Changes in Interstate Banking Laws: The Impact on Shareholder Wealth
Author(s): Harold A. Black, M. Andrew Fields, Robert L. Schweitzer
Source: *The Journal of Finance*, Vol. 45, No. 5 (Dec., 1990), pp. 1663-1671
Published by: Blackwell Publishing for the American Finance Association
Stable URL: http://www.jstor.org/stable/2328757
Accessed: 26/11/2009 07:22

THE JOURNAL OF FINANCE • VOL. XLV, NO. 5 • DECEMBER 1990

Changes in Interstate Banking Laws: The Impact on Shareholder Wealth

HAROLD A. BLACK, M. ANDREW FIELDS, and ROBERT L. SCHWEITZER*

ABSTRACT

This study examines the impact on shareholder wealth of changes in interstate banking laws. The research demonstrates that changes in state statutes which allow interstate banking have a positive impact on the stock prices of regional banking organizations and a negative impact on the stock prices of money center banks. Interstate banking statutes initially exclude those states in which the money center banks are headquartered. The findings provide evidence that, by excluding money center banks from expansion across state lines, the competition from the regional banks may have an adverse competitive effect on the money center banks.

FROM JUNE 1982 TO SEPTEMBER 1986, 44 states and the District of Columbia passed some form of interstate banking legislation. This study measures the impact of these legislative changes on the wealth of bank shareholders. When legislation is enacted, each state's banks are given the opportunity to engage in interstate merger activity. The market's perception of the impact on the affected banks should be reflected in the equity returns of shareholders. The results show that, while there are no announcement effects for the entire sample, there are significant effects among a subsample of the data set. Money center banks experience negative returns throughout the sample period, whereas regional banking organizations experience positive abnormal returns.

Section I reviews the literature. Section II describes the data used in this study and defines the event. The methodological issues are addressed in Section III. The empirical results are in Section IV. The conclusions are in Section V.

I. Related Literature

The banking literature shows conflicting evidence on the effect of interstate acquisitions on shareholder wealth. Trifts and Scanlon (1986) use a sample of interstate mergers during the acquisition announcement period to show that the shareholders of acquired banks earn large statistically significant abnormal returns. They also find that shareholders of acquiring banks earn insignificant

* University of Tennessee, Knoxville, University of Delaware, and University of Delaware, respectively. Funding for this research was made available by the University of Delaware Center for Financial Institutions Research and Education. Helpful comments by James W. Wansley, David C. Ketcham, René M. Stulz, and a referee for this Journal are gratefully acknowledged.

abnormal returns. Cornett and De (1988) find significantly positive stock price reactions to announcements for both the bidding and target banks. However, Born, Eisenbeis, and Harris (1988) find no evidence that shareholder values are affected by bank announcements of intent to engage in interstate expansion.

The banking literature recognizes that the liberalization of banking restrictions has led to increased diversification. Previous studies have documented the effect of changes in the banking structure on specific banks. Eisenbeis, Harris, and Lakonishok (1984) measure the benefit to the shareholders of one bank holding companies (OBHCs) from product diversification. They report that the announcement of the formation of OBHCs prior to legislative restrictions that were imposed in 1970 is associated with positive abnormal returns. Announcements to form OBHCs after regulatory restrictions imposed in 1970 are not associated with significant positive abnormal returns. They also note that the abnormal returns are concentrated in the few weeks around the announcement dates, while no abnormal returns are found around the actual formation date. Lee and Schweitzer (1989), studying the relaxation of regulatory restrictions in Delaware, report that there are positive abnormal returns associated with the announcement of the formation of a banking subsidiary in that state by money center banks. These returns are found around the announcement date and quickly dissipate.

As to the probable effects of the new interstate banking laws, there should be a difference in the ability of banks to avail themselves of the legislation. There is an important regulatory constraint that limits the interstate expansion of money center banks. Harding (1988) points out that interstate banking legislation was written to initially exclude those states in which the money center banks are located. Later, when nationwide banking is permitted by state statute, Harding notes that the money center banks will be at a competitive disadvantage in terms of acquiring sizable market shares because the superregionals should have already acquired the most attractive midsized banks. In addition to the regulatory constraint, Trigaux (1988) notes that, during this period of legislative liberalization, the ten banking companies with the highest capital ratios are superregional organizations. He states that, as a result, these banks would be in a more advantageous position than money center banks to take advantage of the opportunity to expand across state lines.

