

# An Empirical Assessment Of The Determinants Of Bank Branch Manager Compensation

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## Abstract

*A model of branch-management compensation based on human capital and performance measures is tested using data on managers from eighty-two branches of a large, Eastern United States bank. Human capital factors such as managerial rank, gender, years of schooling, experience in the industry, and age are found to explain branch manager pay levels, after controlling for competition, and branch size.*

## Introduction

Increased competition in the financial services industry has inspired industry leaders to adopt a renewed interest in achieving high levels of customer service to achieve strategic distinction in their markets. This, in turn, has prompted banks to embed total quality management principles in their management practices (Bottorff, 1995). In jumping on the quality bandwagon, a myriad of branch-level training and structural issues come into focus, e.g., The educational needs of tellers and sales personnel, office layout and design, alternative service hours, and installation of alternative delivery systems, e.g., ATMs (Dullnig, 1995; Hochstein, 1996). Since responsibility for the implementation of these initiatives falls squarely on branch managers' shoulders, the design of compensation and reward systems for bank branch managers has become a critical factor in achieving these new strategic goals.

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*Readers with comments or questions are encouraged to contact the authors via e-mail.*

Though much attention has been paid to the compensation of higher level executives such as CEO compensation in the popular and business press (Crawford, Ezzell, and Miles, 1995; Hubbard and Palia; Kenny and Tripp, 1995), mid-level management compensation has not been adequately addressed. The passing of the strategic management baton to lower levels of management calls us to action, in assuring that we continue to motivate and monitor branch managers. Compensation systems must consider the needs and motivation of middle-level managers who are charged with achieving performance objectives, if they are to continue to be effective instruments of strategic change.

Agency theory may be especially useful in exploring the motivation of bank managers in the face of increased competition (Cates, 1994; Dullnig, 1995; Webster, 1995). One prominent stream of the broad literature (e.g., Jensen & Murphy, 1990), focuses on size and performance as key determinants of compensation levels. This focus is congruent with the creation of pay-for-

performance programs, which link compensation to performance in an effort to protect and promote the interest of the firms' stockholders (Holmstrom, 1979; Crawford, Ezzell and Miles, 1995).

Drawing on agency theory, Webster (1995) examines and documents the link between managers' pay and their performance. While the Webster study is especially useful given the paucity of data on divisional manager performance evaluation (Keating, 1995), it is subject to two major limitations. First, because it intermingles data on managers and lower-level employees, findings do not establish a clear link between branch manager pay and branch performance. And second, although the study controls for size effects, it ignores another potentially important set of determinants of compensation level viz. personal attributes of the branch managers themselves.

The purpose of this paper is to extend previous findings regarding the influence of size and performance on manager compensation levels. While we acknowledge the need to retest and control for the impact of key size variables, we hope to add to the expanding literature on mid-level managers by incorporating the personal attributes of the managers themselves. We test hypotheses developed using a 1994 sample of 118 managers from 82 branch offices of a large U.S. bank located in the Eastern United States. We find that middle managers in the banking environment are compensated for their human capital. Interestingly, we also find that the effects of human capital to exceed those of firm performance in predicting managers' base level compensation.

### **Literature Review and Theory Development**

#### *Firm Size and compensation*

Firm size and performance have been widely studied as determinants of compensation. Prior findings inform the approach we take in

studying mid-level managers. First, consider the impact of size. Until recently, bank compensation policy tended to focus almost exclusively on size. In his study of bank branch managers, Webster (1995) reports that senior employees are consistently compensated for growth in sales or the number of employees. Size was measured using a variety of metrics, e.g., number of employees, growth in sales, or total branch assets. With this early systematic approach to compensation, higher level employees who worked for large banks routinely earned substantially more than their counterparts at smaller institutions. And, managers' total compensation had little if anything to do with measurable aspects of their performance. Pay policy offered virtually no flexibility, was highly structured, and was erratic across and between levels of the organization; some branch managers earned many times more than the lowest level employee and others incrementally less.

