# FRBSF WEEKLY LETTER

January 27, 1989

### The California Deposit Rate Mystery

In recent years, a number of journalists and consumer groups have observed that some banks in California paid lower rates on deposits and charged higher rates on loans than banks in other states. These observers have implied that banking in California may be less competitive than in other states, insulating California banks from the market discipline of interest rate competition. In this Letter, we investigate the socalled "California rate mystery."

#### Which rates?

A number of observers have guestioned the rates California banks pay on money market deposit accounts (MMDAs), which pay interest and offer limited checkwriting privileges. But does the rate mystery extend to other deposits, as well? The chart shows that for the last five years, the rates on MMDAs and Super NOWs paid by major banks in Los Angeles have been lower than the average rates paid on these accounts by banks in New York, Chicago, Philadelphia, and Detroit. Moreover, statistical analysis suggests that these differences, which have ranged between 50 and 100 basis points over the five-year period, are not due merely to random fluctuations.

#### California vs. Other Major Markets



However, the chart also shows that these discrepancies do not extend to rates paid on 21/2 year retail certificates of deposit (CDs). Statistical analysis confirms that from 1984 to 1988, there has been no significant difference between the 21/2 year rates in California and elsewhere. The same finding is true for 6-month CDs.

This suggests that the California deposit rate mystery is confined to accounts that have transactions features. Specifically, MMDAs and Super NOWs offer depositors checkwriting privileges and access to automated teller machines (ATMs), while CDs are more nearly a pure savings vehicle that offers few extra non-rate features.

#### **Possible suspects**

There are two competing explanations of the California rate mystery. One points to certain factors that may distinguish the California deposit market from other markets. For example, differences in funding patterns, cost structures, level of bank services, or consumer preferences may dictate a different deposit rate structure in California.

The alternative hypothesis suggests that the structure of the California banking market inhibits interest rate competition. Proponents of this view argue that California banking is overly concentrated and that banks in the state enjoy significant market power. If this is the case, California banks would be able to retain deposits and earn healthy profits without paying "competitive" deposit rates. According to this view, then, changes in regulations intended to enhance competition would reduce concentration and likely would eliminate the interest rate discrepancies between markets in California and elsewhere.

#### Clues from the data

To determine whether the observed discrepancies in deposit rates are the result of the unique characteristics of the California deposit market or the result of market power and noncompetitive

#### **JJESTERN** BANKI

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

## FRBSF

behavior, economists look for evidence in the data on the deposit rate structure itself, differences in operating expenses, bank profits, and banking market structure. Looking at retail deposit rate structure first, it is noteworthy that the rate differentials between California and the rest of the country do not exist for CDs. If California banks are using market power to limit interest rate competition in retail accounts, we might expect them to do so for all types of accounts, not just the MMDAs and Super NOWs. This line of reasoning suggests that market power may not be the rationale for the rate discrepancies.

On the other hand, such a rate structure does not rule out the possibility that California banks have market power only in the markets for MMDAs and Super NOWs. Because MMDAs and Super NOWs offer important transactions services like checkwriting and ATM access, it is possible that the markets for these two accounts are tied more closely to a particular locality than are the markets for pure saving vehicles like CDs, which do not offer location-specific services.

The second piece of evidence, net overhead margins, suggests that California banks face a different cost structure than do banks in other major markets. Overhead expenses are substantially higher in California than in other populous states and in the U.S. as a whole. This could suggest that California banks, operating in a less competitive market, are not forced to operate as efficiently as are banks elsewhere.

However, this cost structure also is consistent with the view that California banks are competing for deposits by offering more services. California banks operate more than 5,000 branch offices, half of which are run by the five largest banks. These extensive branch networks are costly to maintain and operate. California banks thus may offset lower explicit interest rate expenses with a higher level of non-interest rate, service expenses. In contrast, many other major markets (Illinois and New York, for example) have a tradition of unit banking or restricted branching and may not have developed a strong history of extensive retail customer services.

Third, California banks' profits, after adjusting for loan losses, have paralleled average profits for banks elsewhere in the nation over the past five years. This finding tends to discredit the view that California banks are earning excess profits from exercising market power.

On the other hand, the banking market in California *is* characterized by a higher degree of concentration than markets in other major banking states. The percentage of deposits or assets controlled by the top four or five banks has been higher in California for the past several years than in such states as New York, Illinois, and Pennsylvania. Superficially, therefore, California banking may be less competitive than elsewhere.