There are also behavioral differences between the two types of organizations. Collins, Blackwell, and Sinkey (1989) find that money center BHCs primarily seek expansion through new product lines such as insurance, real estate and investment banking. On the other hand, regional BHCs seek greater growth opportunities in traditional commercial banking areas through interstate banking.

Little work has focused on investor perceptions concerning the impact of changes in the banking structure on the industry in general. As James (1984) concludes, the removal of restrictions may well result in substantial efficiency gains as inefficient firms become potential acquisition targets. Thus, it can be argued that the removal of barriers should stimulate interstate acquisition activity. This study seeks to capture investor perceptions of these gains at the time that the legislation reducing restrictions is enacted.

II. The Data

The data set consists of those banking organizations listed on the New York and American Stock Exchanges with returns available on the Center for Research in Security Prices (CRSP) Daily Returns File. States with changes in interstate banking legislation are identified from Amel and Keane (1985) and from King, Tschinkel, and Whitehead (1989). States that had at least one bank with data available from the CRSP file are included in the sample. The result is a sample of 51 banks from 17 states. The banks are among the largest in the country and, utilizing the classification provided by Trigaux (1988), are designated as either superregional or money center banks. There are 38 superregional banks from 15 states and 13 money center banks from four states. These banks can now either acquire other banks across state lines or be acquired by out-of-state banking organizations. Harding (1988) analyzes the strategies for acquisition given state laws.

In this paper, the event date is defined as the date when press coverage indicates that the governor signed the bill or that the state legislature passed the bill and the governor was expected to sign the bill. Thus, there is one event per state, and all banks in the sample that are chartered in that state will have the same event date. These events are partially anticipated as the bill(s) is (are) introduced, debated, and passed. Each state is unique, and the critical step for passage will differ. In one state it may be uncertain that the governor will sign the legislation. In other states the recommendation of the legislative committee may signal passage. Therefore, the effect of the legislation on stock prices might be captured in the period leading to the passage of the bill.

The legislation is also subject to regional influences. Some laws have strict reciprocity requirements, while other states have passed nationwide interstate banking laws with few restrictions. Nonetheless, virtually all these laws are associated with fewer restrictions on interstate banking, except to prohibit entry by the money center banking organizations. King, Tschinkel, and Whitehead (1988) report that only four states, West Virginia, Ohio, Indiana, and Kentucky, have passed statutes prohibiting acquisitions if the acquiring bank holding company holds more than a specified percentage of total bank deposits in the state. Also, the timing of the bill will have an effect because the date on which the bill becomes effective was immediate in some states and delayed in others. As noted in King, Tschinkel, and Whitehead (1988), full interstate banking was allowed in some states and delayed in others.

The data are compiled from the *Wall Street Journal*, *American Banker*, *American Bankers Association Banking Literature Index*, *New York Times*, *Washington Post*, and *Profile of State Chartered Banking*.

III. Methodology

The measurement of abnormal returns is conducted utilizing the market adjusted methodology in a manner similar to Eisenbeis, Harris, and Lakonishok (1984). Abnormal returns for stock j on day t, AR_{jt}, are computed by

$$AR_{jt} = R_{jt} - R_{mt}, \tag{1}$$

where

R_{jt} = the actual rate of return on stock j for day t, and
R_{mt} = the control portfolio return for day t.

A control portfolio was constructed for each state and provided the comparative performance measurement for each bank located in that state during the legislative period. The control portfolios consisted of all available banks from other states, except where other states were enacting legislation concurrently. In this case, these banks were excluded as well. The state control portfolios ranged in size from 35 to 50 banks. The study was replicated using standard event-study methodology with data from the CRSP Excess Returns File, and similar results were obtained. For each day within the interval from day −30 to day 30, the portfolio abnormal returns are

$$PAR_t = \sum_{j=1}^{N} \frac{AR_{jt}}{N}, \tag{2}$$

where N = the number of banks in the sample or subsample. The cumulative abnormal returns over the 61 days (CAR_t) are

$$CAR_t = PAR_t + CAR_{t-1}. \tag{3}$$

Tests of significance are computed for each of the PARs and CARs using the method provided by Brown and Warner (1985). Significance tests for each CAR are computed for the period from day −30 to day t. The t-statistics are computed using the standard deviation of PAR_t measured over the period from day −150 to day −31. Because in some instances the sample contains several banks within the same states and because there are states that enacted legislation concurrently, the events tend to be clustered in calendar time. Consequently, tests are conducted assuming cross-sectional dependence.