Whereas many firms are moving away from these less flexible systems of compensation, paying executives on the basis of size can be said to have some justification, since larger organizations and branches are more complex and thus require more effort and responsibility on the part of their top executives. Larger organizations may also have a greater ability to compensate executives and provide higher compensation at higher levels to maintain adequate pay differentials between the hierarchical levels of leaders (O'Reilly, Main and Crystal, 1988). Thus, based on these structural arguments, we frame the following hypothesis.

**H1:** Bank branch manager compensation will be positively related to branch size. The larger the branch size, the larger will be managers' compensation.

#### *Firm Performance and compensation*

While size continues to be an important determinant of compensation level, we also recognize the impact of other environmental factors

that drive compensation. U.S. banks face a very different competitive climate today than did their predecessors of a decade ago. Smaller banks have been bought out by larger, resource-rich institutions, and non-bank competition, e.g., credit unions and investment houses, offer consumers substitute services that beckon customers and households away from traditional financial service suppliers (Bottorff, 1995).

The increased intensity of competition in the banking and financial services industry has led to a growing interest in the use of compensation contracts that explicitly reward performance (Dullnig, 1995; Cates, 1995). Such contracts are often presumed to be superior motivators of executives and other employees, and are consistent with expectancy theory (see, for example, Harder, 1992) and with agency theory (e.g., Holmstrom, 1979; Jensen and Meckling, 1976).

Expectancy theory (e.g., Lawler, 1981) predicts that agents can be motivated to achieve desired outcomes through the design of attractive, or valent, performance rewards. Thus, minimum performance targets are often included in top executive long-term incentive plans, to prompt superior performance. Agency theory argues that compensation policy must include an element of motivation that encourages them NOT to follow courses of action that are in their own best interests, but, rather, are in the best interest of the firm. In the basic agency framework, a principal (i.e., owner of the enterprise) hires an agent to provide effort and decision-making. The agent's actions and private information are incompletely observable by the principal. Since the agent's motives (such as effort- and risk-aversion) may differ from the principal's motives, agency theorists formulate optimal contracts that link the agent's compensation to various performance outcomes. Such contracts seek to redirect the agent's goals, so that the agent furnishes effort and makes decisions in ways that benefit the principal (Eaton and Rosen, 1983). There is growing evidence that pay-for-performance has become the norm in establish-

ing CEO compensation policy (Crawford, Ezzell, and Miles, 1995; Hubbard and Palia; Kenny and Tripp, 1995), and that the influence of pay-for-performance policies is now extending down to lower-level bank managers and employees (Webster, 1995).

Bottorff (1995) argues that banks have to respond to increased competition by rewarding not only performance (as derived from outcome measures and metrics) but also *efficiency*. He further argues that by rewarding bank employees for finding more efficient ways to process work, rather than measuring output, banks might generate a structural solution to the banking industry's productivity challenges. Thus, he supports the use of alternative measures of bank manager effectiveness and performance in developing compensation policy, measures such as efficiency ratings.

We follow the above traditions of linking performance and efficiency measures with compensation in formulating the following hypothesis for middle-level bank branch managers.

**H2:** Bank branch manager compensation will be positively related to branch performance and efficiency. The higher the branch performance, the higher will be managers' compensation.

#### *Human capital and compensation*

Firms may reasonably be expected to compensate executives for their inputs and skills as well as the more traditional output measures such as performance (Harris and Helfat, 1995). Economists consider that "human capital" variables such as education, work experience, and age justify a pay premium. Individuals who have made personal investments in job-relevant skills and experience are more able and influential (Becker, 1964; Hogan and McPheters, 1980; Mincer and Ofek, 1982; O'Reilly, Main and Crystal, 1988).

Santerre and Thomas (1993) determined that the compensation levels of hospital CEOs are attributable not only to size and location, but also to human characteristics such as gender, education, and experience. Another recent paper suggests that real estate executives should be compensated so that their judgements and other subjective qualities are recognized, since these characteristics predict success in the majority of a real estate managers' tasks and challenges (Ferguson, 1993).

