EXECUTIVE COMPENSATION AT U.S. COMMUNITY BANKS: AN EMPIRICAL STUDY OF THE RELATIONSHIP BETWEEN DIRECT COMPENSATION AND FINANCIAL RETURN

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ABSTRACT

Executive compensation is an important and timely topic, especially in the financial services industry. In this paper we examine the relationship between CEO direct compensation and firm performance at a sample of domestic, publicly-traded community banks. We find that the pay–performance sensitivity of CEO direct compensation at the community banks in our sample is comparable to that of the banking sector as a whole. We also find that CEO direct compensation is most sensitive to changes in total return, positively tied to the generation of fundamental returns, and uncorrelated with the generation of speculative returns.

Key Words: Banking, Executive Compensation, Community Banking, Returns

JEL Code: G21

I. INTRODUCTION

For the first time in U.S. history, a White House appointed pay czar is overseeing compensation at numerous U.S. banks. European banks are facing even stricter government oversight of bank executive compensation. While the controversy surrounding the magnitude of executive compensation in the financial services industry

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is not new, the latest round of scrutiny is much more intense than in the past, and was precipitated by the financial crisis that began in 2008. At a recent panel discussion about the global financial crisis held at Creighton University School of Law, the panelists' comments were summed up as follows:

> There was a surprising degree of agreement on a number of basic issues between "pro-regulation" academics and the "pro-market" business executives. In particular, both groups consistently cited the importance of the structure of financial incentives and the necessity of aligning such incentives with organizational goals as both an important cause of, and potential solution to, the financial crisis [Aronson 2010, p. 275].

These panelists are referring to the classic principal–agent problem. That is, how can we properly incent managers to act in the best interest of the owners of the firm? Or in practical terms, how can the Board of Directors structure executive compensation so that managers are rewarded for maximizing shareholder wealth instead of their own utility? The academic literature on executive compensation is voluminous and focuses much of its attention on the role of corporate governance in dealing with agency problems (for a survey of this literature see John and Senbet (1998)), and the use of stock-based compensation incentives (for surveys of this literature see Lord and Saito (2010); Core, Guay, and Larcker (2003); and Murphy (1999)). The general idea behind stock-based compensation incentives is that if you tie a manager's wealth to stock price maximization (for example, through stock options) their incentives will be aligned with those of the shareholders and they will take actions to maximize shareholder wealth.

Compensation schemes of extraordinary variety and complexity have resulted from this line of reasoning. However, despite their level of sophistication and complexity, these schemes have often led to a great deal of very short-run focused decision-making and outsized risk-taking as evidenced by the recent shocks to the financial system. The need to encourage wealth creation must be balanced against encouraging risk-shifting in an environment where deposits are insured. The correlation between shareholder wealth and executive compensation should be strong enough to promote efficiency, but not so enticing as to encourage excessive risk-taking.

A single, very large financial institution generates more systemic risk than a smaller one. Thus, large institutions have attracted the most attention from academicians and regulators. For example, it was reported that "there is a provision in the Dodd–Frank financial overhaul law that instructs regulators to prohibit any bonus that 'encourages inappropriate risks' at financial firms with more than $1 billion in assets.[3] However, as a group, community banks make up 97% of the banks in the United States (ICBA 2010). So while individual community banks do not generate a great deal of systemic risk, as a group their well-being is critical to the health and well-being of the financial system. Thomas Hoenig (2003), president of the Federal Reserve Bank of Kansas City states that "While community banks pose little systemic risk to the

[3] See "U.S. Mulls New Push to Shape Bank Pay" on the front page of the 12/21/10 edition of *The Wall Street Journal*.

nation's financial system or payments network, they do face firm-level risk that impacts local communities…" He continues: "Community banks are especially important in rural communities, accounting for 58% of all banking offices in rural locations and 49% of all deposits" (Hoenig 2003, p. 6). Farmers, small businesses, and depositors with low to moderate wealth depend heavily on the type of relationship-banking that community banks provide. In addition, community banks also play an important role in the Federal Reserve's three missions—monetary policy, banking supervision and regulation, and the payments system.

This paper helps to fill a gap in the existing literature by focusing solely on the executive compensation practices of community banks. We examine the pay–performance sensitivity of CEO direct compensation at community banks and test the relationship between direct compensation and various measures of financial return. Specifically, we use total, fundamental and speculative returns as variables in our analysis. The motivation for using these three variables and the relationship between them are discussed later.