IV. Empirical Results and Analysis

Table I presents the abnormal and cumulative abnormal returns for the entire sample. In general, the returns are not significantly different from zero. However, given the evidence of Harding (1988) and Trigaux (1988) on the contrasting ability of superregionals and money center banks to engage in interstate acquisitions, these groups are analyzed separately and the results are in Table II and Figure 1.

Table II shows that significantly positive abnormal returns are in general observed for the superregional banks. The cumulative abnormal return is 5.26 percent on day 0 (accumulated from day −30). In direct contrast are the results for the money center banks. For these banks, Table II shows that the abnormal returns are in general *negative*. The difference between the CARs for the superregional banks and the money center banks also appears in Table II. The results show that the cumulative differences are statistically significant from day −24 through day 30.

Table I

Portfolio Abnormal Returns (PARs) and Cumulative Abnormal Returns (CARs) for All 51 Banks

This table reports portfolio abnormal return (PARs) and cumulative abnormal returns (CARs) from day −30 to day 30 for the 51 banks in the sample. The sample period is from June 1982 to September 1986 and encompasses the period when 44 states and the District of Columbia passed some form of interstate banking legislation.

Day	PARs	CARs	Day	PARs	CARs
−30	0.0004	0.0004	1	0.0025	0.0301
−29	0.0011	0.0015	2	0.0051	0.0352
−28	−0.0039	−0.0025	3	0.0023	0.0375*
−27	0.0024	−0.0001	4	0.0025	0.0400*
−26	0.0011	0.0010	5	−0.0009	0.0391*
−25	0.0102**	0.0112	6	0.0011	0.0402*
−24	0.0126**	0.0237**	7	0.0049	0.0451*
−23	−0.0052	0.0185	8	−0.0010	0.0441*
−22	0.0024	0.0209*	9	−0.0035	0.0406*
−21	−0.0082**	0.0127	10	−0.0042	0.0364
−20	−0.0017	0.0109	11	0.0005	0.0369
−19	−0.0043	0.0066	12	−0.0025	0.0344
−18	0.0001	0.0067	13	0.0016	0.0360
−17	−0.0015	0.0052	14	0.0039	0.0399*
−16	−0.0009	0.0043	15	0.0014	0.0413*
−15	0.0001	0.0044	16	−0.0014	0.0398
−14	0.0018	0.0061	17	−0.0010	0.0389
−13	0.0034	0.0096	18	−0.0019	0.0370
−12	0.0021	0.0116	19	−0.0025	0.0345
−11	0.0089**	0.0205	20	0.0010	0.0356
−10	−0.0021	0.0184	21	0.0005	0.0361
−9	−0.0037	0.0147	22	−0.0020	0.0340
−8	0.0008	0.0156	23	−0.0009	0.0331
−7	0.0093**	0.0249	24	0.0025	0.0357
−6	0.0010	0.0259	25	0.0013	0.0369
−5	−0.0032	0.0227	26	0.0041	0.0410
−4	0.0006	0.0233	27	0.0000	0.0410
−3	0.0018	0.0216	28	−0.0014	0.0395
−2	−0.0009	0.0207	29	0.0006	0.0402
−1	0.0000	0.0207	30	−0.0019	0.0383
0	0.0068*	0.0275			

* Significant at the 0.05 level.

** Significant at the 0.01 level.

The cumulative abnormal returns reported in Table II are shown in Figure 1. The striking contrast between the cumulative abnormal returns of the money center banks and the regional banks is evident. Therefore, it is apparent that the results in the overall sample were obscured by combining the two groups. As a consequence, it may be of value when studying banking organizations to analyze money center and regional banks separately.

The results may arise from money center banks being excluded from the initial interstate banking legislation. During the period of this study, money center

Table II
Portfolio Abnormal Returns (PARs) and Cumulative Abnormal Returns (CARs) for Superregional and Money Center Banks

This table reports portfolio abnormal returns (PARs), and cumulative abnormal returns (CARs), and the cumulative differences (SR-CARs less MC-CARs) for superregional and money center banks. The sample period is from June 1982 to September 1986 and encompasses the period when 44 states and the District of Columbia passed some form of interstate banking legislation.

