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# TURNOVER IN THE TOP MANAGEMENT COHORT AND FINANCIAL PERFORMANCE

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*Roy A. Cook*  
Fort Lewis College  
Durango, Colorado

*Daniel S. Cochran*  
*Gareth Stephen Taylor*  
Mississippi State University  
Starksville, Mississippi

## Introduction

The subject of turnover in organizations has always captured the attention of both practitioners and academicians. Stories of management upheaval and change abound as organizations downsize and restructure to meet the challenges of a globally competitive environment. Corporate giants such as Sears, Tenneco, Chrysler, General Motors, and Wang have made dramatic management changes. Research on this subject has ranged from the frequently suggested approach of comparing an organization's turnover with some type of industry standard ([14], [23]) to analyses of specifically targeted positions and occupational groupings ([8], [32]).

Published investigations of the relationship between turnover and organizational performance have typically focused on the movement of individuals into and out of the top positions within an organization or on the outcomes of movement by more than one individual into or out of an organization. However, with few exceptions, the relationship between top management turnover and organizational performance has received scant attention. Specifically, literature on managerial succession has proven to be inconclusive in regard to subsequent organizational performance [3].

Consequently, the nature of the managerial turnover-organizational performance relationship has not been fully specified. For example, is there a relationship between managerial turnover and organizational performance? If so, are there relevant points at which varying levels of turnover either enhance or retard the overall financial performance of an organization? If there is a significant relationship between varying levels of turnover in the top management cohort and long-term organizational financial performance, then it would seem reasonable to use organizational resources in an attempt to influence the level of turnover within this group.

## Theoretical Background

The need for a team or cohort of individuals rather than one person to accomplish top management tasks of an organization was well-documented almost twenty years ago [9]. Speculation as to the relationship between managerial succession and subsequent organizational performance can be traced to Barnard [1] who hypothesized that a change in the top management team would result in organizational chaos. Staw

[31] also observed that the loss of large numbers of key employees may be detrimental to the organization because of the general disruption that may occur. However, the significance of this disruption will depend on the specialized knowledge of the position holder and/or the interdependence of established work roles between key group members.

Researchers, noting that strategic decision makers ultimately determine organizational success or failure, have begun the task of focusing attention on the significance of top management turnover and chief executive officer succession ([2], [22], [20], [35]). However, the empirical investigations into this subject have been limited and inconclusive. The primary focus appears to have been on single top management positions rather than multiple positions in the top management cohort. "Some evidence suggests that succession creates an organizational crisis and thus negatively affects organizational performance. Other evidence suggests that succession enhances performance. And finally, a third body of evidence suggests that succession and performance are unrelated" ([3], p. 93). The scarcity of research into the specific question of turnover in the top management cohort can be seen by reviewing the findings of the key studies on this subject presented in Table 1. Some of the contradictory findings of the early studies may be traced to small sample sizes. Later studies, however, began to point to the possibility of a relationship between top management turnover and organizational performance.

As researchers examined the potential impacts of employee turnover on organizations, it was observed that some level of exchange of human resources between the organization and the environment is required for the organization to remain viable [21]. This would preclude the possibility of maintaining a long-term rate of zero turnover. However, it should also be noted that turnover in top management positions could result in disruption of reporting relationships due to changes in cohort membership. Hopefully, the results of the present research will provide insights for strategic decision makers as they face key human resource issues.

Based on the findings of previous research and professional opinions from members of the banking community ([11], [13], [29], [30]), the following independent variables were included in our analyses: Percentage of Agricultural and Commercial Loans in Loan Portfolio; Percentage of Real Estate Loans in Loan Portfolio; Percentage of Individual Loans in Loan Portfolio; Income Production; Net Loan Charge Offs to Average Loans; Loan to Deposit Ratio; Total Overhead Expense to Average Earning Assets; Effective Tax Rate; and Equity Multiplier (see the Appendix for a definition of each variable.). By examining the joint effects of turnover and previously identified variables related to the overall financial performance of banks, a more complete picture of the significance of turnover in the top management cohort can be identified. Therefore, we tested the following hypothesis:

Turnover in the top management cohort is related to organizational financial performance in the presence of other theoretically specified independent variables.