II. DESCRIPTION OF THE DATA USED FOR THIS STUDY

The data used for this research was obtained from SNL Financial. We collect compensation data for the top executive of community banks listed on NASDAQ with total assets of $5 billion or less over the years 2003–2005 and 2007–2009. We do not use 2006 because SNL does not provide data for that year. In their database description, they state that: "Due to amended SEC reporting requirements for compensation data, SNL has chosen not to display data comparisons between 2006 and prior years." This gives us three samples, one prior to the financial crisis that began in 2008 (years 2003–2005), one that overlapped it (years 2007–2009), and a third that includes all of these years.

While there is no clear definition of a community bank in terms of asset size, typical attributes of a community bank include (1) that "they tend to obtain deposits from local individuals and businesses and lend them out to local borrowers, (2) they specialize in 'relationship banking,' as opposed to 'transactional banking,' and (3) they make most of their money from loans" (Welter, 2010). We chose banks with $5 billion or less in assets because our personal consulting experience with community banks tells us that these banks meet the three criteria listed above. Also, the Independent Community Bankers Association (ICBA) (J. McNair, personal communication, October 3, 2010) states that community banks have assets of $10 billion and less. The fact that the banks in our sample fall well within that benchmark also gives us confidence that they exhibit the attributes listed above.

When collecting data for an individual bank, we select the highest-ranking executive with three years of available compensation data in the 2003–2005 and 2007–2009 periods. Sometimes the executive selected for the first period is different than the executive selected for the next period due to retirements, promotions and other changes in the executive suite. SNL shows data for the chairman, but we only include chairman

data when he/she also fills the CEO's role, in order to focus on executive compensation, not board compensation. Ninety percent of the top executives at the banks in our sample carry CEO as all or part of their title. Thus for descriptive purposes we use "CEO" instead of "top executive" throughout the paper.

Because of the changes to the data reported post-2006, the fields of data collected for the two periods differ somewhat. The primary difference is that for the 2003–2005 period, SNL does not include the cost of option awards in their calculation of total compensation while post-2006 they do (in accordance with FAS 123R). We account for this by reporting results both with and without option awards in the latter period.

Our preliminary sample includes 265 community banks. However, in order to include a bank in our final sample we need fundamental performance data (i.e. earnings per share, dividends per share, beginning and year-end stock prices, and number of shares outstanding) as well as compensation data. Also, all of the banks in the final sample must have fiscal years and calendar years ending on December 31. Therefore, some of the banks included in the preliminary sample cannot be used because of incomplete data or data that would lead to meaningless calculations.[i] The final sample consists of 173 community banks. Summary statistics on compensation and market value for this sample are included in Table 1.

Table 1. Summary Statistics for the Final Sample

Median	2003	2004	2005	2007	2008	2009
Total Comp. ($000s)	$319.9	$345.4	$381.9	$488.9	$478.9	$463.3
Market Value ($millions)	$122.8	$133.7	$140.1	$122.9	$82.4	$76.5