	Superregional ($N = 38$)		Money Center ($N = 13$)		SR-CARs less MC-CARs		Superregional ($N = 38$)		Money Center ($N = 13$)		SR-CARs less MC-CARs
Day	PARs	CARs	PARs	CARs		Day	PARs	CARs	PARs	CARs	
−30	0.0021	0.0021	−0.0045	−0.0045	0.0066	1	0.0061	0.0588**	−0.0082	−0.0560	0.1147**
−29	0.0009	0.0029	0.0016	0.0029	0.0059	2	0.0054	0.0641**	0.0043	0.0516	0.1158**
−28	−0.0045	−0.0016	−0.0023	−0.0052	0.0036	3	0.0029	0.0670**	0.0008	−0.0509	0.1179**
−27	0.0045	0.0029	−0.0041	−0.0093	0.0122	4	0.0014	0.0684**	0.0059	−0.0450	0.1133**
−26	0.0011	0.0041	0.0010	−0.0083	0.0123	5	0.0021	0.0705**	−0.0100	−0.0550	0.1254**
−25	0.0122**	0.0162	0.0041	−0.0041	0.0204	6	0.0050	0.0755**	−0.0107	−0.0657	0.1411**
−24	0.0175**	0.0338**	−0.0023	−0.0064	0.0402*	7	0.0032	0.0787**	0.0100	−0.0556	0.1343**
−23	−0.0038	0.0300**	−0.0093	−0.0158	0.0457*	8	−0.0003	0.0784**	−0.0031	−0.0587	0.1371**
−22	0.0063	0.0362**	−0.0092	−0.0250	0.0612**	9	−0.0038	0.0746**	−0.0026	−0.0613	0.1359**
−21	−0.0075*	0.0287*	−0.0104	−0.0354	0.0641**	10	−0.0028	0.0718**	−0.0085	−0.0698	0.1416**
−20	−0.0017	0.0270*	−0.0018	−0.0373	0.0643**	11	0.0015	0.0733**	−0.0024	−0.0722	0.1454**
−19	−0.0043	0.0227	−0.0044	−0.0417	0.0643**	12	−0.0014	0.0718**	−0.0056	−0.0778	0.1497**
−18	−0.0009	0.0218	0.0032	−0.0385	0.0602**	13	−0.0031	0.0687**	0.0153*	−0.0625	0.1313**
−17	0.0044	0.0262	−0.0194**	−0.0579*	0.0841**	14	0.0064	0.0752**	−0.0047	−0.0672	0.1424**

Table II—*Continued*

	Superregional ($N = 38$)		Money Center ($N = 13$)		SR-CARs less		Superregional ($N = 38$)		Money Center ($N = 13$)		SR-CARs less
Day	PARs	CARs	PARs	CARs	MC-CARs	Day	PARs	CARs	PARs	CARs	MC-CARs
−16	−0.0016	0.0246	0.0010	−0.0568*	0.0814**	15	0.0039	0.0790**	−0.0061	−0.0733	0.1524**
−15	−0.0021	0.0225	0.0067	−0.0501*	0.0726**	16	0.0003	0.0794**	−0.0083	−0.0816	0.1610**
−14	0.0035	0.0260	−0.0034	−0.0536*	0.0796**	17	0.0019	0.0812**	−0.0086	−0.0902*	0.1714**
−13	0.0046	0.0306	0.0001	−0.0535*	0.0841**	18	−0.0026	0.0786**	0.0021	−0.0881*	0.1667**
−12	−0.0001	0.0305	0.0084	−0.0450	0.0756**	19	−0.0050	0.0736**	0.0037	−0.0844	0.1580**
−11	0.0105**	0.0410*	0.0041	−0.0409	0.0819**	20	0.0000	0.0736**	0.0026	−0.0818	0.1554**
−10	−0.0009	0.0401*	−0.0057	−0.0466	0.0866**	21	0.0013	0.0749**	−0.0019	−0.0837	0.1586**
−9	−0.0004	0.0396*	−0.0134*	−0.0599*	0.0996**	22	−0.0047	0.0703*	0.0046	0.0790	0.1493**
−8	0.0034	0.0430*	−0.0068	−0.0667*	0.1097**	23	0.0005	0.0708*	−0.0056	−0.0846	0.1554**
−7	0.0118*	0.0548**	0.0020	−0.0648*	0.1195**	24	0.0002	0.0709*	0.0090	−0.0756	0.1466**
−6	0.0005	0.0552**	0.0026	−0.0621*	0.1174**	25	−0.0018	0.0692*	0.0086	−0.0670	0.1362**
−5	−0.0007	0.0545**	−0.0106	−0.0728*	0.1273**	26	−0.0001	0.0690*	0.0144*	−0.0526	0.1216**
−4	0.0004	0.0550**	0.0012	−0.0715*	0.1265**	27	−0.0009	0.0682*	0.0021	−0.0505	0.1186**
−3	−0.0028	0.0522**	0.0013	−0.0703*	0.1224**	28	−0.0046	0.0636*	0.0069	−0.0435	0.1071*
−2	−0.0054	0.0468*	0.0125*	−0.0577	0.1046**	29	0.0027	0.0663*	−0.0061	−0.0496	0.1159*
−1	0.0026	0.0494*	−0.0075	−0.0653	0.1147**	30	0.0008	0.0671*	−0.0100	−0.0597	0.1268**
0	0.0032	0.0526*	0.0175**	−0.0478	0.1004**						

