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# FRBSF WEEKLY LETTER

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## Is Competitive Banking Stable?

Despite the frequent reference to the term "deregulation", used to describe the financial regulatory reforms and innovations of the past several years, the current reforms are not designed to remove all types of government regulation. In fact, many depository institutions are now subject to more of some types of regulation than before.

The recent reforms are designed primarily to remove or relax key constraints on the competitive behavior of depository institutions. The depository system is undoubtedly more competitive now than before 1980, and it is likely that deregulation will continue and further increase this competitiveness.

The benefits of deregulation have been substantial. However, many have expressed concern about further efforts to increase competition among depository institutions. Some argue that deregulation has been pursued too aggressively and, as a result, has induced depository institutions to engage in portfolio activities that are inconsistent with their role in the national payments system.

The issue has been intensified by recent events such as the sharp increase in the bank failure rate since 1980, the well-publicized difficulties of Continental Illinois Bank, the increasing number of banks listed as "problem banks", and the Ohio S&L crisis. Whether these events are related to the deregulation process is open to debate. The events themselves, however, have renewed concerns about the stability of competitive banking.

This *Letter* explores three related issues. First, I discuss the meaning of a competitive unregulated banking system and indicate that "contagion" effects are critical to rendering such a system unstable. Second, I review recent studies of two historical cases when banking was subject to little or no government regulation. And third, I draw some implications from these historical cases for the deregulation process of the 1980s.

### **An interpretation of banking instability**

To determine whether banking is inherently unstable, one must distinguish between economy-wide and local shocks. Large numbers of bank failures spread over a wide geographic area as a result of an economy-wide shock is not proof that the banking system is inherently unstable since by definition such a shock would affect the majority of banks. Inherent instability is characteristic of a banking system in which local shocks, which affect only a few banks, threaten the continued operation of other banks. Contagion is thus a necessary condition for the concept of inherent instability in banking.

Unregulated banking has traditionally been viewed as subject to contagion effects, and hence, inherently unstable, for four reasons. First, banks operate under a fractional reserve system in which only a small percentage of reserves are available to meet deposit withdrawals. Thus, banks are unable to convert large amounts of outstanding deposits into currency should depositors wish to withdraw funds on short notice. Second, depositors have incomplete information about the ability of banks not affected by a local shock to remain in operation. Hence, they are not sure whether the other banks will be able to convert deposits into currency at par. Lack of knowledge induces depositors to withdraw funds from the unaffected banks and thereby possibly force them to close.

Third, competition among banks presumably forces each bank to accept riskier portfolios of assets and liabilities than is prudent for institutions whose liabilities (deposits) constitute part of the nation's money supply. Fourth, competitive unregulated banks may resort to fraud and deliberately misinform the public about their operations. They thus generate public distrust of banking and raise the probability that banks will fail.

The view that banking is inherently unstable has had significant public policy implications. Policies designed to monitor bank portfolio opera-

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tions, limit individual bank risk, and provide lender of last resort services have been strongly influenced by the view that unregulated banking is unstable. At the same time, even an inherently stable banking system may benefit from some types of regulation to protect the system from economy-wide shocks and/or to provide the public with sufficient information to judge the quality of individual banks.

## **Evidence from two banking eras**

The view that unregulated competitive banking is inherently unstable has been difficult to test empirically because there have been few periods in recent history when banks functioned in an unregulated environment. At a minimum, the following conditions must hold to define such an environment: banks must be subject to little or no government regulation that restricts their portfolio opportunities; there must be a large number of banks; and entry into and exit from the banking industry must be relatively easy.

The banking conditions of the Great Depression do not qualify because banks were then subject to government regulation. In addition, the banking system experienced a series of economy-wide shocks that make it difficult to isolate contagion effects. We must turn to earlier historical periods for examples of unregulated competitive banking.

Two interesting periods appear to satisfy the institutional requirements of unregulated competitive banking: the "Free Banking Eras" in the U.S. from 1837 to 1863 and in Scotland from 1800 to 1845.

The Free Banking Era in the U.S. has traditionally been regarded as strong evidence that competitive banking in the absence of extensive regulation is unstable. High rates of inflation in the late 1830s and a sharp recession in the early 1840s, which has been compared to the first few years of the Great Depression in its intensity, were regarded as the outcome of unstable banking. Accounts of the period emphasized the high number of bank failures, bank panics, and the large number of bank notes that circulated at various rates of discount as evidence of unstable banking that destabilized the economy.

Perhaps the most oft-cited facet of unstable banking during this period consists of the so-called "wildcat banks", which many observers claimed dominated the banking scene. Wildcat banks were established in remote areas (where only wildcats roamed) and issued bank notes in excess of the value of their assets. The remote locations made it difficult to convert notes into specie.

This traditional view has been challenged by economists Arthur J. Rolnick and Warren E. Weber (1983) in their detailed study of state auditor reports for New York, Indiana, Wisconsin, and Minnesota. They found evidence that local failures were not contagious, that many banks did not fail, that failed banks frequently redeemed notes at par, that total losses to note-holders resulting from bank failures were much smaller than originally thought, and that wildcat banking was not a major part of the banking scene.