Wage theory offers yet another perspective, with two wage theories being particularly relevant. While most studies that examine executive compensation follow what is referred to as the marginal productivity approach to wage determination, both the *screening hypothesis* (Arrow, 1973; Stiglitz, 1975; Taubman, 1977) and the *job competition hypothesis* (Thurow, 1975) offer promise for gaining additional insights into the effects of personal attributes on compensation levels.

The marginal productivity approach to wage determination suggests that executives' marginal productivity to the firms' performance be the central determinant of compensation policy. Using this approach, senior management would closely monitor the performance levels of bank branch managers to determine which managers are adding the most value to the organization's bottom line profitability. Performance would be tracked using conventional measures that capture profit contributions to the branch. For example, the net number of deposit accounts opened in the branch per year (i.e., the number opened minus the number closed), and the number of households served (households are groups of customers who live at the same address, and represent a measure of the branch's appeal to the surrounding community) would each indicate branch, and therefore branch manager, performance.

The marginal productivity hypothesis is useful to the development of compensation strat-

egy. Each of the first two hypotheses stated here fall within the domain of the argument that managers should be paid according to their marginal contributions; H1 examines the branch managers' compensation as a function of size, and H2 ties branch manager compensation to both performance and efficiency. We argue here, however, that performance should not be the only determinant of branch manager compensation. In this context, manager attributes become an important determinant of appropriate compensation policy.

Both the screening hypothesis and the job competition hypothesis suggest that other executive characteristics and attributes are important to consider in drafting compensation policy decisions. The screening hypothesis suggests that information about executive performance is imperfect, and that personal characteristics such as the number of years as CEO (an experience metric) are important indicators of qualities that are conducive to successful performance. Thus, a compensation board is likely to view years of tenure as CEO into account when making CEO compensation decisions. Similarly, the job competition hypothesis favors heavy investment in employee training, due to the impact that training has on executives' future performance levels. Thus, training is said to be a good indicator of future performance.

Thus, branch managers with more experience (a function of age, tenure with the firm and tenure as branch manager) should command higher salaries, as should managers with superior educational backgrounds, since they have the potential to be more effective. When managers are hired, it is often their potential that commands the wage, since a large proportion of job changes are made for career advancement, and thus do not permit a direct transfer of skills and abilities. This intuition has received some broad empirical support with regard to the compensation arrangements for corporate CEOs in general (but not for lower-level bank executives), although findings are still mixed and tentative

(e.g., Deckop, 1988; Hill and Phan, 1991; Kostiuk, 1990; Winkler and Duncan, 1991; Monti-Belkaoui and Riahi-Belkaoui, 1993; Harris and Helfat, 1995). Based on the preceding discussion, we frame the following hypothesis:

**H3:** Bank branch manager performance will be positively related to managers' age, education level, tenure with the organization, and experience in the industry. The more extensive the human capital, the higher will be manager compensation.

## Methods

### *Sample and Procedures*

The hypotheses presented are addressed via a combination of field survey research and archival data collection techniques, in a cross-sectional research design. The research site was a large savings and loan institution located in the Eastern United States. This bank is widely known for its aggressive management, and its asset strength in the markets in which it operates. Branch managers are given a significant amount of latitude in the management of their 82 retail offices.

Human capital data on age, experience, gender and education was collected from managers via administration of a field survey. All branch employees were surveyed, however, for the purpose of this study, we focus on responses from branch leaders only. The final sample employed here included 118 branch and assistant branch managers from each of the 82 branch offices. This represented an overall response rate of 67%; a total of 177 managers were issued surveys, and a total of 118 usable surveys were returned. Missing data further reduces the usable sample size for empirical modeling.

In this retail banking network, branch managers and assistant managers each enjoy a unique set of responsibilities. The branch manager is responsible for the overall market devel-

opment and profitability of the branch; activities such as calling on prospective customers are typical in the realm of their responsibilities and task accomplishments. Assistant managers, on the other hand, have responsibility for the operational, front-line aspects of the branch. Each level of management is important to the overall functioning of the branch, and its resultant profitability, and each contributes unique tasks, skills, and abilities. We controlled for leaders' managerial level by incorporating a dummy variable in our regression analyses called Managerial Rank (= 1 if a branch manager; 0 otherwise). This rank was obtained from bank archives.

