FRBSF Economic Letter

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Trends in the Concentration of Bank Deposits: The Northwest

Two major trends affecting the structure of the banking industry since the mid-1980s have been tremendous consolidation and the liberalization of interstate banking. Consolidation has unambiguously increased concentration at the national level. The effects on concentration in smaller geographic areas are more complicated. For one thing, mergers can involve interstate transactions, and a merger between banks in two states usually leaves both states, and their local banking markets, with the same number of banks. For another, antitrust enforcement, as well as market forces, tends to limit the impact of mergers on concentration in local markets.

This *Letter* looks at how bank consolidation has affected deposit concentration at the national level and in two key states in the Twelfth Federal Reserve District—Oregon and Washington. Both states have seen declines in the number of depository organizations, as well as a considerable degree of acquisition by out-of-state organizations. The analysis indicates that concentration has increased notably at the national level and for the state of Washington, but less so for Oregon. However, relatively few local markets within the states have become highly concentrated.

Trends in consolidation and interstate banking

The U.S. banking industry has seen massive consolidation since the mid-1980s. The number of independent bank and thrift organizations (collectively, depository organizations) in the U.S. fell from 15,416 in 1984 to 8,191 in 2001, a drop of 46.9%. Some of the depository organizations that have been eliminated ranked among the largest in the nation. As a result, the share of deposits held by the five largest increased from about 9% in 1984 to over 23% in 2001.

The consolidation of banking at the national level has been facilitated by the liberalization of the laws governing interstate banking. Beginning in the mid-1970s, states allowed bank holding companies headquartered in other states to acquire banks in their state. The Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 permitted interstate branching, whereby banks in one state could acquire banks in another state and turn the acquired branches into their own, rather than keeping the acquired bank as a separately chartered entity.

The experience with interstate banking and the effect on concentration at the state level vary considerably. Oregon has been especially affected by interstate acquisitions—as of 2001, out-of-state organizations controlled 74.2% of Oregon deposits, the second highest percentage in the nation. For Oregon, for the most part, out-of-state acquirers have merely replaced the large in-state institutions, with little effect on concentration at the state level. Thus, the deposit share of the top five institutions operating in Oregon barely has changed, increasing from 63.1% to 67.9% since 1984. (These shares are considerably higher than in states without a long history of statewide branching.) At 45.2% and ranking seventh in the nation, Washington's out-of-state controlled deposit share also is relatively high. However, the top-five share in Washington increased more than Oregon's, from 48.6% in 1984 to 60.5% in 2001, largely due to gains by one of the state's own—Washington Mutual, Inc., the second largest depository institution in Washington.

Public policy concerns

From a public policy perspective, the main concern is the impact that bank mergers and acquisitions may have on local banking markets. A local banking market typically encompasses a metropolitan area or a number of rural communities that are economically linked. Survey evidence regarding where people do their banking and research linking local banking market concentration and prices, such as loan rates, suggest that banking markets retain a local dimension.

Western Banking *Western Banking* is a quarterly review of banking developments in the Twelfth Federal Reserve District. It is published in the *Economic Letter* on the fourth Friday of January, April, July, and October.

Indeed, antitrust enforcement regarding bank mergers focuses primarily on the effects on local market concentration. Under the Bank Holding Company Act, the Bank Merger Act, and other statutes, the Federal Reserve and the other bank regulatory agencies review proposed bank mergers for acceptable increases in concentration, post-merger levels of concentration, and post-merger market shares.

Regulatory approval of a merger may require a divestiture of acquirer or target branches in the relevant markets to a third party such that the resulting change in concentration is acceptable. On the other hand, mitigating factors may argue for approval in a particular market. For example, the relevant market may have strong population growth, indicating the likelihood of a rapidly increasing demand for banking services. In such a case, the market would be expected to attract new entrants at an above average rate, which would tend to alleviate the increase in concentration due to the merger.

Concentration in local markets

Interstate mergers usually would not have affected concentration at the local level, since the acquirer and the target would have operated in different states and therefore, usually, in different local markets. However, intrastate mergers, even among the smaller organizations, and failures could have had a significant impact. Therefore, the change in the number of depository organizations within a state is an important indicator of the potential effects of consolidation on local markets. Between 1984 and 2001, the number of depository organizations in Oregon declined 46.1%, from 102 to 55, while the number in Washington declined 30%, from 160 to 112.

