FRBSF Economic Letter

Number 2002-12, April 26, 2002

Is There a Credit Crunch?

Recently, some concerns about a "credit crunch" in the U.S. economy have appeared in the business press. In the commercial paper market, a number of large firms were reportedly unable to borrow from this market, as investors reassessed the credit risk of these firms amid growing accounting concerns. In the bank loan market, total commercial and industrial (C&I) lending has fallen quite substantially. Business credit is the lifeblood of economic activity, so it is very important that the credit market function properly and smoothly. This *Economic Letter* examines recent developments on credit availability to businesses, focusing specifically on the issue of a credit crunch, or credit rationing, in which creditworthy borrowers are denied credit.

The commercial paper market

Commercial paper—short-term, unsecured promissory notes issued by corporations—is a low-cost alternative to bank loans. In order to offer commercial paper at competitive rates, the issuers must be large and reputable firms, so that institutional investors can trust in their creditworthiness. The market for nonfinancial commercial paper has grown rapidly in recent years, peaking at $351 billion in November 2000. Since then, it has fallen over 40% to about $200 billion. While some of the recent drop-off was related to the well-publicized problems faced by a few large companies that could no longer tap the commercial paper market, the decline started much earlier. Part of the decline is due to the softening demand for short-term financing as economic activity slowed in early 2001. Indeed, the current downturn in commercial paper started just a few months before the economy went into a recession.

It is important to gain some perspective on the recent instances where a number of large firms were shut out of the commercial paper market. In providing very short-term, unsecured financing, commercial paper investors place a high value on safety, and they deal almost exclusively with only high-quality borrowers. Thus, whenever there is even a small doubt about a firm's creditworthiness, investors simply bypass this firm's commercial paper altogether. At the same time, it may not be economical for the firm to raise its commercial paper yield to entice investors, as the firm may find it cheaper to borrow from a specialized lender like a bank, which usually provides back-up lines of credit to commercial paper issuers. Thus, the recent episode reflects more about how the commercial paper market works than about an environment of unusual credit rationing. So far, there is little evidence to suggest that high-quality borrowers cannot access this market.

In addition, the interest rate on high-grade commercial paper continues to track the default-free Treasury rate very closely. Thus, there is no sign that high-quality borrowers have to pay more on commercial paper financing. Nevertheless, the spread between the highest grade and the second-tier commercial paper has widened somewhat recently. This may be due to the heightened sensitivity to credit risk in this market amid growing concerns about accounting practices and transparency among several large commercial paper issuers. Overall, the relatively small interest rate differentiation in the commercial paper market again suggests that only high-quality borrowers can access this market.

Bank C&I lending

In the bank loan market, commercial banks also have been tightening their standards for C&I lending to both large and small borrowers for quite some time, as indicated in the Federal Reserve Senior Loan Officer Opinion Survey (2002). At the same time, the survey also points to falling loan demand faced by banks amid a slowing economy. With both supply and demand factors at work, seasonally adjusted bank C&I lending has fallen 7.5% to around $1 trillion since the recession started (Figure 1), a much steeper decline than in prior recessions.

At issue in determining whether there is a credit crunch is what is happening on the supply side. Specifically, are the tighter lending standards a response to the changing creditworthiness of the borrowers, or are they driven by something else? Tightening in response to declining repayment capability of the borrowers is a rational business decision that is the key to a healthy banking sector; however, tightening that is unrelated to the borrowers' fundamentals is a cause for concern. So

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.