Manager's age, and years of schooling are expressed in years. Experience in industry is expressed in months. Gender is also coded (1 = if female, 0 if male). All remaining measures were obtained from bank archives and information systems.

The dependent variable in each of the models tested was manager's compensation. Compensation data was provided by the bank from archival records, and is reported in terms of hourly wages paid. Reflecting bank policy, wages paid for managers in one very large metropolitan area were reduced by a metric of 10% to permit equal comparison of salaries across all other branch areas; managers in this area receive a compensation premium intended to cover highly elevated living expenses.

The manager compensation variable captures the manager's hourly wage, which is not fixed, but is based on an overall subjective appraisal of the manager's performance. Prior to the time of this study, traditional metrics of a branch manager's performance, used to establish hourly wages, were factors such as the total asset base of the branch, loan sale activity, new account growth, number of closed accounts, successful cross-selling of products within households served, etc. These measures reflected the branch manager's overall ability to manage the branch and its surrounding market area, as

judged by bank administrators. Commission income, based on mortgage, securities, and/or insurance product sales were not included in the computation of managers' base wage levels, as not all managers are involved in these additional activities.

Thus, the compensation variable may be considered a base salary only in the sense that it represents an administrators' judgement that branch managers are meeting expectations across a full array of activities and responsibilities that are common to each office in the branch network. At the time of this study, performance measurements such as ROA per branch, and market area data, e.g., intensity of competition, and branch efficiency, were just beginning to be made available to bank administrators, due to recent system innovations and newly acquired data. Our study provided a unique opportunity to test the validity of these new performance measures in distinguishing among compensation levels, and to weigh them against the relative effects of human capital measures such as job tenure, gender, and age.

Branch size was via the number of persons employed at each branch location, and thus reflects managers' spans of control, strength of resource base, and managerial burden.

A number of newly-acquired performance-related variables were obtained from the bank that permitted us to tease out the impact of human capital factors above and beyond size effects. We used multiple measures since there is ongoing debate with respect to how best to measure bank branch performance (e.g., Keating, 1995; Webster, 1995).

Market share for 1994 is computed by the bank as:  $\text{Market share} = \text{Year-End branch deposits} / \text{Market size in dollars}$ .

A ranking of 1994 efficiency is computed and reported by the bank that ranges from (1-5), with lower ranks representing the most

cost inefficient, and higher ranks the least inefficient -- or most efficient branch locations -- in terms of expenses incurred. The Efficiency rank is based on the following equation and account data:  $[\text{Direct Expenses in basis points}^1 + (\text{Deposit Mix (\%)} / 2)]$ .

Direct expenses, expressed in basis points, are computed as:  $(10 * \text{Branch Direct Expenses}) / \text{Year - End deposits}$ .

Deposit Mix (%) is computed as:  $(\%) \text{ NOW accounts} + (\%) \text{ Passbook Savings (Day to Day accounts)} + (\%) \text{ Money Market Accounts}$ .

ROA for 1994 is also expressed in basis points, and is computed by the bank as:  $(\text{Current Marginal Contribution} * 10) / \text{Year End Deposits}$ .

The extent of competition is computed by the bank, and measured using a ranking method that ranges from (1-5), with a rank of (5) representing a higher level of competition. It is computed as:  $\text{Market size} + \text{Number of competitors} + [(3 * \text{average branch size}) / 5]$ .

### *Models and Results*

The means, standard deviations and correlations for all variables are described in Table 1 on page 61.

The research models tested using ordinary least squares (OLS) regression are provided below. The OLS regression results for all models are presented in Table 2. Overall, the full regression model explains 77% of the variation in the levels of branch manager compensation, and the reduced model only 6%.

The first model is based on the full theoretical model, which includes both the size and firm performance variables, and those used to capture leaders' human capital, i.e., age, education, and experience in the industry. Model one may be compared with the reduced model, which appears as Model 2, below.

