Web Appendix

This appendix includes 5 tables reporting empirical results that are referred to, but not presented, in our paper.

Table W-I reports the full results of the estimation that is summarized in table 3 of the published article.

Table W-II presents the results of estimating equation (1) with the addition of several variables.

Table W-III reports the results of estimating equation (1) with the sample restricted to banks that derive at least 50% of their deposits from a single market.

Table W-IV presents the results from a cross-sectional analysis of two-year price changes.

Table W-V contains definitions of variables included in Tables W-II and W-IV that do not appear in the published article.

Table W-I

Complete Regression Results for Equation 1
OLS with Robust Standard Errors[1]
Dependent Variable: $ratchg_{it}$

	NOW		MMDA		3MOCD	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
δ_2	-0.0309***	-5.37	-0.0251***	-5.36	-0.0392***	-8.92
δ_3	-0.0504***	-6.94	-0.0435***	-7.79	-0.0237***	-4.96
δ_4	0.0071	1.06	0.0026	0.43	0.0442***	8.87
δ_5	0.0248***	3.69	0.0247***	4.21	0.0627***	15.67
δ_6	0.0099**	2.24	0.0118**	2.54	0.0343***	9.78
δ_7	0.0268***	4.74	0.0191***	4.34	0.0511***	13.85
δ_8	0.0272***	4.22	0.0276***	6.61	0.0522***	15.27
δ_9	-0.0503***	-9.84	-0.0346***	-7.75	-0.0359***	-7.23
δ_{10}	0.0105**	2.07	0.0097*	1.95	0.0358***	7.55
δ_{11}	-0.0113*	-1.76	-0.0012	-0.34	0.0038	0.96
δ_{12}	0.0162***	3.01	0.0156***	3.10	0.0499***	11.46
δ_{13}	0.0348***	6.02	0.0270***	5.78	0.0705***	21.59
δ_{14}	0.0334***	7.21	0.0309***	11.07	0.0637***	20.61
δ_{15}	0.0344***	6.17	0.0296***	6.20	0.0522***	15.23
δ_{16}	0.0254***	4.65	0.0238***	5.53	0.0523***	15.08
δ_{17}	0.0240***	4.67	0.0226***	5.13	0.0475***	14.27
δ_{18}	0.0251***	4.35	0.0161***	3.29	0.0536***	14.68
δ_{19}	0.0298***	4.97	0.0386***	7.86	0.0607***	15.77
δ_{20}	0.0280***	4.48	0.0252***	6.23	0.0594***	15.76
δ_{21}	0.0339***	6.29	0.0296***	6.32	0.0626***	15.37
δ_{22}	0.0212***	3.36	0.0275***	6.84	0.0597***	19.49
δ_{23}	0.0098	0.69	0.0217***	3.30	0.0555***	18.27
δ_{24}	0.0308***	4.88	0.0292***	6.52	0.0652***	23.47
δ_{25}	0.0290***	4.75	0.0315***	7.89	0.0637***	19.31
δ_{26}	0.0436***	3.30	0.0349***	6.76	0.0627***	18.40
δ_{27}	0.0340***	6.15	0.0319***	8.23	0.0633***	22.16