Figure 1
Bank C&I lending

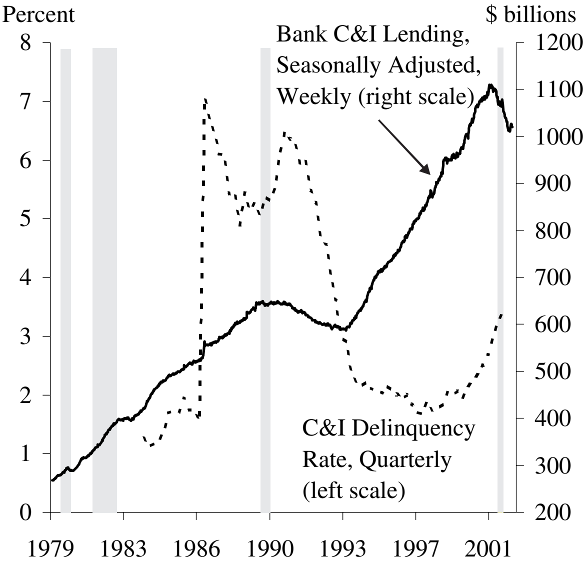
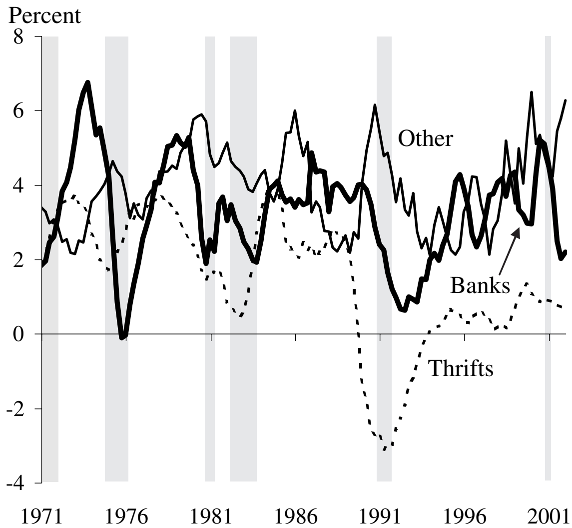


Figure 2
Net household borrowing and business external financing relative to GDP



far, the evidence seems to suggest the former, not the latter.

First, the C&I loan delinquency rate has been climbing steadily since 2000 and shows signs of acceleration towards the end of 2001 (Figure 1). Part of the pickup in loan defaults has to do with banks' lax lending standards during the boom years. Thus, facing a growing bad loan problem, it seems logical for banks to rein in their lending standards to be more in line with economic fundamentals. Second, the slowing economy was expected to worsen borrowers' repayment capability going forward. Indeed, the Loan Officer Survey indicated that concerns about the economic outlook were the main reason banks tightened their lending standards. Hence, while some borrowers may see their credit rating downgraded by banks and must incur higher borrowing costs, other marginal borrowers would no longer meet the bank's minimal lending standards and must be denied credit. Quite clearly, this kind of tightening is a rational response to the borrower's changing condition and should not be confused with credit rationing. Third, banks in general are highly profitable and have strong capital positions. Unlike the early 1990s, when banks restrained lending due to low capital, now we do not seem to see readily identifiable supply factors in the banking industry that may cause banks to refuse to lend to creditworthy borrowers.

Finally, data on total credit flows indicates that, while C&I loans and commercial paper volume are contracting, total business debt is still growing at a healthy pace. In particular, Figure 2 shows that the decline in bank lending is more or less offset by the robust credit extension by other lenders, including finance companies, long-term bond holders, as well as real estate and other asset-based lenders. This was not the case in prior recessions.

Conclusions

The significant drop-off in nonfinancial commercial paper and the sharp decline in bank C&I lending have raised concerns about credit availability to business borrowers. But so far, there is no indication that truly creditworthy borrowers cannot obtain credit, as evidenced by the healthy growth in total business debt. The declines in commercial paper and C&I lending both coincided with slowing economic activity and are consistent with falling demand for short-term credit by businesses. To the extent that firms that were squeezed out of the credit market are indeed marginal borrowers, this is nothing more than normal market forces at work.

Simon Kwan
Research Advisor

Reference

January 2002 Senior Loan Officer Opinion Survey on Bank Lending Practices, Board of Governors of the Federal Reserve System.