**Table 1**  
Descriptive Statistics and Correlations (N = 103)

Variable	Mean	S.Dev.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
1. Manager's Compensation (Expressed as hourly wage)	14.39	6.59	1									
2. Age	41.26	8.09	.079	1								
3. Gender (1 = Female)	.7	.46	-.069	-.107	1							
4. Years of Schooling	14.07	1.87	.004	-.065	-.301	1						
5. Experience in Industry (In months)	106.1	101.5	.357	.291	-.100	-.038	1					
6. Managerial Rank (1 = Branch Manager)	.61	.49	.202	.189	-.210	.171	.207	1				
7. Number of Employees	9.24	3.05	-.064	.103	-.061	.017	.079	-.029	1			
8. Efficiency Ranking	3.06	.84	.065	.100	.126	.062	.190	-.020	.210	1		
9. Market Share	.13	.15	-.085	.015	.094	-.191	.037	-.067	.021	.018	1	
10. ROA	39.92	39.6	-.086	.174	.009	-.106	.007	-.118	.210	.457	.225	1
11. Competition Ranking	3.64	4.62	-.038	-.074	-.058	-.133	.072	-.024	.124	.234	.030	.070

<i>Significance Levels:</i>
<i>Correlations &gt; .16 indicate p &lt; .10 or better</i>
<i>Correlations &gt; .24 indicate p &lt; .01 or better</i>
<i>Correlations &gt; .30 indicate p &lt; .001 or better</i>

**Model 1:** The full model of all human capital variables and performance measures.

*Branch manager compensation = f (Number of employees (+); Branch expense efficiency (+); Branch ROA (+); Branch market share (+); Age (+); Education level (+); Experience in industry (+); Gender (1 for males) (+); Manager level (+); Extent of competition that branch faces (+))*

**Model 2:** This reduced model omits all the human capital variables included in Models 1 -3:

*Branch manager compensation = f (Number of employees (+); Branch expense efficiency (+); Branch ROA (+); Branch market share (+); Manager level (+); Extent of competition that branch faces (+))*

Based on findings from model 1, results for the effects of size (H1) and performance (H2) variables are mixed. We find the hypothesized positive impact for the number of employees. And, only branch efficiency (as based on expenses), and not branch ROA or market share is positively related to branch manager pay. According to interpretation of regression coefficients for the effects of managerial rank, Branch managers are paid more than their assistant branch managers, as would be expected. The extent of competition that the branch faces has no influence on the managers' compensation levels. As predicted, model 1 results indicate that the human capital variables are related to branch manager compensation, each is significant at the .05 level of alpha or better, using a two-way interpretation, per our directional hypotheses.

Table 2: Results of Multiple Regression Analyses

Variable	Model 1 (Full Model)	Model 2 (Reduced Model)
Number of Branch Employees	.070*	-.13
	(.042)	(.206)
	.087 (.049)	-.06 (.26)
Extent of Competition Ranking	-.029	-.067
	(.036)	(.135)
	-.044 (.210)	-.048 (.309)
Market Share	.146	-2.43
	(1.00)	(4.24)
	.008 (.442)	-.055 (.285)
ROA	-.003	-.013
	(.004)	(.018)
	-.058 (.176)	-.081 (.225)
Efficiency Ranking	.356*	1.214
	(.193)	(.845)
	.116 (.034)	.152 (.077)
Managerial Rank (1 = Manager)	3.63***	2.438*
	(.279)	(1.247)
	.715 (.000)	.182 (.026)
Experience in Industry	.003*	
	(.001)	
	.114 (.022)	
Gender (1 = Female)	-.653*	
	(.291)	
	-.125 (.014)	
Years of Schooling	.125*	
	(.075)	
	.095 (.049)	
Age	.046**	
	(.017)	
	.152 (.005)	
Constant	6.576	11.43
	(1.38)	(2.97)
	(.0000)	(.000)
R <sup>2</sup>	.77	.06
N	101	

Cells contain regression coefficients, standard errors, standardized beta coefficients, and one-way significance of t-statistics. Significance: \*  $p < .05$  or better; \*\*  $p < .01$  or better; \*\*\*  $p < .001$  or better

Model 2 explains only approximately 5 % of the variation in branch manager compensation levels (in contrast to the 77% explanatory power of Models 1). The only variable shown to be significant in this model is Managerial Rank, the position indicator that distinguishes between branch and assistant branch managers. An incremental F-test verifies that human capital variables do have a very significant impact on the model's explanatory power (at  $p < .001$ ). That is, the addition of the human capital variables substantially increase the model's explanatory power, above and beyond what we know from size and performance variables alone.