These figures, however, may overstate the extent of concentration (and, hence, potential bank market power) because they do not account for the substantial presence of savings and loan associations in the state. The market concentration measures would decline more in California than in other market states since S&Ls now hold more than half of the state's total deposits.

#### The jury is still out

The evidence on the California rate mystery clearly is mixed. Indeed, the mystery may have to remain unsolved until after 1991 when restrictions on entry by out-of-state banks are removed. If interest rate differentials between California and other markets disappear when out-of-state banks move into California, a case could be made then that competition among banks previously had been low.

On the other hand, these rate differentials may result from local market conditions. In this case, banks entering the state after 1991 will adapt to local conditions, changing their operating style to reflect the California market, and the rate differentials will persist.

Our preliminary analysis indicates that the California rate mystery has two plausible explanations. Banking in California *is* fairly concentrated and California banks *do* pay lower rates on MMDAs and Super NOWs. However, different costs and perhaps different service levels suggest that the banking market is different in California. At a minimum, this discussion reveals that it is hazardous to draw policy implications from simple statistical comparisons.

Jonathan A. Neuberger Ga Economist

Gary C. Zimmerman Economist

#### **REGIONAL BANKING DATA**

September 30, 1988

(Not Seasonally Adjusted, Preliminary Data)

		DISTRICT	ALASKA	ARIZONA	CALIF	HAWAII	IDAHO	NEVADA	OREGON	UTAH	WASH
		ASSETS	AND LIABI	LITIES	\$ MILLION	(ALL COMME	ERCIAL BAN	KS)			
ASSETS	TOTAL	424,279	4,755	27,305	296,034	13,138	7,334	12,011	19,303	11,094	33,305
	FOREIGN	41,107	1	N/A	39,104	1,063	N/A	N/A	0	73	866
	DOMESTIC	383,172	4,754	27,305	256,930	12,075	7,334	12,011	19,303	11,021	32,439
LOANS	TOTAL	290,233	2,354	19,768	202,706	7,944	4,834	8,997	12,350	7,225	24,056
	FOREIGN DOMESTIC	32,453 257,780	2,352	N/A 19,768	31,254	692	N/A 4,834	N/A 8,997	ر 12,344	N/A 7,225	501 23,556
	REAL ESTATE	107,556	974	8,731	171,452 75,944	7,252 3,649	1,226	1,573	3,740	2,881	8,838
	COMMERCIAL	72,281	899	4,782	48,910	1,938	1,261	1,432	4,804	1,738	6,517
	CONSUMER	53,038	231	4,166	30,372	1,225	1,345	5,671	2,619	1,990	5,420
	AGRICULTURE	4,981	7	500	2,445	16	628	21	373	115	876
	INTERNATIONAL	284	N/A	54	223	0	N/A	N/A	0	2	5
SECURITIES		42,669	1,262	3,745	23,428	2,455	1,446	1,919	3,348 1,034	1,753 418	3,311 1,268
	U.S.T.S. SECONDARY MARKET	13,539 15,769	822 21 <b>3</b>	1,576 608	6,349 11,318	917 518	536 432	619 400	707	739	834
	OTHER SEC.	13,361	213	1,560	5,762	1,021	432	901	1,608	596	1,209
LIABILITIES		400,027	4,347	25,555	280,351			11,281	18,029	10,302	31,076
LINDILITIES	DOMESTIC	358,920	4,347	25,555	241,247	12,265 11,202	6,821 6,821	11,281	18,029	10,228	30,210
DEPOSITS	TOTAL	337,817	3,870	22,806	236,005	11,440	5,895	6,171	15,303	8,635	27,692
	FOREIGN	32,515	1	N/A	30,834	800	N/A	N/A	N/A	73	807
	DOMESTIC	305,303	3,869	22,806	205,171	10,640	5,895	6,171	15,303	8,562	26,885
	DEMAND	77,992	979	4,633	56,899	1,857	986	1,821	3,187	1,606	6,023
	TIME AND SAVINGS	227,311	2,890	18,173	148,271	8,784	4,909	4,351	12,116	6,956	20,862
OTHER BORRO EQUITY CAPI		38,097	429	2,362	24,070	275	844	4,648 730	1,936 1,274	1,208 793	2,326 2,229
LOAN LOSS R		24,252 8,304	408 97	1,750 390	15,683 6,683	873 127	513 90	226	171	128	393
	TERS OF CREDIT	31,944	26	702	28,151	335	110	152	520	289	1,660
LOAN COMMIT		135,854	391	5,492	109,344	3,535	985	1,209	4,188	1,585	9,126
LOANS SOLD	7	100,018	48	217	99,038	82	13	96	327	19	179
		ASSET G	WALITY	PERCENT OF	LOANS (L	ARGE COMME	RCIAL BANK	S)			
LOAN LOSS R	ESERVE (ALL BANKS)	2.86	4.12	1.97	3.30	1.60	1.85	2.51	1.39	1.77	1.64
NET CHARGEO	FFS, TOTAL	1.17	7.45	1.13	1.15	0.17	0.72	1.91	0.86	1.48	0.98
	REAL ESTATE	0.34	15.10	0.61	0.13	0.01	0.29	0.46	0.39	0.67	0.36
	COMMERCIAL	0.82	3.34	1.02	0.69	0.06	1.42	1.77	0.66	2.42	1.28
	CONSUMER	1.66	0.75	1.81	1.78	0.28	0.66	2.39	1.18	0.89 0.84	1.21 0.79
PAST DUE 8	AGRICULTURE NONACCRUAL, TOTAL	0.04	N/A 20.90	0.43 8.23	59 5.61	0.42	0.84	N/A 4.04	1.02 3.27	4,47	4.41
TAST DOL Q	REAL ESTATE	5,44	35.80	12.40	4.35	1.43	2.90	5.35	5.96	6.38	6.08
	COMMERCIAL	5.01	14.20	8.39	5.09	1.78	2.53	3.34	2.17	3.83	4.75
	CONSUMER	2.74	3.17	1.86	2.94	1.92	1.87	3.95	1.87	2.05	2.08
	AGRICULTURE	11.70	4.68	4.08	17.70	33.10	3.64	0.57	5.44	3.64	5.73
		EARNI	NGS AND RE	TURNS \$	MILLION	(ALL COMMER	CIAL BANK	3)			
INCOME	TOTAL	32,033	304	1,966	22,286	972	536	1,132	1,368	828	2,640
	INTEREST	26,799	260	1,709	18,414	815	480	1,007	1,193	735	2,188
	FEES & CHARGES	1,510	14	105	1,040	25	30	35	74	43	145
EXPENSES	TOTAL	28,106	369	1,842	19,510	791	475	911	1,149	779	2,278
	INTEREST	13,985	157	928	9,676	433	261	421	596	394	1,118 496
	SALARIES LOAN LOSS PROVISION	5,802 1,882	67 62	389 162	4,109 1,231	172 31	80 30	125 118	244 50	121 77	120
	OTHER	6,437	82	363	4,495	155	104	247	259	187	544
INCOME BEFO		3,905	-65	124	2,761	179	60	221	214	49	362
TAXES		1,404	-0	30	1,044	63	18	68	64	14	104
NET INCOME		2,697	-65	98	1,867	116	43	153	152	35	298
ROA (%)		0.86	-1.80	0.49	0.86	1.20	0.78	1.75	1.09	0.43	1.21
ROE (%)		14.80	-21.00	7.49	15.90	17.70	11.10	27.90	15.90	5.82	17.80