	NOW		MMDA		3MOCD	
	Coeff	t-stat	Coeff	t-stat	Coeff	t-stat
δ_{28}	0.0342***	4.85	0.0374***	9.51	0.0744***	20.70
δ_{29}	0.0485***	4.48	0.0360***	8.25	0.0853***	18.43
δ_{30}	0.0491***	8.37	0.0497***	8.77	0.0894***	24.43
δ_{31}	0.0538***	10.04	0.0549***	10.02	0.0974***	19.39
δ_{32}	0.0530***	10.46	0.0487***	11.93	0.0807***	23.25
δ_{33}	0.0507***	10.18	0.0447***	9.22	0.0841***	20.94
δ_{34}	0.0565***	10.34	0.0530***	9.27	0.0945***	18.21
β_{-12}	-0.0254***	-3.87	-0.0000	-0.00	0.0024	0.61
β_{-11}	0.0164*	1.81	0.0004	0.02	0.0074	1.09
β_{-10}	-0.0041	-0.175	-0.0188	-1.11	0.0075	1.29
β_{-9}	-0.0344*	-1.76	0.0066	0.37	-0.0049	-0.46
β_{-8}	0.0118*	1.80	-0.0002	-0.02	0.0109	1.56
β_{-7}	-0.0118	1.29	-0.0010	-0.24	-0.0191***	-2.85
β_{-6}	-0.0130	-0.66	0.0012	0.23	0.0174	1.39
β_{-5}	0.0102	1.16	-0.0086	-0.73	-0.0171	-0.84
β_{-4}	-0.0033	-0.29	0.0003	0.02	0.0062	1.27
β_{-3}	-0.0133	-1.22	-0.0041	-0.40	-0.0070	-0.94
β_{-2}	-0.0045	-0.55	-0.0008	-0.10	-0.0008	-0.17
β_{-1}	-0.0105	-0.58	-0.0035	-0.25	-0.0012	-0.17
β_{0}	-0.0044	-0.26	0.0133	1.15	0.0002	0.04
β_{1}	-0.0096	-1.08	-0.0032	-0.51	0.0099	1.02
β_{2}	0.0026	0.31	-0.0015	-0.14	-0.0119	-1.08
β_{3}	0.0035	0.30	-0.0087	-0.75	0.0036	0.51
β_{4}	0.0006	0.05	-0.0039	-0.29	-0.0119	-1.19
β_{5}	-0.0142*	-1.69	-0.0086	-0.78	0.0019	0.21
β_{6}	-0.0135	-1.52	-0.0063	-1.21	0.0026	0.72
β_{7}	-0.0161*	1.92	0.0090	1.63	0.0022	0.64
β_{8}	-0.0007	-0.05	-0.0154	-1.11	0.0027	0.37
β_{9}	-0.0382**	-2.50	-0.0181	-1.30	-0.0142*	-1.91

Table W-I (cont'd)

	NOW		MMDA		3MOCD	
	Coeff	t-stat	Coeff	t-stat	Coeff	t-stat
β_{-10}	0.0100	0.85	0.0037	0.70	-0.0008	0.08
β_{-11}	-0.0297	-1.22	-0.0186	-1.32	0.0018	0.16
β_{-12}	0.0153	1.29	-0.0078	-0.43	-0.0051	-0.69
α	-0.0474***	-10.61	-0.0403***	-11.83	-0.0655***	-24.14
# of obs	12325		12515		12030	
R^2	0.0846		0.1362		0.3519	

1. The estimation technique employed here allows for the possibility of error correlation across observations within the same state.

*, **, *** denote significance at the 0.10, 0.05 and 0.01 levels, respectively.

Table W-II

Summary of Results for Equation 1 with Additional Variables Included[1]
OLS with Robust Standard Errors[2]
Dependent Variable: $ratchg_{it}$

	NOW		MMDA		3MOCD	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
PREMERGER EFFECT	-0.0812	-1.509	-0.0182	-0.664	0.0008	0.049
POST MERGER EFFECT	-0.1005***	-3.243	-0.0880***	-4.137	-0.0269	-1.171
TOTAL EFFECT	-0.1816***	-3.037	-0.1062***	-3.044	-0.0261	-0.826
INITIALRATE[3]	-0.1661**	-2.025	-0.1616***	-3.242	-0.2388**	-2.032
ASSETS[3]	-0.0001	-1.116	-0.0000	-0.047	0.0001**	2.668
ΔASSETS[3]	-0.0000	0.113	0.0000	0.096	-0.0001	-0.682
MSADUM[3]	-0.0054***	-6.387	-0.0027***	-4.910	-0.0017**	-2.116
ΔINCOME[3]	-0.0281	-1.516	-0.0022	-0.168	0.0194	1.411
# of obs.	10322		10401		9978	
# of banks	311		312		305	
Ave. obs. per bank	33.19		33.34		32.71	
Regression R^2	0.0818		0.1374		0.3595	

1. Each regression includes 8 regional indicator variables, 33 month indicators and 25 weighted merger indicators. Coefficients for these variables are not reported in order to conserve space.