**Discussion**

We find that, after controlling for the managers' position and the extent of competition that their branches face, only a small part of the variation in bank manager base compensation is explained by measures of branch size and performance. By themselves, these results might suggest that bank managers are being "overpaid" based on a salary entitlement mentality (Bradke, Lehnen and Bruno, 1995), at the stockholders' expense. However, when we test the impact of managers' personal attributes (i.e., experience in industry, education, age, and gender) we find that this greatly increases the percentage of variation in compensation that is explained. Thus, on balance, we conclude that bank compensation policy-setters (whether at the corporate or regional level) appear to be doing a good job at safeguarding stockholders' interest by ensuring that branch managers are paid according to their *total* value to the firm.

This finding is especially significant given the increasingly vocal populist revolt against perceived executive overpayment in an era of corporate and divisional downsizing. What these results suggest is that middle-level managers, like CEOs, earn wages that are consonant with the combination of the bundle



of human capital attributes that they bring to their positions and their measurable performance outcomes. Thus, in our results, human capital and performance variables combine to determine wages at the branch manager level.

Our findings are significant for several reasons. First, following Webster (1995), we add to the literature on the impact of size and performance/efficiency on branch manager compensation; size and performance variables are found to determine compensation in our models. Whereas Webster argues that size is no longer a useful determinant of compensation level, we argue and find that size, as measured by the number of employees per branch, remains a useful determinant of compensation. And, whereas Webster focused on traditional accounting measures (ROA, ROE) related to branch performance, we provide insight into the impact of branches' overall cost efficiency on compensation. Focus on divisional, or branch-based performance metrics such as cost efficiency have been said to more closely capture the value of the manager to the firm (Keating, 1995), and are therefore argued to be preferable metrics. In these findings we find evidence that managers are paid more when they are more cost efficient. Thus, these findings support Bottorff's (1995) argument regarding the importance of rewarding efficiency in addition to rewarding on the basis of raw performance measures.

We also improve on Webster's findings by limiting our sample only to branch managers<sup>2</sup>. The sample improvements we make to the Webster research design permit another useful inference regarding the effectiveness of organizations as a whole. Keating (1995) points out that the branch/divisional performance-compensation linkage is especially significant because branch and divisional performance measures are less "noisy" indicators of top executives' effectiveness than the corresponding metrics for CEO and firm performance, because they are less subject to influences outside the executives' control.

Our results regarding the positive impact of managers' human capital on his/her compensation are especially noteworthy. As our results demonstrate, these human capital variables explained a large amount of the variation in compensation. Consistent with economic reasoning, and the wage theoretical perspectives noted in the job competition and screening hypotheses, firms pay employees for their skills and experience, in order to retain their services in competitive labor markets. The high explanatory power of our models is also reassuring, in that it suggests that these branch managers are not being overpaid relative to what they bring to the table. This finding may be useful in defusing negative sentiment associated with presumed "overpayment" of wages during times of downsizing, and high institutional default rates in the financial services industry.

Our comprehensive models, tested via OLS methods, are also useful in at least two other respects. First, their comprehensiveness avoids a problem that likely plagues other models that rely only on one or two determinants of compensation (e.g., on size and performance). These less comprehensive models may be underspecified due to omission of theoretically-meaningful variables such as the human capital set we include here; the end result in such cases can be the biasing of regression coefficients<sup>3</sup>. Our model minimizes such bias. Second, the comprehensive model we based our tests on permits comparison of the *relative* impact of each of the variables. Examining the standardized beta coefficients in the OLS regression models, we find that managerial rank (i.e., managers' status as either branch manager or assistant branch manager) has the largest impact on compensation, followed by age, branch expense efficiency, experience working in the industry, the number of employees working at the branch, and the branch manager's education level. This mix represents an interesting combination of performance and human capital effects.