**Table 1: Turnover and Top Management Organizational Performance**

Investigator	Organizations	Time Frame	Statistical Technique	Succession Variable(s)	Performance Variable(s)	Major Findings
Trow (1961)	108 small manufacturing companies	Varies by company	Cross tabulations; tests of significance	Annual rate of succession of managers	Changes in profitability	Organizations that plan for succession show profitability
Grusky (1961)	Business corporations	1949-1959	Chi square	Changes in top management	Size; amt. of bureaucracy	Frequency of succession positively related to size
Brown (1982)	26 NFL Teams	1970-1978	Regression	Changes of head coach, chief operational manager, assistant coaches, players	Percentage of games won in regular season of a given year	No relationship between succession and performance
Wagner, Pfeffer, & O'Reilly (1984)	31 Fortune 500 companies	1976-1980	Multiple regression	Proportion of turnover in the top mgt. group	Return on investment	Proportion of turnover in top mgt. group inversely related to financial performance & positively related to coefficient of variation of distance between managers
Reinganum (1985)	353 New York & American Stock Exchanges traded companies	1978-1979	Event study	Change in chairman and/or president	Abnormal stock mkt performance	Succession effects dependent on size of firm, origin of successor, and disposition of predecessor
Goodstein & Boeker (1991)	327 California hospitals	1980-1986	Pooled time series; cross-sectional structure using lagged indep. variable structure	CEO & Board composition changes	Number of product and/or service additions or deletions	Changes in hospital ownership & mgt. significant catalysts to service changes

Adapted from Glenn R. Carroll, (1984), "Dynamics of Publisher Succession in Newspaper Organizations," *Administrative Science Quarterly*, 39:96.

### **Research Design**

In order to gain a better understanding of the potential relationship between varying levels of top management turnover and financial performance, we analyzed data from all regulated banks in the state of Nebraska over a seven-year time span. This period provided an interesting strategic window for analysis since the banking industry was experiencing a great deal of turbulence and change due to the impact of regulatory changes initiated by the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA). DIDMCA brought comparability to the banking industry as Federal Reserve requirements were extended to institutions which had previously avoided this control. In addition to providing a large relatively homogeneous group of organizations for our research, the possibility of industry effects was controlled by using a single industry.

Since researchers have failed to reach a consensus on a universal measure of organizational financial performance, we identified two measures of performance commonly monitored in the banking industry: Return on Average Assets and Return on Average Equity ([10], [13], [28], [30]). Return on Average Assets captures the response of an organization's financial performance relative to managerial policies, while Return on Average Equity captures the concept of investor wealth maximization.

### **Sample and Data**

In order to control for differences in the external environment, the banks selected for this study were all domiciled in the state of Nebraska. The banking industry in Nebraska provided a large number of observations (391) as well as a relatively homogeneous group due to state-mandated legislative restrictions on interstate and branch banking. Information about managerial turnover was taken from a listing of bank officers reported in the Nebraska Edition of the American Bank Directory. Financial performance data are based on Uniform Bank Performance Reports submitted to the Federal Deposit Insurance Corporation and published annually in Sheshunoff Banks of Nebraska ([24], [25], [26], [27], [28], [29]).

The time frame selected for analysis begins after the passage and phase-in of the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA). As previously noted, DIDMCA brought comparability in financial reporting standards to the banking industry. Top management turnover in this environment was measured over a two-year time frame which is in keeping with previous turnover research in top management conducted by Helmich and Brown [17] and Wagner, et al. [33].

No attempt has been made to separate voluntary and involuntary turnover for purposes of analysis because it is virtually impossible to obtain accurate information as to the voluntary/involuntary status of separations in the top management hierarchical level ([18], [19]). In fact, individuals leaving the upper echelons of organizations are often described as "pursuing other opportunities" which makes it difficult to determine the actual nature of departures.

Since the present research required identifying turnover among persons who are in positions that can have an impact on long-run organization financial performance, it was necessary to limit the number of positions to those who participate in top management decisions. An earlier survey of banks operating in the State of Nebraska identified the following positions as part of the top management cohort: Chairman of the Board, President, Chairman of the Executive Committee, Executive Vice President, Senior Vice President, Vice President, Cashier, and Treasurer [7]. Total turnover in this group was defined by the percentage of individuals who were no longer in the top management cohort over a two-year period between the spring of 1980 following the passage of DIDMCA and the spring of 1982.

### **Statistical Analyses**

The recorded data were analyzed using the stepwise procedure for multiple linear regression in order to identify representative models applicable for each dependent variable and year being studied. The relationship between turnover in the top management cohort and organizational financial performance was analyzed by lagging financial performance for one-, two-, three-, four-, and five-year periods. This procedure is in keeping with the previously reported research where lagged time periods were used for analyzing organizational performance ([22], [34], [35]).