* Significant at the 0.05 level.

** Significant at the 0.01 level.

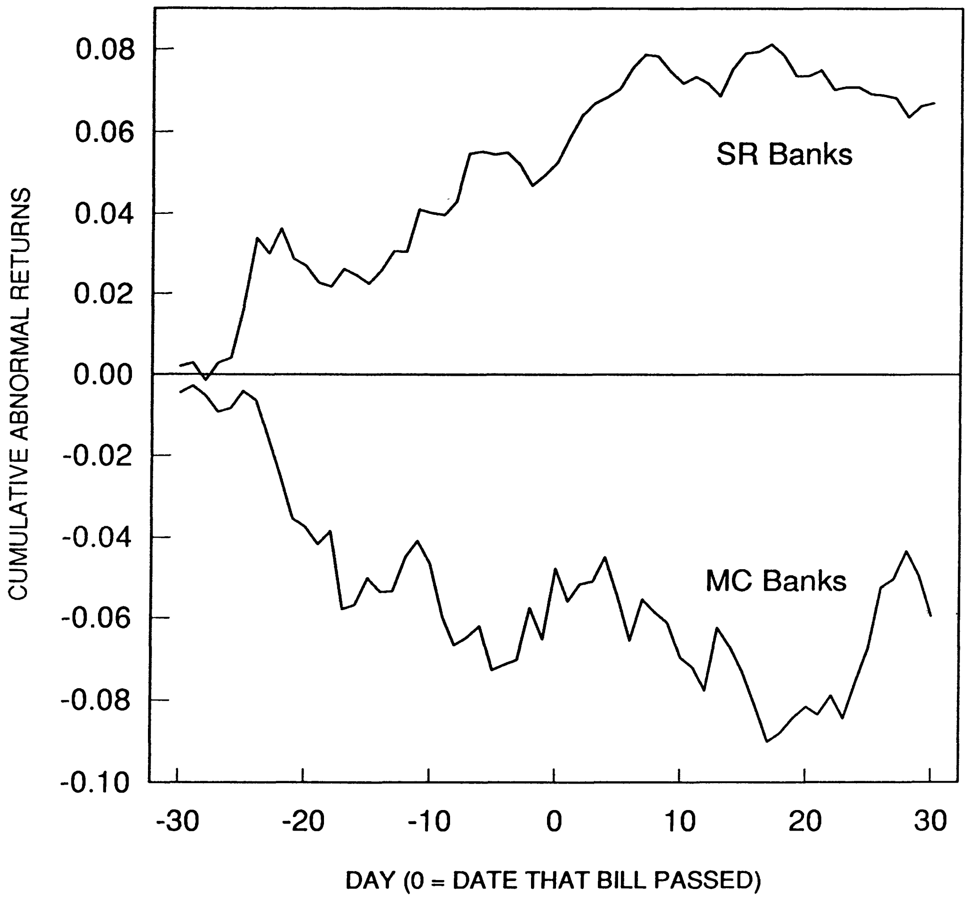

Figure 1. Daily cumulative abnormal returns for both the superregional and money center banks. This figure presents the cumulative abnormal returns from two portfolios of bank stocks, superregional ($N = 39$) and money center ($N = 11$), during the passage of interstate banking legislation in 17 states. Standard event-study methodology was utilized to compute the residuals from 30 days before to 30 days following passage of the legislation. The event date is defined as the day when press coverage indicated that the governor signed the bill or that the state legislature passed the bill and the governor was expected to sign it. A control portfolio was constructed for each state in order to provide a comparative performance measurement for each bank located in that state during the legislative period. The control portfolio consisted of all available banks from other states except where other states were enacting legislation concurrently. Similar results were obtained utilizing the CRSP Excess Returns File.

banks because of wording in the acts were unable to take advantage of such legislation (Harding (1988), p. 26). The results imply that the legislation initially limiting the expansion of money center banks across state lines may also be viewed by the market as having an adverse competitive effect on those banks vis-à-vis the superregional banks. As such, the results corroborate the contention of Trigaux (1988) that the superregionals are in the best position to expand through acquisition.

By implication, the results are also consistent with the findings of Collins et al. (1989). Although money center BHCs concentrate their expansion on new products rather than geographic market expansion, it may be the case that the advent of interstate banking will cause additional strains on their profitability. Regional BHCs through geographic expansion could cause an erosion of the market share of the money center BHCs and seriously challenge established banking relationships such as correspondent banking. Although these are conjectures at this point, the market appears to be sending a strong signal that the passage of interstate banking legislation will lead to a strengthening of the financial condition of the superregional banks at the expense of the money center banks.

V. Conclusions