Regulators assessing the effect of mergers on concentration in local banking markets typically rely on a statistic called the Herfindahl-Hirschman Index (HHI), which is calculated by summing the squares of the individual percent market shares of all the participants in a market. For example, a market with four firms with market shares of 30%, 30%, 20%, and 20% has an HHI of 2,600. The HHI gives proportionally greater weight to the market shares of the larger firms, in accord with their relative importance in competitive interactions. The Department of Justice divides the spectrum of market concentration into three broad categories: unconcentrated (HHI below 1,000), moderately concentrated (HHI between 1,000 and 1,800), and highly concentrated (HHI above 1,800).

For Oregon and Washington, changes in local banking market concentration were computed for 15 urban markets and 26 rural markets between 1984 and 2001. In urban markets, the average HHI increased 206 points, from 1,296 to 1,502. So, on average, urban markets in Oregon and Washington stayed within the moderately concentrated range.

Regarding individual markets, 11 urban markets (73.3%) had a higher HHI in 2001 than in 1984. However, only one—Longview, Washington—moved up to being highly concentrated. After starting out at 993 in 1984, Longview's HHI increased to 1,986 in 2001. All the other urban markets except for Walla Walla, Washington, which already was highly concentrated in 1984, remained moderately concentrated.

In rural markets, the average HHI increased 75 points, from 2,095 in 1984 to 2,170 in 2001. So, on average, rural markets in Oregon and Washington already were highly concentrated in 1984, and became only very slightly more concentrated.

In 14 rural markets (53.9%), the HHI was higher in 2001 than in 1984. Among these, seven markets went from being moderately concentrated in 1984 to highly concentrated in 2001. These were the Coos Bay, Hood River, Lincoln County, Pendleton, and Roseburg markets in Oregon, and the Sunnyside and Wenatchee markets in Washington. Four of these—Coos Bay, Pendleton, Roseburg, and Sunnyside—now have HHIs more than 300 points above the highly concentrated benchmark of 1,800. However, given that 9 of the 12 rural markets that already were highly concentrated in 1984 became less concentrated by 2001, it is possible that concentration in some of these newly highly concentrated markets rural markets eventually also may fall.

Conclusion

Consolidation in banking has left its mark on concentration in the Northwest. At the state level, concentration has increased slightly in Oregon, more so in Washington. Among local banking markets, concentration increased both on average and in the majority of urban and rural markets. However, relatively few markets moved into the highly concentrated range—one urban market and about one-fourth of the rural markets. Even among the rural markets, the average increase in market concentration has been limited.

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BANKS HEADQUARTERED BY REGION

MARCH 31, 2002

(NOT SEASONALLY ADJUSTED, PRELIMINARY DATA)

(BANKS WITH ASSETS LESS THAN OR EQUAL TO $1 BILLION ARE DEFINED AS SMALL)

