0.086)	(0.631)	(0.456)	(0.957)	(0.475)
B_SHARE × SEAT_ V (–)	+	0.023	-0.005	0.027	0.022	0.008	0.023
		(0.000)	(0.690)	(0.000)	(0.000)	(0.590)	(0.000)
B_SHARE × FAMILY (+)	–	-0.529	-0.005	-0.523	-0.257	0.510	-0.334
		(0.007)	(0.992)	(0.012)	(0.169)	(0.351)	(0.114)
B_SHARE × B_SIZE	+	0.116	0.293	0.055	0.158	0.387	0.091
		(0.000)	(0.000)	(0.052)	(0.000)	(0.000)	(0.002)
B_SHARE × DUAL (+)	–	-0.819	-0.546	-0.850	-0.631	-0.526	-0.633
		(0.000)	(0.201)	(0.000)	(0.001)	(0.240)	(0.002)
B_SHARE × INST (+)	–	-0.011	-0.029	-0.008	-0.005	-0.046	0.003
		(0.626)	(0.604)	(0.735)	(0.804)	(0.427)	(0.902)
B_SHARE × MANG (–)	–	-2.646	0.192	-3.126	-4.540	-1.603	-4.952
		(0.000)	(0.913)	(0.000)	(0.000)	(0.382)	(0.000)
SIZE	–	-19.088	-28.554	-10.315	-19.187	-27.218	-11.566
		(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)
F-statistics		45.28	21.300	28.660	38.30	17.270	22.070
		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Adj. R^2		0.0903	0.084	0.110	0.0771	0.069	0.086

Variable definitions: see Table 1.

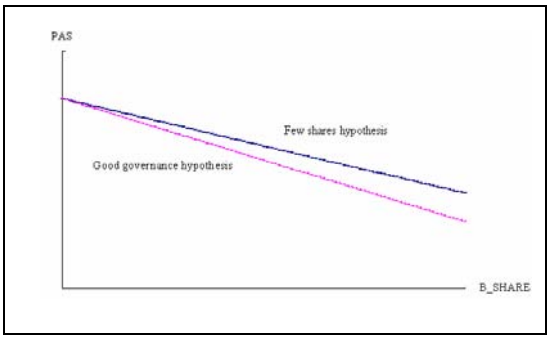

Figure 1: The Few Shares and Good Governance Hypotheses.

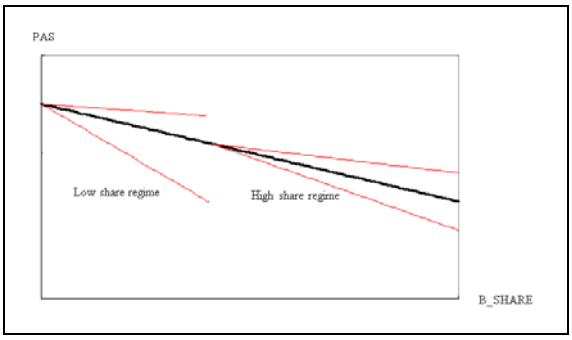

Figure 2: The Asymmetric Governance Hypothesis.

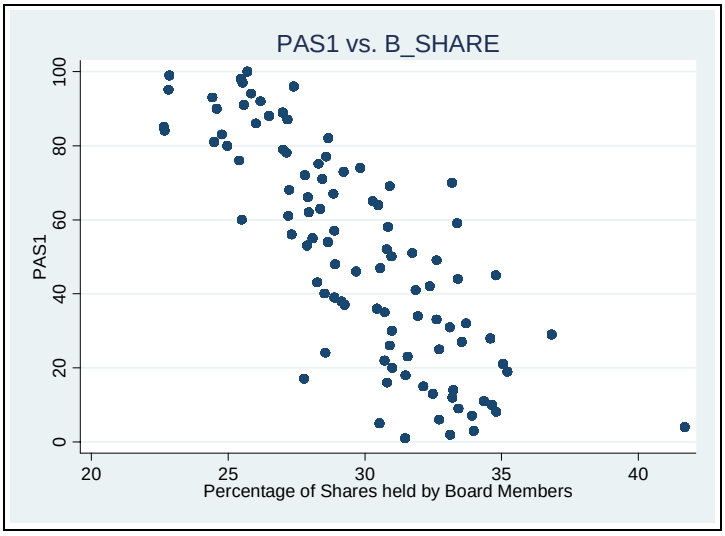

Figure 3: A Scatter Plot of PAS1 and B_SHARE