This study provides evidence on the impact of changes in interstate banking laws on shareholder wealth. The results show that there are dramatically different effects on shareholder wealth for money center and superregional banks. The effects for the superregional banks are positive, while those for the money center banks are negative. These results show that the testing of all banks in a single sample obscures findings that are both interesting and important. The results corroborate the earlier conjectures regarding these two groups of banks provided by Harding (1988) and Trigaux (1988) which have not been previously empirically tested.

REFERENCES

Amel, D. F. and D. G. Keane, 1985, State laws affecting commercial bank branching, multibank holding company expansion and interstate banking, Working paper, Board of Governors of the Federal Reserve System.

Born, J., R. A. Eisenbeis, and R. S. Harris, 1988, The benefits of geographical and product expansion in the financial services industry, *Journal of Financial Services Research* 2, 161–182.

Brown, S. and J. Warner, 1985, Using daily stock returns: The case of event studies, *Journal of Financial Economics* 14, 3–31.

Collins, M. C., D. W. Blackwell, and J. F. Sinkey, Jr., 1989, Bank regulation, investment opportunities, and corporate policy choices for large bank holding companies, 1977–1985, Unpublished manuscript, University of Tennessee.

Cornett, M. M. and S. De, 1988, An examination of stock market reactions to interstate bank mergers, *Journal of Banking and Finance*, Forthcoming.

Eisenbeis, R. A., R. S. Harris, and J. Lakonishok, 1984, Benefits of bank diversification: The evidence from shareholder returns, *Journal of Finance* 39, 881–892.

Harding, B. W., 1988, The five-year outlook for interstate banking, *Bankers Magazine* 190, 25–30.

James, C., 1984, An analysis of the effect of state acquisition laws on managerial efficiency: The case of the bank holding company acquisitions, *Journal of Law and Economics* 27, 211–226.

King, B. F., S. L. Tschinkel, and D. D. Whitehead, 1989, Interstate banking developments in the 1980s, Federal Reserve Bank of Atlanta, *Economic Review*, 32–51.

Lee, I. and R. Schweitzer, 1989, Shareholder wealth effects of interstate banking: The case of Delaware's financial center development act, *Journal of Financial Services Research* 2, 65–72.

Trifts, J. W. and K. P. Scanlon, 1986, Interstate bank mergers: The early evidence, *Journal of Financial Research* 9, 305–311.

Trigaux, R., 1988, Risk-based capital plan favors superregionals, *American Banker* 153, 2.