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, or of the Board of Governors of the Federal Reserve System.

Editorial comments may be addressed to the editor (Barbara Bennett) or to the author... Free copies of Federal Reserve publications can be obtained from the Public Information Department, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 974-2246.

									M.	<b>ARK</b>	ET	SH	[AR]	E S	ТА	TI	STIC	S												
PERCENT OF TOTAL DEPOSITS, FOR NOVEMBER 1988, BY REGION																														
	DISTRICT		DISTRICT		ALASKA		ARIZONA		ONA	A CALIF		HAWAII			IDAHO		NEVADA		A	OREGON			UTAH			WASH				
															·											-,				
DEPOSIT TYPE	СВ	SL	CU	СВ	SL	cu	СВ	SL	CU	св	SL	CU	СВ	SL	cu		CB SL	. cu	СВ	SL	cu	СВ	SL	CU	СВ	SL	cυ	CE	3 SL	CU
TOTAL DEPOSITS	46	50	4	72	9	19	53	43	4	41	55	3	65	30	5		86 11	3	65	32	3	66	29	5	58	33	8	54	\$ 39	7
DEMAND	93	5	2	. 98	. 1	1	94	4	2	93	5	2	94	3	3		99 1	0	100	0	0	96	2	2	91	7	- 3	95	54	1
NOW	60	33	7	51	16	34	64	28	8	56	38	6	72	25	3		88 7	5	77	16	7	76	18	6	69	22	10	64	4 24	12
SAVINGS & MMDA	58	34	8	54	8	37	65	27	8	56	37	7	61	29	10		87 9	4	69	26	5	70	21	9	62	19	19	55	5 30	15
SMALL TIME	26	72	3	69	20	10	40	58	2	.19	78	2	40	58	. 2		82 16	5 2	34	63	2	50	47	3	42	54	4	40	57	3
LARGE TIME	32	67	1	95	4	1	37	62	1	27	72	1	79	19	3		84 11	5	54	46	0	64	33	3	64	33	- 3	45	5 54	1
CB = COMMERCIAL BA	NKS;	SL	= S	AVING	SS 8	LO/	ANS A	ND	MUT	JÁL	SAVI	NGS	BAN	(S;	CU	=	CREDI	τU	NIONS	; MA	Y NO	T SL	JM 1	го 1	00%	DŲE	TO	ROUN	DING	3