		UNITED STATES			TWELFTH DISTRICT		
		ALL	SMALL	LARGE	ALL	SMALL	LARGE
ASSETS AND LIABILITIES — $ MILLION							
ASSETS	TOTAL	6,443,567	1,040,440	5,403,127	645,184	95,443	549,741
	FOREIGN	710,295	955	709,341	3,455	18	3,437
	DOMESTIC	5,733,271	1,039,485	4,693,786	641,729	95,425	546,304
LOANS	TOTAL	3,861,298	666,693	3,194,605	414,133	63,925	350,208
	FOREIGN	290,349	854	289,495	2,550	47	2,503
	DOMESTIC	3,570,949	665,839	2,905,110	411,583	63,878	347,705
	REAL ESTATE	1,762,619	435,577	1,327,041	218,697	40,949	177,748
	COMMERCIAL RE	515,061	163,939	351,121	78,294	22,237	56,057
	SINGLE FAMILY RES	953,494	180,409	773,085	100,536	7,498	93,039
	COMMERCIAL	815,271	116,701	698,570	88,877	13,895	74,982
	CONSUMER	589,344	72,602	516,742	76,599	6,758	69,841
	CREDIT CARDS	246,678	6,455	240,224	50,413	1,337	49,076
	AGRICULTURAL	44,176	28,647	15,528	5,563	1,452	4,112
	OTHER LOANS	359,540	12,311	347,229	21,846	824	21,022
INV. SECURITIES	TOTAL	1,161,542	241,854	919,687	117,030	16,770	100,260
	U.S. TREASURIES	49,194	11,922	37,272	3,327	775	2,552
	U.S. AGENCIES, TOTAL	717,134	164,585	552,548	51,848	10,933	40,914
	U.S. AGENCIES, MBS	523,312	75,984	447,328	38,098	5,818	32,279
	OTHER MBS	81,551	4,306	77,246	12,565	932	11,633
	OTHER SECURITIES	313,663	61,041	252,621	49,291	4,130	45,161
LIABILITIES	TOTAL	5,832,088	936,719	4,895,369	573,655	85,188	488,466
	DOMESTIC	5,122,005	935,765	4,186,240	570,199	85,171	485,029
DEPOSITS	TOTAL	4,317,833	857,334	3,460,499	441,277	76,458	364,819
	FOREIGN	603,282	1,590	601,693	11,929	46	11,883
	DOMESTIC	3,714,551	855,745	2,858,807	429,348	76,412	352,936
	DEMAND	490,975	116,416	374,559	51,139	12,259	38,880
	MMDA & SAVINGS	1,811,906	252,459	1,559,447	255,861	28,681	227,180
	SMALL TIME	720,279	258,158	462,121	50,534	15,271	35,263
	LARGE TIME	540,284	136,883	403,401	62,389	15,261	47,128
	OTHER DEPOSITS	151,108	91,828	59,279	9,426	4,941	4,486
OTHER BORROWINGS		529,601	46,287	483,314	63,791	5,417	58,374
EQUITY CAPITAL		600,579	103,618	496,961	71,235	10,227	61,008
LOAN LOSS RESERVE		74,433	9,780	64,652	8,829	1,313	7,516
LOAN COMMITMENTS		5,061,006	638,332	4,422,675	815,012	341,535	473,478
TIER1 CAPITAL RATIO		0.102	0.136	0.096	0.115	0.130	0.113
TOTAL CAPITAL RATIO		0.130	0.148	0.127	0.144	0.143	0.144
LEVERAGE RATIO		0.080	0.095	0.077	0.092	0.101	0.090
LOAN LOSS RESERVE RATIO		1.928	1.467	2.024	2.132	2.054	2.146
QUARTERLY EARNINGS AND RETURNS — $ MILLION							
INCOME	TOTAL	130,077	19,942	110,134	13,972	2,135	11,837
	INTEREST	88,063	16,227	71,836	9,583	1,587	7,996
	FEES & CHARGES	6,991	1,047	5,944	598	76	522
EXPENSES	TOTAL	96,194	15,604	80,589	9,670	1,670	8,000
	INTEREST	29,927	5,926	24,001	2,415	442	1,973
	SALARIES	24,700	4,462	20,237	2,355	512	1,843
	LOAN LOSS PROVISION	11,555	820	10,735	1,523	182	1,342
	OTHER	30,012	4,396	25,616	3,377	535	2,842
TAXES		11,103	1,182	9,920	1,538	157	1,381
NET INCOME		21,557	3,033	18,524	2,566	245	2,321
ROA (% ANNUALIZED)		1.336	1.180	1.366	1.610	1.051	1.705
ROE (% ANNUALIZED)		14.357	11.708	14.910	14.407	9.581	15.216
NET INTEREST MARGIN (% ANNUALIZED)		3.603	4.008	3.527	4.497	4.912	4.426
ASSET QUALITY — PERCENT OF LOANS							
NET CHARGEOFFS (% ANNUALIZED)							
	TOTAL	1.143	0.318	1.316	1.352	0.813	1.450
	REAL ESTATE	0.151	0.084	0.173	0.093	0.096	0.092
	COMMERCIAL	1.465	0.497	1.600	2.071	1.304	2.211
	CONSUMER	3.931	1.476	4.244	4.324	4.372	4.320
	CREDIT CARDS	7.916	8.482	7.901	5.753	13.981	5.529
	AGRICULTURAL	0.335	0.108	0.738	0.604	-0.005	0.819
PAST DUE & NON-ACCRUAL							
	TOTAL	2.709	2.392	2.775	2.444	2.427	2.447
	REAL ESTATE	2.055	2.050	2.056	1.730	1.723	1.732
	CONSTRUCTION	2.285	2.221	2.308	2.882	2.276	3.126
	COMMERCIAL	1.846	1.875	1.832	1.460	1.429	1.473
	FARM	3.256	3.011	3.821	4.782	6.639	3.618
	HOME EQUITY LINES	0.983	0.908	0.992	1.040	0.821	1.074
	MORTGAGES	2.472	2.241	2.532	1.734	2.074	1.710
	MULTI-FAMILY	1.069	1.086	1.064	0.854	0.512	0.962
	COMMERCIAL	3.703	3.091	3.788	3.592	3.271	3.651
	CONSUMER	3.527	3.034	3.590	3.387	4.560	3.274
	CREDIT CARDS	4.769	7.721	4.690	4.123	11.537	3.921
	AGRICULTURAL	3.146	2.596	4.122	4.505	3.411	4.891
NUMBER OF BANKS		7,986	7,604	382	564	490	74
NUMBER OF EMPLOYEES		1,709,055	385,569	1,323,486	159,000	37,157	121,843