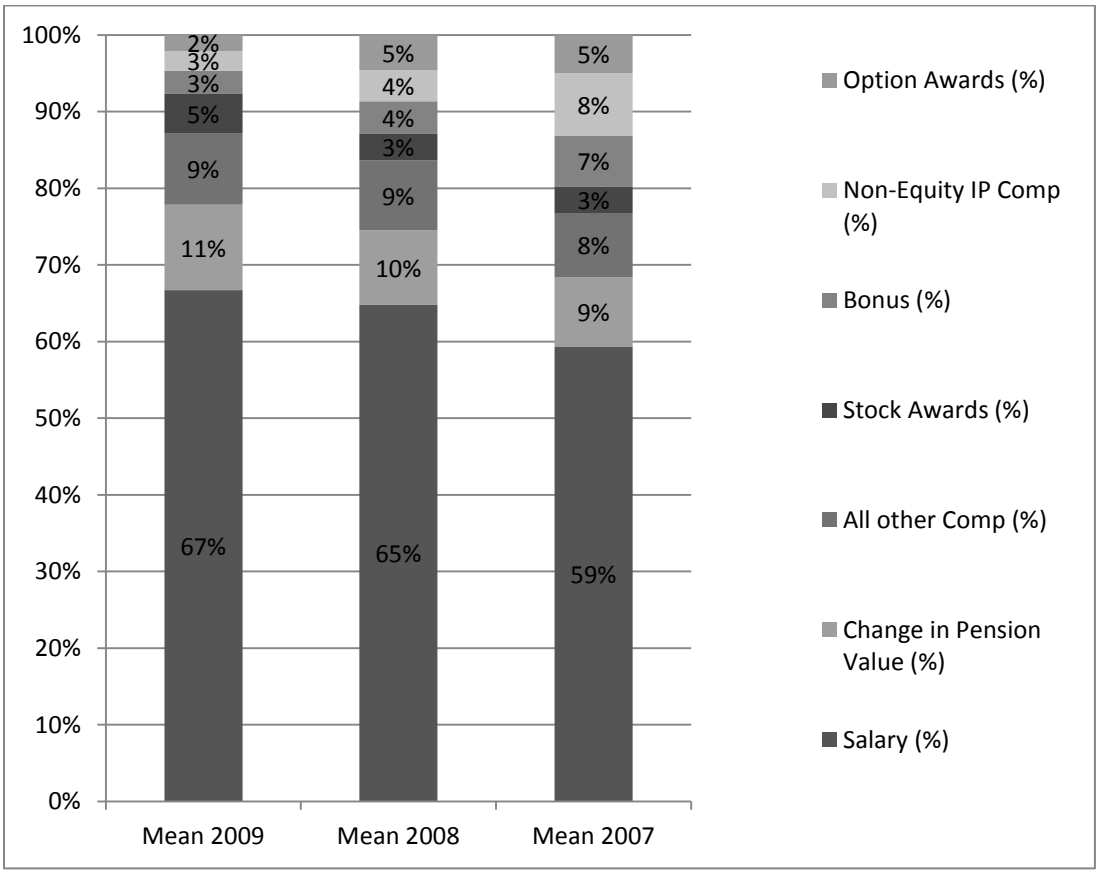
III. PAY–PERFORMANCE SENSITIVITY

Economic theory hypothesizes that when a firm is highly levered (typical of banks) and a CEO's compensation has a high pay–performance sensitivity, this can exacerbate risk-shifting on the behalf of shareholders to the detriment of creditors. Therefore, John and John (1993) argue that in a levered firm, such as a bank, the optimal management compensation scheme should not only align management's incentives with shareholder's interests, but also have low pay–performance sensitivity in order to minimize incentives for risk-shifting. In 2003, John and Qian confirm that pay–performance sensitivity in the highly-levered banking industry is lower than in manufacturing firms where the debt ratio is lower. In this section we measure the pay–performance sensitivity of a sample of community banks.

We use SNL's definition of total compensation as our measure of direct compensation. It is important to point out that SNL's definition includes neither the change in the value of, nor the profits from exercising previously issued stock options. Thus, SNL's definition of total compensation is that remuneration which is under direct control of the board of directors, subject to the executive's employment contract. Of course direct compensation and annual realized wealth are not always equal because executives can affect their realized wealth in a particular year through the timely exercise of previously awarded options. However, that is out of the control of the board of directors. Also, unlike at larger financial institutions, option grants

are a very small part of total compensation for executives at the banks in our sample (see Figure 1). While Lord and Saito (2010) report that option grants represent 20% of total CEO compensation for the financial services sector as a whole (SIC codes 6000-6999) in 2007, the comparable number for the community banks in our sample is only 5%. By 2009, the percentage drops to 2% (figure 1). This decline is consistent with the findings of Lord and Saito (2010) who find that option grants as a percent of CEO total compensation have been declining since the implementation of FASB Statement No. 123R in 2005. Thus, for the banks in our sample, it is likely that SNL's definition of total compensation is not only a measure of direct compensation, but also a reasonable approximation of total annual realized executive wealth. But testing this assertion is beyond the scope of this paper and its validity is not a necessary condition for the conclusions drawn in this paper, which only apply to direct compensation.

Figure 1. Components of Total Compensation by Year (Average)



In order to measure the sensitivity of direct compensation to bank financial performance, we use the model first utilized by Jensen and Murphy (1990):

$$\Delta(CEO\ Direct\ Compensation)_{it} = a + b\Delta(shareholder\ value)_{it} + \epsilon_{it} \qquad (1)$$

The results, reported in Table 2, show that a community bank CEO in our sample receives an average increase in direct compensation of $32,562 (in 2009 dollars) in years in which shareholders earn a zero increase in shareholder value and receives, on average, an additional 37.5 cents for each $1,000 increase in shareholder value. This compares favorably to John and Qian (2003) who, using Standard and Poor's

ExecuComp database and a sample of 120 large and small banks from 1992–2000, report that for every $1,000 increase in shareholder value, CEO direct compensation increases by 40 cents.

In light of the extreme market fluctuations in 2008 and 2009, we test for the impact of outliers on our results by removing observations that fall beyond two standard deviations from the mean in any year. The results (Column 3 of Table 2) are consistent with those of the complete sample and thus we do not believe that outliers are significantly influencing our findings.