STREET, NO.

Alaska Arizona California Hawaii Idaho Nevada Oregon Utah Washington

**Σοη Francisco** 

Federal Reserve

Research Department

gank of

	NALANALOS ALASARONS	ALEISTING TRANSPORT	and the following states of the second states of th	Sángha Mara Kontog	nere de la comune de la comune de	UNUS IN STRONG IN	RAN I ROMANNA	References		
		INTERES	T RATES	ON DE	POSITS AN	D LOA	NS (%)			
TYPE OF ACCOUNT OR LOAN	DATE	US	DISTRICT	ARIZONA	CALIF	HAWAII	IDAHO	OREGON	UTAH	WASH
MONEY MARKET DEPOSIT ACCOUNTS	SEP88	5.63	5.33	5.21	5.39	5.28	5.21	4.92	5.80	5.08
	00788	5.67	5.37	5.22	2 5.45	5.29	5.25	4.94	5.84	5.10
	NOV88	5.78	5.42	5.29	5.47	5.41	5.35	4.99	5.92	5.10
6-MONTH CERTIFICATES	SEP88	7.37	6.74	6.47	6.68	6.39	7.45	6.90	7.41	6.53
	0ĊT88	7.46	6.79	6.47	6.72	6.46	7.54	6.97	7.52	6.63
	NOV88	7.65	6.99	6.81	6.93	6.64	7.77	7.16	7.80	6.68
2-1/2 YEAR CERTIFICATES	SEP88	8.16	7.81	8.09	7.68	7.89	8.28	8.19	8.02	7.59
	00788	8.18	7.81	7.88	3 7.68	7.89	8.33	8.19	8.02	7.68
	NOV88	8.30	7.94	7.92	2 7.82	8.21	8.38	8.29	8.33	7.75
COMMERCIAL LOANS, SHORT-TERM*	NOV88	10.11	9.88	10.45	9.70	10.29	11.93	9.41	11.14	10.30
AVERAGE MATURITY (DAYS)		48	65	135	5 41	87	123	20	113	186
COMMERCIAL LOANS, LONG-TERM*	NOV88	10.79	11.03			N/A	11.72	12.44	11.34	10.16
AVERAGE MATURITY (MONTHS)		47	57	43	5 59	N/A	71	35	49	30
CONSTRUCTION LOANS*	NOV88	11.04	10.89	11.68	3 10.87	N/A	N/A	N/A	N/A	10.11
AVERAGE MATURITY (MONTHS)		7	20	5	20	N/A	N/A	N/A	N/A	3
OANS TO FARMERS*	NOV88	11.59	10.64	10.76	5 10.34	9.50	12.02	10.94	11.95	10.96
AVERAGE MATURITY (MONTHS)		7	6	9		45	9	. 5	9	8
CONSUMER LOANS, AUTOMOBILE	NOV88	11.22	11.60		-	N/A	13.00	10.50	11.25	10.96
CONSUMER LOANS, PERSONAL	NOV88	15.06	15.87			N/A	13.00	13.61	16.00	16.05
CONSUMER LOANS, CREDIT CARDS	NOV88	17.77	18.26			N/A	N/A	19.24	18.55	15.75
SOURCES: SURVEY OF TERM					CREDIT; MOST				SELECTED	ACCOUNTS

SURVEY OF TERM OF BANK LENDING & TERMS OF CONSUMER CREDIT; MOST COMMON INTEREST RATES ON SELECTED ACCOUN \* U.S. DATA ARE COMPOUNDED ANNUAL RATES, DISTRICT AND STATE DATA ARE SIMPLE ANNUAL RATES.