2. The estimation technique employed here allows for the possibility of error correlation across observations within the same state.

3. See table W-V for variable definition.

*, **, *** denote significance at the 0.10, 0.05 and 0.01 levels, respectively.

Table W-III

Summary of Results with Sample Restricted to Firms Deriving
at Least 50% of Deposits from a Single Banking Market[1]
OLS with Robust Standard Errors[2]
Dependent Variable: $ratchg_{it}$

	NOW		MMDA		3MOCD	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
PREMERGER EFFECT	-0.0677	-1.101	0.0034	0.096	0.0070	0.417
POST MERGER EFFECT	-0.0738**	-2.231	-0.0705***	-3.613	-0.0133	-0.563
TOTAL EFFECT	-0.1415*	-1.989	-0.0671	-1.53	-0.0064	-0.193
# of obs.	12252		12405		11884	
# of banks	389		394		385	
Ave. obs. per bank	31.50		31.48		30.87	
Regression R^2	0.0816		0.1354		0.3452	

1. Each regression includes 33 month indicators and 25 weighted merger indicators. Coefficients for these variables are not reported in order to conserve space.

2. The estimation technique employed here allows for the possibility of error correlation across observations within the same state.

*, **, *** denote significance at the 0.10, 0.05 and 0.01 levels, respectively.

Table W-IV

Results of Cross Sectional Analysis[1]
OLS with Robust Standard Errors[2]

	NOW		MMDA		3MOCD	
	Coeff.	t-stat	Coeff.	t-stat	Coeff.	t-stat
INITIALRATE[3]	-11.3809***	-3.530	-12.9875***	-5.579	-11.0985**	-2.660
ASSETS[3]	-0.0008	-0.304	0.0013	0.781	0.0027***	3.974
ΔASSETS[3]	-0.0001	-0.022	0.0031	0.784	-0.0019	-0.523
MSADUM[3]	-0.1101***	-2.670	-0.0464**	-2.337	-0.0184	-0.783
ΔINCOME[3]	-0.7271	-1.268	0.4111	1.245	0.6375	1.438
MERGERDUM	-0.1444***	-3.807	-0.1459***	-5.428	-0.0443	-1.110
INTERCEPT	0.0001	0.001	0.2184**	2.173	0.2036	1.355

Eight regional dummy variables included but not reported.

ADJ. R^2	0.3083		0.3125		0.2606	

1. The estimated equations are:

$$\ln (RATE_{i,34}/RATE_{i,1}) = \gamma_0 + \gamma_1 \, INITIALRATE_i + \gamma_2 \, ASSETS_i + \gamma_3 \, \Delta ASSETS_i +$$

$$\gamma_4 \, MSADUM_i + \gamma_5 \, \Delta INCOME_i + \gamma_6 \, MERGERDUM_i + \sum_{j=1}^{8} O_j \, REGIONDUM_{ji} + \epsilon_i$$

2. The estimation technique employed here allows for the possibility of error correlation across observations within the same state.

3. See table W-V for variable definitions.

*, **, *** denote significance at the 0.10, 0.05, and 0.01 levels, respectively.

Table W-V

Variable Definitions

$ASSETS_i$	Bank i's total assets as of 1992.
$\Delta ASSETS_i$	Change in bank i's total assets from 1992 to 1994.
$\Delta INCOME_i$	Deposit weighted change in Total Personal Income in area served by bank i from 1991 to 1993.
$INITIALRATE_i$	Deposit interest rate offered by bank i at the end of October 1991.
$MERGERDUM_i$	Deposit weighted dummy variable indicating whether or not bank i operated in a market where a substantial horizontal merger occurred between January 1, 1991 and June 30, 1994.
$MSADUM_i$	Deposit weighted dummy variable indicating whether or not bank i operates in an MSA.
$RATE_{it}$	Deposit interest rate offered by bank i in month t.
$REGIONDUM_{ji}$	Dummy variable indicating whether or not bank i operates in region j.