Next, we split the sample into pre-financial crisis (2004 & 2005) and financial crisis (2008 & 2009) samples to measure the pay–performance sensitivities in these two sub-periods. The results indicate that pay–performance sensitivity declines from 42.4 cents per $1,000 to 27.6 cents once the financial crisis occurs. This drop in sensitivity is likely the result of employment contracts that were in place prior to the financial crisis. While the median market value of the banks in our sample declined by 32.9% in 2008, CEO direct compensation declined by only 2.1% (Table 1). Similarly, in 2009, median market value dropped by 7.2% while direct compensation declined by only 3.3%. This contrasts to the 2004/2005 period when market values increased and corresponding increases in median CEO compensation closely tracked (2004) and exceeded (2005) the increases in shareholder wealth. This indicates that the pay–performance relationship at community banks is "sticky" in the downward direction.

Table 2. Pay–performance Sensitivity of Community Banks

	Adjusted for Inflation (2009 dollars) excluding option awards			
	All Years	All Years w/o outliers	2004/2005 Only	2008/2009 Only
a	32,562***	23,563***	45,273***	16,998
b (t-stat)	0.000375*** (3.73)	0.000419*** (4.72)	0.000424*** (2.94)	0.000276* (1.87)
R^2	0.020	0.034	0.025	0.010
N (CEO-years)	692	634	346	346

* Significant at the 0.10 level

** Significant at the 0.05 level

*** Significant at the 0.01 level

Finally, to test the pay–performance sensitivity of direct compensation to the inclusion of option awards we perform regression analysis on the 2008/2009 data with and without option awards included. The results indicate that the inclusion of option awards increases pay–performance sensitivity, but only slightly (Table 3). This is what

we expect to find given that option awards represent a small percentage of total direct compensation at the community banks in our sample (Figure 1).

Table 3. Comparison of Pay–Performance Sensitivity with and without Option Awards

Adjusted for Inflation (2009 dollars)		
	2008/2009 Excluding Option Awards	2008/2009 Including Option Awards
a	16,998	6,076
b (t-stat)	0.000276* (1.87)	0.000305** (1.96)
R^2	0.010	0.011
N (CEO-years)	346	346

* Significant at the 0.10 level
** Significant at the 0.05 level
*** Significant at the 0.01 level

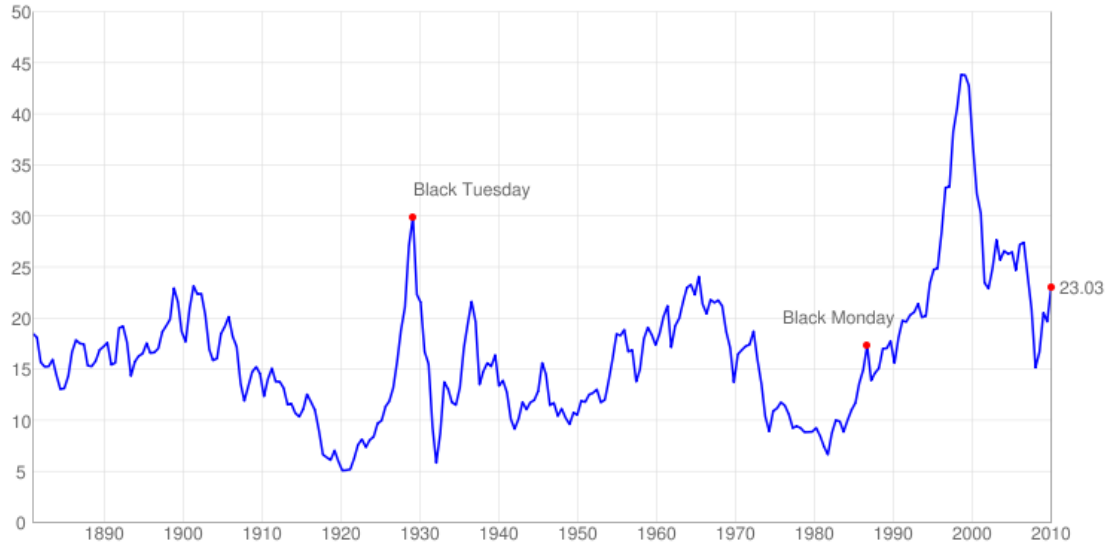
IV. A Closer Look at "Shareholder Value"