In addition to using the stepwise multiple regression procedure for analysis, the correlations among the independent variables in each of the samples were screened for the presence of multicollinearity. Although the potential problem of multicollinearity was recognized, it was not considered to be a significant problem since previously tested performance models were being utilized. However, reported unadjusted  $R^2$  and adjusted  $R^2$  statistics were compared to check for any unusually large differences between these statistics which might indicate a potential problem with multicollinearity. Additionally, analyses were performed using a Chow test [5] to determine whether the specified models could be universally applied to those banks experiencing some turnover as well as those experiencing no turnover in the top management cohort.

### **Results**

An abridged presentation of the results highlighting the turnover variable and adjusted  $R^2$  of each separate regression equation for the Return on Average Assets and Return on Average Equity Models is shown in Table 2.

Our analyses of the data indicated that there were no statistically significant relationships evident between turnover in the top management cohort and the organizational financial performance measures of return on average assets or equity in the presence of the other theoretically specified variables for any of the years investigated. In addition, an examination of the correlation matrices for all variables by year in both models indicated that turnover was significantly correlated with return on average assets only in 1983 (-.002,  $p < .05$ ) and 1987 (-.106,  $p < .05$ ). However, there appears to

Table 2: Partial Summary of Regression Statistics

## Return on Assets Model

Year	Turnover Variable			Adjusted R <sup>2</sup>
	B	t	p value	
1983	-.037	-1.053	.293	.544*
1984	-.032	-1.234	.218	.744*
1985	.037	1.353	.177	.728*
1986	.031	1.155	.249	.716*
1987	.017	.506	.613	.602*

## Return on Equity Model

Year	Turnover Variable			Adjusted R <sup>2</sup>
	B	t	p value	
1983	0.000	-.218	.828	.550***
1984	0.000	-.120	.904	.728*
1985	.045	1.664	.097	.725*
1986	-.027	.992	.322	.724*
1987	.023	.616	.539	.511*

\*p&lt;.05

\*\*p&lt;.01

\*\*\*p&lt;.001

be little practical significance to observed correlations of this magnitude. More importantly, turnover was not correlated with return on average equity in any of the years studied.

Therefore, the *a priori* null hypothesis that turnover in the top management cohort is not related to return on average assets in the presence of other theoretically specified independent variables cannot be rejected. However, there were variables significantly related to the financial performance measures selected for this study. The variables found to be significantly related to return on average assets and equity were net loan charge offs, income production, loans-to-deposits, overhead, real estate loan mix, loans to individuals, and the equity multiplier. Although the relationships between the independent variables identified as being statistically significant in the specified models were not of specific interest to this research, they are similar to previous research findings investigating variables within managerial control that contribute to bank performance ([13], [4]).

Comparison of those banks experiencing some turnover in the top management cohort (146) and no turnover in the top management cohort (245) were conducted using the Chow test [5]. The results from these tests for the return on average assets and equity models are presented in Tables 3 and 4 respectively.

**Table 3: Chow Test**  
 Comparisons of Banks Exhibiting Some Turnover with Those Exhibiting  
 No Turnover in the Top Management Cohort

**Return on Assets Model**

Year	N	N <sub>1</sub>	N <sub>2</sub>	SSE <sub>N</sub>	SSE <sub>N1</sub>	SSE <sub>N2</sub>	F	F(k, N-2k)
1983	389	243	143	121.89912	86.44974	28.96013	4.2621*	2.21
1984	388	242	146	167.11605	116.90118	46.70638	1.6212	2.21
1985	387	242	145	169.70026	116.25415	50.34694	1.4026	2.21
1986	391	245	146	239.67803	168.16200	68.56420	.9502	2.21
1987	375	234	141	94.65772	60.46571	32.40972	1.4009	2.21

N = All Banks

N<sub>1</sub> = Turnover = 0

N<sub>2</sub> = Turnover > 0

p<.05

**Table 4: Chow Test**  
 Comparisons of Banks Exhibiting Some Turnover with Those Exhibiting No  
 Turnover in the Top Management Cohort

**Return on Equity Model**

Year	N	N <sub>1</sub>	N <sub>2</sub>	SSE <sub>N</sub>	SSE <sub>N1</sub>	SSE <sub>N2</sub>	F	F(k, N-2k)
1983	384	239	145	9956.59524	5782.24242	3515.16104	4.39584*	2.10
1984	377	236	141	11822.88687	7266.05243	3965.80560	3.20115*	2.10
1985	377	236	141	12630.04959	8928.26000	3086.42309	3.11578*	2.10
1986	378	235	143	19434.64098	11648.98351	7169.25776	1.99808	2.10
1987	370	230	140	12620.95809	6340.90090	5346.76392	4.76456*	2.10