BANKS HEADQUARTERED BY REGION
DECEMBER 31, 2001
(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	6,509,496	1,039,358	5,470,139	642,538	93,684	548,853
	FOREIGN	738,057	941	737,116	3,879	18	3,861
	DOMESTIC	5,771,439	1,038,416	4,733,023	638,659	93,667	544,992
LOANS	TOTAL	3,863,261	666,598	3,196,664	406,145	63,079	343,067
	FOREIGN	286,024	863	285,161	2,601	48	2,553
	DOMESTIC	3,577,238	665,735	2,911,503	403,545	63,031	340,514
	REAL ESTATE	1,754,087	431,264	1,322,823	212,116	40,066	172,050
	COMMERCIAL RE	503,974	157,768	346,206	75,991	21,207	54,783
	SINGLE FAMILY RES	959,279	184,391	774,887	96,867	8,062	88,805
	COMMERCIAL	822,697	117,241	705,456	89,583	13,951	75,632
	CONSUMER	572,445	74,996	497,450	78,400	6,585	71,815
	CREDIT CARDS	231,201	7,326	223,874	53,337	1,534	51,802
	AGRICULTURAL	46,741	29,762	16,978	6,282	1,501	4,781
	OTHER LOANS	381,267	12,472	368,795	17,164	928	16,236
INV. SECURITIES	TOTAL	1,156,867	238,564	918,303	123,253	16,108	107,145
	U.S. TREASURIES	44,203	11,808	32,395	3,327	814	2,513
	U.S. AGENCIES, TOTAL	700,571	160,726	539,845	51,762	10,483	41,279
	U.S. AGENCIES, MBS	515,593	73,491	442,103	37,905	5,466	32,439
	OTHER MBS	88,080	4,171	83,909	12,243	581	11,662
	OTHER SECURITIES	324,013	61,859	262,154	55,920	4,230	51,690
LIABILITIES	TOTAL	5,906,544	935,981	4,970,563	574,608	83,539	491,068
	DOMESTIC	5,168,487	935,040	4,233,447	570,729	83,522	487,207
DEPOSITS	TOTAL	4,357,869	854,635	3,503,234	436,015	75,242	360,773
	FOREIGN	629,254	1,508	627,746	12,668	44	12,624
	DOMESTIC	3,728,615	853,128	2,875,488	423,346	75,197	348,149
	DEMAND	570,667	121,282	449,385	58,268	12,037	46,232
	MMDA & SAVINGS	1,711,585	239,755	1,471,830	238,896	27,118	211,778
	SMALL TIME	736,011	262,782	473,229	51,971	15,429	36,542
	LARGE TIME	542,280	136,390	405,890	60,320	15,675	44,644
	OTHER DEPOSITS	168,072	92,919	75,153	13,892	4,938	8,954
OTHER BORROWINGS		453,190	24,158	429,032	42,591	1,553	41,038
EQUITY CAPITAL		593,298	103,340	489,958	67,761	10,142	57,619
LOAN LOSS RESERVE		71,683	9,549	62,133	8,774	1,300	7,475
LOAN COMMITMENTS		4,866,898	654,816	4,212,083	780,736	322,694	458,042
TIER1 CAPITAL RATIO		0.099	0.135	0.093	0.108	0.127	0.105
TOTAL CAPITAL RATIO		0.127	0.146	0.124	0.136	0.140	0.136
LEVERAGE RATIO		0.078	0.095	0.075	0.089	0.100	0.087
LOAN LOSS RESERVE RATIO		1.856	1.433	1.944	2.160	2.060	2.179
QUARTERLY EARNINGS AND RETURNS — $ MILLION							
INCOME	TOTAL	145,972	21,480	124,492	13,593	2,329	11,264
	INTEREST	100,469	17,299	83,169	9,480	1,687	7,792
	FEES & CHARGES	7,344	1,118	6,226	519	77	442
EXPENSES	TOTAL	115,650	17,489	98,161	9,517	1,923	7,594
	INTEREST	40,275	6,964	33,311	2,657	529	2,128
	SALARIES	25,530	4,548	20,983	2,088	527	1,560
	LOAN LOSS PROVISION	15,412	1,215	14,197	1,429	222	1,207
	OTHER	34,433	4,763	29,670	3,344	645	2,699
TAXES		8,886	1,087	7,798	1,369	140	1,229
NET INCOME		19,311	2,773	16,538	2,473	232	2,242
ROA (% ANNUALIZED)		1.190	1.083	1.210	1.579	0.999	1.680
ROE (% ANNUALIZED)		13.019	10.733	13.501	14.599	9.133	15.562
NET INTEREST MARGIN (% ANNUALIZED)		3.709	4.038	3.648	4.356	4.999	4.244
ASSET QUALITY — PERCENT OF LOANS							
NET CHARGEOFFS (% ANNUALIZED)							
	TOTAL	1.341	0.567	1.503	1.485	0.973	1.579
	REAL ESTATE	0.220	0.144	0.244	0.107	0.101	0.109
	COMMERCIAL	2.512	1.239	2.687	2.159	1.499	2.278
	CONSUMER	3.345	1.925	3.539	4.727	5.104	4.692
	CREDIT CARDS	6.276	8.324	6.209	6.422	13.571	6.210
	AGRICULTURAL	0.347	0.418	0.228	-0.075	0.752	-0.334
PAST DUE & NON-ACCRUAL							
	TOTAL	2.765	2.412	2.838	2.535	2.348	2.569
	REAL ESTATE	2.151	2.121	2.161	1.819	1.555	1.880
	CONSTRUCTION	2.270	2.172	2.306	2.653	1.869	2.962
	COMMERCIAL	1.867	1.849	1.875	1.385	1.296	1.420
	FARM	2.567	2.264	3.236	4.557	4.665	4.499
	HOME EQUITY LINES	1.304	1.159	1.323	1.134	1.000	1.156
	MORTGAGES	2.616	2.522	2.640	2.089	2.114	2.087
	MULTI-FAMILY	1.117	1.150	1.108	0.707	0.588	0.744
	COMMERCIAL	3.416	2.854	3.493	3.460	2.973	3.548
	CONSUMER	3.945	3.623	3.989	3.471	5.866	3.252
	CREDIT CARDS	4.844	8.218	4.734	4.057	12.577	3.804
	AGRICULTURAL	2.324	1.530	3.660	4.022	1.932	4.678
NUMBER OF BANKS		8,061	7,670	391	572	497	75
NUMBER OF EMPLOYEES		1,689,726	386,928	1,302,798	155,824	36,910	118,914