Brigham and Ehrhardt (p. 9, 2011) state that "because managers are supposed to be working on behalf of shareholders, they should pursue policies that enhance shareholder value." Another way to phrase this is to say that managers should strive to maximize the total return to shareholders. Ellis (p. 129, 2002) discusses a "clear and straightforward approach" championed by Jack Bogle (founder of The Vanguard Group) for examining stock returns. Total return of a stock is affected by changes to its P/E ratio. This is true for a bank stock or any other stock. However, the fundamental driver of a stock's return is the change in *EPS* and the dividend paid to shareholders. We can credit management for growing *EPS*, but can they also be credited with improving their firm's P/E ratio? The answer is yes and no. If a firm's P/E ratio rises, this could be attributed to improved growth prospects for *EPS* or to a perceived reduction in the risk inherent to the firm's expected cash flows. Both of these factors can be traced back to management decisions, thus it would seem appropriate for them to share in the reward resulting from a higher P/E ratio on the stock.

However, market and sector P/E ratios are anything but static. This is evident from the S&P's P/E ratio shown below in Figure 2. Changes in the market P/E can be attributed to shifts in macroeconomic conditions. For example, if the market anticipates an improving economy, such as at the end of a recession, the market's P/E will likely improve. The saying "a rising tide lifts all ships" could apply to a given firm. In other words, as the outlook for the market improves and the market P/E increases a firm's P/E likely also improves. Thus, when a firm's P/E increases, how does one know whether that is a result of management's actions or an improved market sentiment that is favorably influencing the market's P/E? To the extent that the changing P/E for a

firm is driven by an overall change in the market, a compensation expert might argue that management does not deserve credit or blame. As consideration is given to how best to structure pay packages for bank executives, a paradigm that recognizes the components of total return could be helpful. In the next section, we show how total return can be dissected mathematically into two logical components, based on the Bogle approach.

Figure 2. Historic P/E Ratio for the S&P 500



Source: Robert Shiller, Yale Department of Economics

V. Total Return, Fundamental Return, and Speculative Return

On a per share basis, the maximization of shareholder wealth is equivalent to the maximization of total return. The total return (TR_t) for a share of stock in period t is given by equation (2):

$$TR_t = \frac{(P_t - P_{t-1}) + DIV_t}{P_{t-1}} \qquad (2)$$

where P_{t-1} and P_t are the stock's price at the end of period t–1 and t, and DIV_t is the dividend paid in period t. In order to align executive and shareholder interests, it follows that executive compensation should be linked to the total return of the firm's stock. If we follow Jack Bogle's terminology, the investment return or total return is split into its "fundamental" and "speculative" return components. The potential to decouple total return into these two components becomes apparent when equation (2) is rewritten using earnings per share (EPS) and the price/earnings multiple (P/E):

$$TR_t = \frac{\left(EPS_t \times (\frac{P}{E})_t - EPS_{t-1} \times (\frac{P}{E})_{t-1}\right) + DIV_t}{EPS_{t-1} \times (\frac{P}{E})_{t-1}} \qquad (2.a)$$

where $(P/E)_{t-1}$ and $(P/E)_t$ are the stock's price-to-earnings ratio at the end of period t–1 and t. Generally, we can say that there are a fundamental return component and a speculative return component in equation (2.a), but there is also an interaction aspect between the two return components. The fundamental return is based on a firm's growth in *EPS* and the dividends for period t and is given by equation (3):

$$FR_t = \frac{EPS_t - EPS_{t-1}}{EPS_{t-1}} + \frac{DIV_t}{P_{t-1}} \quad (3)$$

where EPS_{t-1} and EPS_t are the firm's *EPS* at the end of period t–1 and t, and DIV_t is the dividend paid in period t. Likewise, the speculative return is based on the change in a firm's P/E ratio during period t and is given by equation (4):

$$SR_t = \frac{(\frac{P}{E})_t - (\frac{P}{E})_{t-1}}{(\frac{P}{E})_{t-1}} \quad (4)$$

Notice that if $(P/E)_{t-1} = (P/E)_t$, meaning that the firm's P/E ratio doesn't change across periods, then equation (2.a) reduces to equation (3). Thus, if there is no speculative return, the total return is equal to the fundamental return. Likewise, if $EPS_{t-1} = EPS_t$ and the firm doesn't pay a dividend (i.e., $DIV_t = 0$), then equation (2.a) reduces to equation (4). Thus, if there is no fundamental return, the total return is equal to the speculative return.