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INTEREST RATES ON LOANS

TYPE OF LOAN		FEB 2000	MAY 2000	AUG 2000	NOV 2000	FEB 2001	MAY 2001	AUG 2001	NOV 2001	FEB 2002	MAY 2002
COMMERCIAL and INDUSTRIAL LOANS											
TOTAL	U.S.	7.44	7.78	8.28	8.15	7.19	6.22	5.61	3.89	3.66	3.60
	DISTRICT	7.04	7.42	7.90	7.85	7.04	5.94	5.22	3.58	3.36	3.77
BY RISK RATING:											
MINIMAL RISK	U.S.	6.47	6.82	7.42	7.54	6.23	6.01	4.50	2.97	2.10	2.61
	DISTRICT	6.49	6.19	7.25	6.66	6.54	4.98	4.46	2.88	2.59	2.79
LOW RISK	U.S.	6.87	7.15	7.55	7.57	6.54	5.44	4.81	3.08	3.41	2.86
	DISTRICT	6.79	6.99	7.65	7.68	6.53	5.42	4.66	3.14	2.91	3.18
MODERATE RISK	U.S.	7.54	7.97	8.41	8.33	7.28	6.38	5.57	4.25	3.89	3.84
	DISTRICT	7.15	7.57	8.06	8.04	7.51	6.35	5.54	3.84	3.48	4.35
OTHER	U.S.	8.24	8.63	8.95	8.85	7.97	6.82	6.16	4.31	4.01	4.00
	DISTRICT	7.23	7.57	8.00	7.79	7.70	6.64	6.35	4.39	3.98	4.55
BY MATURITY/REPRICING INTERVAL:											
DAILY	U.S.	6.84	7.21	7.74	7.84	6.88	5.94	5.15	3.67	3.10	3.12
	DISTRICT	6.87	7.59	7.94	7.85	7.22	6.03	5.33	3.91	3.71	3.65
2 TO 30 DAYS	U.S.	7.42	7.60	8.18	7.60	6.94	5.80	5.84	3.66	3.61	3.46
	DISTRICT	7.00	7.37	7.83	7.78	6.96	5.87	5.16	3.47	3.25	3.71
31 TO 365 DAYS	U.S.	7.67	8.04	8.13	8.04	7.22	5.90	5.42	3.94	3.74	3.44
	DISTRICT	6.96	7.05	7.70	7.68	6.39	5.47	4.72	3.23	2.88	3.24
OVER 365 DAYS	U.S.	8.81	8.37	8.84	8.37	8.48	7.61	7.02	6.09	5.66	6.01
	DISTRICT	7.90	4.64	8.72	9.03	7.36	7.70	7.30	5.08	5.71	6.82
CONSUMER, AUTOMOBILE	U.S.	8.88	9.21	9.62	9.63	9.17	8.67	8.31	7.86	7.50	7.74
	DISTRICT	9.28	9.23	9.87	9.87	9.94	9.34	8.34	8.54	8.32	9.20
CONSUMER, PERSONAL	U.S.	13.76	13.88	13.85	14.12	13.71	13.28	13.25	12.62	11.72	12.57
	DISTRICT	14.41	14.89	13.25	13.25	13.67	12.48	13.22	12.45	14.39	12.36
CONSUMER, CREDIT CARD	U.S.	15.47	15.39	15.98	15.99	15.66	15.07	14.60	14.22	13.65	13.55
	DISTRICT	15.60	15.76	16.16	16.25	16.94	15.54	15.28	15.01	13.21	13.34

SOURCES: SURVEY OF TERMS OF BUSINESS LENDING AND TERMS OF CONSUMER CREDIT