Economic Research

Federal Reserve Bank of San Francisco

P.O. Box 7702
San Francisco, CA 94120
Address Service Requested

Printed on recycled paper
with soybean inks

INTEREST RATES ON LOANS

TYPE OF LOAN		NOV 1999	FEB 2000	MAY 2000	AUG 2000	NOV 2000	FEB 2001	MAY 2001	AUG 2001	NOV 2001	FEB 2002
COMMERCIAL and INDUSTRIAL LOANS											
TOTAL	U.S.	7.03	7.44	7.78	8.28	8.15	7.19	6.22	5.61	3.89	3.66
	DISTRICT	6.98	7.04	7.42	7.90	7.85	7.04	5.94	5.22	3.58	3.36
BY RISK RATING:											
MINIMAL RISK	U.S.	6.01	6.47	6.82	7.42	7.54	6.23	6.01	4.50	2.97	2.10
	DISTRICT	6.36	6.49	6.19	7.25	6.66	6.54	4.98	4.46	2.88	2.59
LOW RISK	U.S.	6.52	6.87	7.15	7.55	7.57	6.54	5.44	4.81	3.08	3.41
	DISTRICT	6.74	6.79	6.99	7.65	7.68	6.53	5.42	4.66	3.14	2.91
MODERATE RISK	U.S.	7.22	7.54	7.97	8.41	8.33	7.28	6.38	5.57	4.25	3.89
	DISTRICT	7.15	7.15	7.57	8.06	8.04	7.51	6.35	5.54	3.84	3.48
OTHER	U.S.	7.71	8.24	8.63	8.95	8.85	7.97	6.82	6.16	4.31	4.01
	DISTRICT	6.93	7.23	7.57	8.00	7.79	7.70	6.64	6.35	4.39	3.98
BY MATURITY/REPRICING INTERVAL:											
DAILY	U.S.	6.43	6.84	7.21	7.74	7.84	6.88	5.94	5.15	3.67	3.10
	DISTRICT	7.08	6.87	7.59	7.94	7.85	7.22	6.03	5.33	3.91	3.71
2 TO 30 DAYS	U.S.	6.80	7.42	7.60	8.18	7.60	6.94	5.80	5.84	3.66	3.61
	DISTRICT	6.86	7.00	7.37	7.83	7.78	6.96	5.87	5.16	3.47	3.25
31 TO 365 DAYS	U.S.	7.58	7.67	8.04	8.13	8.04	7.22	5.90	5.42	3.94	3.74
	DISTRICT	6.85	6.96	7.05	7.70	7.68	6.39	5.47	4.72	3.23	2.88
OVER 365 DAYS	U.S.	8.02	8.81	8.37	8.84	8.37	8.48	7.61	7.02	6.09	5.66
	DISTRICT	8.28	7.90	4.64	8.72	9.03	7.36	7.70	7.30	5.08	5.71
CONSUMER, AUTOMOBILE	U.S.	8.66	8.88	9.21	9.62	9.63	9.17	8.67	8.31	7.86	7.50
	DISTRICT	9.07	9.28	9.23	9.87	9.87	9.94	9.34	8.34	8.54	8.32
CONSUMER, PERSONAL	U.S.	13.52	13.76	13.88	13.85	14.12	13.71	13.28	13.25	12.62	11.72
	DISTRICT	14.45	14.41	14.89	13.25	13.25	13.67	12.48	13.22	12.45	14.39
CONSUMER, CREDIT CARD	U.S.	15.13	15.47	15.39	15.98	15.99	15.66	15.07	14.60	14.22	13.65
	DISTRICT	15.63	15.60	15.76	16.16	16.25	16.94	15.54	15.28	15.01	13.21

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