For simplicity sake, it would be convenient to say that $TR = FR + SR$, but the terms are not additive. Likewise, it would be logical to think that fundamental and speculative returns are multiplicative and could be written as: $TR = (1 + FR) \times (1 + SR)$. But this formula does not provide the same total return as (2). Total return is comprised of fundamental return, speculative return and an interaction between the two return components that is not simple to isolate in mathematical terms. In this paper we investigate the correlation between the percentage change in community bank executive compensation and the three return components discussed above. Specifically, we want to see if changes to direct compensation are more closely related to total return or fundamental return. If the changes are more closely aligned with total return, this suggests that community bank executive compensation is more influenced by the total return realized by a shareholder, consistent with alignment of the executive's raises to maximization of shareholder wealth. On the other hand, if compensation changes are more closely aligned with fundamental return, this would support the conclusion that directors are rewarding executives based on earnings growth and dividends, aspects of financial management that the executives can directly influence through their decision-making. For thoroughness sake, we also examine the correlation to pure speculative returns. We hope to see little relation between compensation increases and speculative returns, as a strong correlation would suggest that directors are rewarding executives based on volatility in P/E ratios, which are partly driven by exogenous market forces.

Recently, Walker (2007) wrote a white paper about how the concept of fundamental versus speculative return could be applied to executive compensation at community banks. Although he only examined one bank (Chittenden Corporation), the paper sparked enough interest among community bank board members to warrant further inquiry regarding the relevancy of such a compensation scheme. However,

before discussing to what extent to compensate CEOs based on fundamental return, we need to know to what extent boards are already doing this. This helps to fill an important gap in the literature which focuses primarily on large banks and or a mix of large and small banks. It also sets the stage for further research into what changes should be made to existing compensation arrangements with the goal of reducing principal–agent conflicts at community banks.

VI. Results and Discussion

In this section, we report the sensitivity of changes in CEO direct compensation to changes in total shareholder return (*TR*), fundamental return (*FR*), and speculative return (*SR*). First, we model the relationship between compensation and total return as follows:

$$\%\Delta(CEO\ Direct\ Compensation)_{it} = a + b(TR_{it}) + \epsilon_{it} \qquad (5)$$

where TR_{it} = total return for the i^{th} bank for period t (equation 2)

Table 4. Sensitivity of Direct Compensation to Total Return

All Observations					
	2004/2005	2008/2009		All Years	
	Excluding Options	Excluding Options	Including Options	Excluding Options	Including Options
a	12.597***	7.590***	6.250***	11.003***	10.304***
b (t-stat)	0.242*** (2.82)	0.125** (2.30)	0.137** (2.52)	0.202*** (4.93)	0.221*** (5.38)
R^2	0.023	0.0152	0.018	0.034	0.040
N (CEO-years)	346	346	346	692	692
Without Outliers					
a	8.828***	3.519***	3.184**	6.721***	6.467***
b (t-stat)	0.157*** (2.62)	0.106*** (2.62)	0.126*** (2.95)	0.067*** (5.80)	0.187*** (6.21)
R^2	0.021	0.021	0.027	0.050	0.057
N (CEO-years)	321	317	316	638	637

* Significant at the 0.10 level

** Significant at the 0.05 level

*** Significant at the 0.01 level

The results (Table 4) indicate that a CEO receives an average increase in direct compensation of 10.3% in years in which shareholders receive a zero total return and receives, on average, an additional 0.221% for each 1% in total return. The low R-squared indicates that there are other variables (such as years of experience in banking) that materially affect the change in direct compensation. Note, however, that in this paper we are not trying to provide a complete model of executive pay but, rather, measure the relative sensitivity of direct compensation to financial return. These results indicate that there is a statistically significant, positive relationship between direct compensation and total return. This is consistent with the intent of aligning executive compensation with shareholder wealth maximization.

Next, we split the sample into pre-financial crisis (2004 & 2005) and financial crisis (2008 & 2009) sub-samples. The results for both sub-periods are consistent with the full sample in that the coefficients are positive, statistically significant, and hover around the 0.20% for each 1% in total return range. However, it is interesting to note that both the estimated pay increase in the absence of return and the sensitivity to changes in return declined from the pre–financial crisis to the during–financial crisis periods. Once again, since banks, on average, were generating strong positive total returns in 2004/2005 (mean = 9.6%, median = 5.4%) and large negative returns in 2008/2009 (mean = -18.6%, median = -20.0%), this result indicates that the pay–performance relationship at community banks is sticky in the downward direction. In other words, pay reductions during bad times were smaller in magnitude than pay increases during good times.

Finally, because two of the years studied (2008/2009) were during the financial crisis, we check for the influence of outliers across the entire time period studied. After removing outliers beyond two standard deviations from the mean and re-running all regressions, the coefficients are still positive and statistically significant. We therefore conclude that direct compensation is strongly linked to total return even when there is great upheaval in the markets and the banking sector.