Rolnick and Weber have not, however, demonstrated unambiguously that banking in the absence of any regulation was stable. While there was no federal regulation during this period, banks were subject to varying degrees of regulation at the state level. State regulation was minimal, but its existence leaves us uncertain as to whether a competitive and completely unregulated banking system would be stable or not.

The Free Banking Era in Scotland offers stronger support for the hypothesis that competitive banking can be stable. During the first half of the nineteenth century, Scotland had no central bank; bank entry and exit were unrestricted; and note issuance was universal and unregulated. Unlike U.S. banks, which were subject to some government regulation, Scottish banks were free of government regulation for all practical purposes.

Lawrence White (1984), economist, has presented convincing evidence that unregulated banking in Scotland was stable, competitive, and supported significant economic growth. He found that local shocks and local bank failures did not spread, banks held adequate reserves, bank notes circulated at par, banks that failed

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frequently compensated the majority of note-holders fully, and the widespread use of extended liability provision for bank shareholders ensured that banks were conservatively operated. In addition, Scotland experienced no problem with the kind of wildcat banking that played a role in the U.S. experience.

Together, these two studies challenge the traditional view that competitive banking in the presence of minimal or no government regulation is inherently unstable. Both studies suggest that contagion was not a characteristic of the banking system, that individual banks had strong economic incentives not to "overissue" bank notes or deposits, and that the public had adequate information on which to judge the quality of individual banks.

#### **Implications for the 1980s**

The reinterpretation of the U.S. experience and the new evidence regarding Scotland appear to refute the instability hypothesis. However, the evidence must be regarded as only suggestive at this time. The data are not detailed enough in either case to provide strong empirical tests of the instability hypothesis. Furthermore, both situations lacked highly integrated interbank and financial markets that might have increased the degree of actual contagion. And both banking systems used a commodity-based, rather than a

fiat-based, monetary standard that may have been responsible for the apparent stability.

Historical re-evaluations of the two periods will surely generate debate and further research. Assuming that these recent historical studies are correct, what lessons can we draw?

First, efforts to remove constraints on competitive behavior should not be held back by fears that increased competition will generate instability in the banking system. While some individual banks will cease to exist in a more competitive environment, their passing will not destabilize the banking system. Competitive banking is not necessarily unstable and contagion is not necessarily characteristic of competitive banking.

Second, while the studies are consistent with the view that competitive banking was stable over 100 years ago, this does not mean that government regulation cannot improve the performance of a competitive banking system. Deposit insurance, audits, and financial disclosure requirements are ways in which regulation could improve the performance of a competitive banking system.

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**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**  
(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount	Change	Change from 3/27/85	
	Outstanding 3/26/86	from 3/19/86	Dollar	Percent <sup>7</sup>
Loans, Leases and Investments <sup>1 2</sup>	200,725	-1,455	11,201	5.9
Loans and Leases <sup>1 6</sup>	182,224	-1,398	10,336	6.0
Commercial and Industrial	52,440	- 670	- 696	- 1.3
Real estate	66,472	3	3,846	6.1
Loans to Individuals	38,977	- 4	5,806	17.5
Leases	5,651	3	328	6.1
U.S. Treasury and Agency Securities <sup>2</sup>	10,568	- 9	- 123	- 1.1
Other Securities <sup>2</sup>	7,934	- 49	988	14.2
Total Deposits	199,322	- 777	5,648	2.9
Demand Deposits	46,710	- 843	2,458	5.5
Demand Deposits Adjusted <sup>3</sup>	32,048	- 269	3,338	11.6
Other Transaction Balances <sup>4</sup>	15,204	- 122	2,098	16.0
Total Non-Transaction Balances <sup>6</sup>	137,408	188	1,093	0.8
Money Market Deposit Accounts—Total	45,903	- 47	2,012	4.5
Time Deposits in Amounts of \$100,000 or more	37,750	205	- 1,313	- 3.3
Other Liabilities for Borrowed Money <sup>5</sup>	26,564	649	8,060	43.5
<b>Two Week Averages of Daily Figures</b>	Period ended 3/24/86	Period ended 3/10/86		
<b>Reserve Position, All Reporting Banks</b>				
Excess Reserves (+)/Deficiency (-)	135	22		
Borrowings	10	30		
Net free reserves (+)/Net borrowed(-)	125	- 8		

<sup>1</sup> Includes loss reserves, unearned income, excludes interbank loans

<sup>2</sup> Excludes trading account securities

<sup>3</sup> Excludes U.S. government and depository institution deposits and cash items

<sup>4</sup> ATS, NOW, Super NOW and savings accounts with telephone transfers

<sup>5</sup> Includes borrowing via FRB, TT&L notes, Fed Funds, RPs and other sources

<sup>6</sup> Includes items not shown separately

<sup>7</sup> Annualized percent change