## Conclusions

What can practicing compensation and human resource managers and compensation consultants learn from our findings? The mixed influence of performance on branch manager pay is somewhat surprising, given the current attention that pay-for-performance models enjoy in the compensation literature and in the popular press. Our findings suggest that banks may need to make more headway toward strengthening the pay-performance linkage in order to provide stronger incentives to branch managers who are on the "front-line." Since competition was found not to influence compensation, we may be prompted to more carefully consider this relationship. Perhaps managers who are best equipped at handling competition do so via their human capital base, a factor that this research suggests *is* being adequately compensated.

Our results point out the importance of branch manager characteristics and outcome measures such as branch size and financial performance in explaining variation in bank branch manager pay. Pay levels in place prior to our study were determined by an overall appraisal of managers' performance, based on performance metrics such as account growth, number of closed accounts, cross-selling of products, etc., etc. Salary levels based on administrators' judgement were not expected to run counter to the new performance measures employed in this study, i.e., return on assets, and efficiency, in light of the intensity of competition faced by the branch, and strength in the market as indicated by market share. Instead, the new measures were expected to bring a finer grained analysis to the compensation policies of the firm. In short, it was expected that the new measures would allow the bank to more carefully capture the effects of high performing managers' distinctive behaviors and decision making. Contrary to their expectations, our study serves to document the value of the original judgmental heuristics administrators used to set manager compensation

levels. These heuristics may well be more reasonable predictors of branch efficiency.

It is heartening to see that branch managers appear to be fairly compensated for the human capital that they have invested in over the years by virtue of their education and experiential choices. How long do these human capital investments and compensation policies continue to pay off in terms of future performance? Do they hold persist at lower levels of the organization, for employees such as bank tellers, and clerical assistants? We look forward to conducting future research that extends our findings into these new contexts.


## Limitations And A Research Agenda

Our research might profitably be extended in several ways. First, it bears replication in more organizations and across geographic regions. Our cross-sectional design could be supplemented by more powerful longitudinal designs that would also permit us to address the issue of whether current compensation levels determine *future* performance levels. Using this approach, there is, for example, some initial evidence that pay-for-performance incentives have boosted performance at large firms such as Levi Strauss (Meltzer, 1994).

Alternatively, future research could focus on whether the relationship between size, performance, human capital and compensation varies across more - and less - regulated time periods. Other areas of interest include the impact of risk as a determinant of branch manager compensation levels, the impact of the perceived relationship between compensation, performance and human capital on employee perceptions of equity and fairness (Harder, 1992), and the extent to which our findings hold at other organizational levels -- for CEOs as well as bank managers (Britt, 1995).

We are confident that the profile of branch manager compensation in retail banking

environments is more detailed as result of this study, and that these findings seem to confirm a complement of the wage theoretical approaches. Our results indicate that size, human capital, and cost efficiency factors are important to setting compensation, while competitive factors such as market share and competitive intensity are less important.

What we do not know, however, is the extent to which the unique structural context of the retail banking environment contributes to these findings. For example, given the self-contained nature of each branch setting, it may be necessary for human capital to be drawn on in especially large doses. The somewhat entrepreneurial character of the branch manager's job may necessitate his or her frequent reliance on the human capital resource pool, whereas other less entrepreneurial contexts may make this relationship less crucial. In order to generalize from our findings, replication in other industries will be pursued. 

**Endnotes**

1. A basis point is 1/100 of a percent. It is the basic unit of measure in establishing interest rates in retail banking.
2. Webster's study focused on the salary levels of all branch level employees. Results were aggregated for the entire branch, thus biasing the estimators.
3. Consider, for example, the case where larger branches hire more experienced branch managers by paying them a premium. A model that only included branch size would have an "unfairly large" size coefficient if it omitted the manager's experience since the size variable's large impact would be partly due to the omitted experience variable.

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