Next, we examine to what extent community bank CEOs were being rewarded for producing fundamental returns. To do this we once again use ordinary least squares:

$$\%\Delta(CEO\ Direct\ Compensation)_{it} = a + b(FR_{it}) + \epsilon_{it} \qquad (6)$$

where FR_{it} = fundamental return for the i^{th} bank for period t (equation 3)

We find that a CEO receives an average pay increase of 9.87% in years in which shareholders receive a zero fundamental return and receives, on average, an additional 0.008% for each 1% in fundamental return. However, when we split the sample into pre–financial crisis (2004 & 2005) and financial crisis (2008 & 2009) sub-samples, we find that there is a loss of statistical significance for the pre-crisis period. The during-crisis period (2008/2009) is still statistically significant but less so than for the sample as a whole.

Table 5. Sensitivity of Direct Compensation to Fundamental Return

All Observations					
	2004/2005	2008/2009		All Years	
	Excluding Options	Excluding Options	Including Options	Excluding Options	Including Options
a	13.867***	6.028***	4.571***	10.584***	9.870***
b (t-stat)	0.040 (1.54)	0.005* (1.69)	0.006* (1.94)	0.007*** (2.59)	0.008*** (2.94)
R^2	0.007	0.008	0.011	0.010	0.012
N (CEO-years)	346	346	346	692	692
Without Outliers					
a	9.188***	2.083*	2.030	6.588***	6.410***
b (t-stat)	0.040*** (2.73)	0.002 (0.266)	0.011 (1.11)	0.025*** (3.50)	0.031*** (4.26)
R^2	0.022	0.000	0.004	0.019	0.027
N (CEO-years)	333	317	316	651	649

* Significant at the 0.10 level
** Significant at the 0.05 level
*** Significant at the 0.01 level

Once again we test if outliers are influencing the results by removing outliers beyond two standard deviations across the entire time period studied. For the sample containing all years, the sensitivity increases and is still statistically significant at the 1% level. This is consistent with the results unadjusted for outliers. However, in the sub periods, we find the opposite result from the unadjusted periods. That is, the 2008/2009 period is not significant but the 2004/2005 period is. This indicates that during the crisis there was no statistically significant link between direct compensation and fundamental return, but that the two were linked in the pre-crisis period. Because of these mixed results, we caution against putting too much emphasis on these sub-period results. It appears that outliers are able to exert a greater influence when the smaller sample sizes are used to analyze fundamental returns. This will be a fertile area for future research as more post-crisis data becomes available.

Finally, we measure to what extent community bank CEOs are being rewarded for speculative returns:

$$\%\Delta(CEO\ Direct\ Compensation)_{it} = a + b \times (SR_{it}) + \epsilon_{it} \quad (7)$$

where SR_{it} = speculative return for the i^{th} bank for period t (equation 4)

Table 6. Sensitivity of Direct Compensation to Speculative Return

All Observations					
	2004/2005	2008/2009		All Years	
	Excluding Options	Excluding Options	Including Options	Excluding Options	Including Options
a	15.000***	5.272***	3.705**	10.009***	9.315***
b (t-stat)	0.013 (0.199)	0.000 (–0.026)	0.000 (–0.034)	0.000 (0.000)	0.000 (–0.005)
R^2	0.000	0.000	0.000	0.000	0.000
N (CEO-years)	346	346	346	692	692
Without Outliers					
a	9.651***	1.730	0.987	6.001***	5.660***
b (t-stat)	–0.093** (–2.13)	–0.012* (–1.73)	–0.005 (–0.76)	–0.016** (–2.46)	–0.010 (–1.51)
R^2	0.014	0.009	0.002	0.009	0.003
N (CEO-years)	333	327	326	660	659

* Significant at the 0.10 level

** Significant at the 0.05 level

*** Significant at the 0.01 level

Across all years, we find no statistically significant link between direct compensation and speculative return. Splitting the sample into sub periods we find similar results. With outliers removed there are several instances where the coefficients are statistically significant. However, the negative sign on the coefficient suggests that the %Δ(*CEO Direct Compensation*) is inversely related to *SR* which is counterintuitive. So once again we caution against putting too much emphasis on the sub-period results and suggest additional research as more post-crisis data becomes available. However, all of the results consistently support the finding that direct compensation of CEOs at community banks are not rewarded for generating speculative returns.