N = All Banks

N<sub>1</sub> = Turnover = 0

N<sub>2</sub> = Turnover > 0

p<.05

In order to perform these tests, a standard model was specified based on the variables that consistently entered the stepwise regression procedure with significant coefficients, and then an hierarchical regression procedure [6] was utilized to analyze each subgroup by year to insure comparability. This procedure is designed to test statistically whether the relationships between the coefficients of the dependent performance variables and the coefficients of the independent variables differ significantly between the subgroups.

### **Discussion**

The absence of empirical evidence confirming the significance of the relationship between top management turnover and subsequent organizational financial performance should concern academicians and practitioners alike. Although the Chow tests indicated turnover was not significant in either of the specified models, the mixed results obtained from these comparisons may have been influenced by the possibility of ritual scapegoating ([12], [15]) or pruning of management deadwood [34] as a result of unacceptable organizational performance. Moreover, banking regulations requiring bank officers to have significant experience may lead to homogeneity within the top management ranks [16].

These findings may prove to be important for several reasons. First, this research adds to the developing body of knowledge about the relationship between turnover and organizational performance which has proven to be inconclusive or contradictory. Second, there is no evidence in this research to indicate that banks experiencing some turnover in the top management cohort will have significantly different financial performance than those banks which experience no turnover in the top management cohort. Third, our findings point out potential flaws in singularly focusing attention and resources on attempting to control the turnover process within the top management group. Fourth, it points to the need for a better understanding of the environmental influences beyond the control of strategic decision makers that may constrain organizational performance and the possible need to focus attention on specific performance criteria within their control.

Fifth, since it has been assumed that it takes time for changes to occur in organizational performance after strategic decisions have been made, the use of a longitudinal design with time lags has important implications. The absence of a significant relationship between turnover and financial performance during the research time frame proved to be revealing since it appeared that financial performance was not materially effected by turnover in the top management cohort. However, the absence of any relationship is significant since it may call into question focusing time and attention on identifying responsible levels of turnover or a specific "equilibrium" point of acceptable turnover for the top management cohort. Although these ideas may be found to be true in other industries or within groups at lower hierarchical levels of an organization, they were not present in the current findings.

The future holds the promise of increasing our understanding of the potential impact of turnover within identified organizational hierarchies or groups. However,

in order to make generalizable statements, additional research is needed. By expanding the present research within industries to include large groupings of comparably sized organizations operating within similar economic constraints as well as undertaking more complex, across industry studies, it should be possible to make more generalizable statements as to potential relationships.

It would also seem reasonable to investigate similar relationships in succeeding lower hierarchical levels within the organization since individuals at these lower levels engage in strategy implementation [36]. Individuals at these lower levels engage in multiple decisions which, cumulatively, may have a significant affect on organizational performance and, therefore, could be fertile ground for further research and managerial attention. Insights into the cohort turnover/performance relationship could prove to be helpful for strategic decision makers in today's highly competitive environment as they face difficult decisions relating to downsizing, restructuring, consensus building, and work team composition and stability.

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**Appendix: Definitions of Independent Variables****Percentage of Agricultural and Commercial Loans in Loan Portfolio:**

The percentage of agricultural and commercial loans to total domestic loans

**Percentage of Real Estate Loans in Loan Portfolio:**

The percentage of real estate loans to total domestic loans

**Percentage of Individual Loans in Loan Portfolio:**

The percentage of individual loans to total domestic loans

**Income Production:**

Combination of interest income (tax adjusted) and total non-interest income as a percentage of average assets

**Net Loan Charge Offs to Average Loans:**

Net loans actually written off as losses, recognizing recoveries from previously written off loans, as a percentage of the average loan portfolio

**Loan to Deposit Ratio:**

The percentage of total loans to total deposits after reduction for all governmental deposits

**Total Overhead Expense to Average Earning Assets:**

The aggregate of salaries and benefits, occupancy expense, and other operating expenses to average earning assets

**Effective Tax Rate:**

Calculation of taxes paid as a percentage of income before extraordinary items for each year

**Equity Multiplier:**

Leverage component—calculated by dividing average annual assets by average annual equity