VII. CONCLUSION

We find that the pay–performance sensitivity of direct compensation at community banks is comparable to that of the banking sector as a whole. Direct

compensation at community banks is most sensitive to changes in total return. This is consistent with the idea that managers should be compensated in a manner that is consistent with shareholder wealth maximization. Direct compensation is positively tied to the generation of fundamental returns, but the strength of the relationship is weaker than the one between total return and direct compensation. Finally, we find that community bank CEOs are not rewarded, through direct compensation, for generating speculative returns. However, they may be able to profit from the generation of speculative returns through the timely exercising of previously awarded stock options. We do not examine that aspect of CEO wealth enrichment in this paper, but this is an area where additional research is needed.

Of the three measures of return examined, direct compensation is most highly correlated with total return. However, the correlation ($\rho = 0.18$) between the two is weak. Therefore, while we find a statistically significant relationship, we have to question its economic significance. That is, it is likely that direct compensation alone is not sufficiently correlated with total return to align the incentives of executives with those of the stockholders. However, the need to encourage wealth creation must be balanced against encouraging risk-shifting in an environment where deposits are insured. The correlation between shareholder wealth and executive compensation should be strong enough to promote efficiency, but not so enticing as to encourage excessive risk-taking.

These findings have important implications for the debate on how to "fix" executive compensation in the financial services industry. First, there is a statistically significant relationship between changes in direct executive compensation and changes in total shareholder wealth at community banks. Finance theory suggests that this is a positive practice. Second, changes in direct compensation are not primarily driven by the speculative vagaries of the financial markets. This too reflects positively on the pay practices of community banks, at least when it comes to direct compensation.

There is a need for further research to see if the ability of community bank CEOs and executives to increase their wealth via the timely exercise of previously granted stock options can subvert the positive incentives that seem to be inherent in direct compensation. This is likely the case at some individual banks, but on the whole, it is likely a far bigger problem for large banks than it is for smaller community banks because of the modest use of stock options at community banks.

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APPENDIX A: SNL Definitions of Total Compensation

For the 2003–2005 period, SNL includes the following in its definition of total compensation (descriptions are provided by SNL Financial and all data are in units of dollars):

1. Base salary—as defined by SEC regulations and as reported in the company's filings. This includes both the cash and equity received as part of an individual's base salary.
2. Annual bonus—as defined by SEC regulations and as reported in the company's filings.
3. Total annual compensation—cash-equivalent compensation paid to the executive, comprising base salary, bonus, and other annual compensation. The base salary is annualized if the data is provided for less than one year's work.

4. Long-term compensation—annual cash, stock, or performance unit awards paid or credited to the executive during the fiscal year in accordance with multi-year performance goals. Includes restricted stock awards, long-term incentive plan awards (whether paid in cash or stock, but not stock options), and other long-term compensation.
5. Total compensation—the sum of annual and long-term compensation, which does not include the value of stock option awards.

For the 2007–2009 period SNL includes the following in its definition of total compensation (descriptions are provided by SNL Financial and all data are in units of dollars):

1. Salary—identical to the "base salary" definition provided for the 2003–2005 period.
2. Bonus—identical to the "annual bonus" definition provided for the 2003–2005 period.
3. Stock awards—cost recognized for financial reporting purposes of all stock-related awards that derive their value from the company's equity securities or permit settlement by issuance of the company's equity securities. Examples include restricted stock, restricted stock units, phantom stock, phantom stock units, and common stock equivalent units. This represents the amount recognized during the fiscal year in accordance with FAS 123R.
4. Option awards—cost recognized for financial reporting purposes of all options, warrants, SARs, and similar equity-based compensation instruments that have option-like features. This compensation cost is recognized during the fiscal year in accordance with FAS 123R.
5. Non-equity IP compensation—amount earned pursuant to non-equity incentive plans. Compensation awarded under an incentive plan should be disclosed in the year when the relevant specified performance criteria under the plain are satisfied and the compensation earned, regardless of whether or not payment is actually made to the named executive officer in that year.
6. Change in pension value—the aggregate increase in actuarial value to the named executive officer of all defined benefit and actuarial plans (including supplemental plans) accrued during the year and earnings on nonqualified deferred compensation.
7. All other compensation—other annual compensation as defined by SEC regulations and as reported in the company's filings. Includes any compensation earned but deferred at the officer's election.
8. Total compensation—total compensation, as reported from the company's Summary Compensation table. Total compensation includes an annualized base salary for officers hired during the most recent fiscal year.

[i] For example, some of the banks had incomplete pricing data, because their stock was not listed on NASDAQ for the entire period under examination. Other institutions were discarded from the dataset because their EPS went from negative to positive across two years. We used "percentage change in EPS" in the calculation of fundamental returns, and if EPS goes from negative to positive year-over-year, this gives a meaningless value for percentage change.