

## **Alan Greenspan: Cyclical and banking regulation**

Remarks by Mr Alan Greenspan, Chairman of the Board of Governors of the US Federal Reserve System, at the Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, Chicago, Illinois, 10 May 2002.

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My congratulations to Mike Moskow and his colleagues for once again designing and implementing an excellent and topical program, with some very interesting papers. The theme of the conference--Financial Market Behavior and Appropriate Regulation Over the Business Cycle--could not be more relevant for a group of central and commercial bankers, not to mention our academic friends.

To be sure, there are those that believe that a regulation should be considered totally independently of either current business conditions or the regulation's implications for financial markets. This position is predicated on the view that the reason for the regulation--in the case of financial markets, usually prudential behavior, consumer protection, or community reinvestment--is an end in itself and should require that macro policymakers adjust to the regulation. Indeed, some of what we do is that. But our emphasis today is the need to be sensitive to the market and cyclical implications of the regulations we adopt. The conference theme does not imply cyclical effects or market responses should dominate the decision about applying a rule that may be needed for other purposes. Rather, our assignment at this conference is to consider, as part of the policymaking and evaluation process, the joint implications of our regulatory--and, I should add, our supervisory--policies both for their intended purposes and for financial markets and cyclical stability.

### **Cyclical in financial markets and intermediation**

Financial markets and intermediaries are part of the macroeconomic cyclical process, and thus new rules involving these markets and institutions need to be evaluated in that context. This is an important reason, in my judgment, why central banks in general, and the Federal Reserve in particular, should remain in the bank regulatory business.

It is evident that regulatory rules can add to ongoing macroeconomic and asset- quality cyclical. Rules are constraints or limits that require responses as those limits are approached. Sometimes those limits--say capital constraints--may induce tighter lending standards or shrinking balance sheets for a number of institutions at the same time, engendering significant real business-cycle effects. We must, therefore, be aware of the implications beyond the original intent of a rule and consider its associated tradeoffs.

Government programs, too, often have unintended business-cycle effects. The safety net--particularly deposit insurance and access to the discount window--clearly has an impact beyond the stability it brings by containing the deposit runs that once led to financial implosion. It induces intermediaries to take on more risk with less capital, creating what is arguably the largest problem facing modern bank supervisors--wide swings in credit quality.

Even without government rules, however, cyclical still would exist in financial markets, the real economy, and in the actions of financial intermediaries. Cyclical financial volatility, for example, was significant from the Civil War to World War I, a period that--abstracting from some of the perverse currency rules that came from the Banking Act of 1863--was not characterized by substantial regulation and rulemaking.

Moreover, behavioral factors, even if there were no rules or regulations, would still be a formidable force in inducing cyclical changes in both the quantity and the quality of assets acquired and issued in the financial sector. The most basic is human response to risk. The often-repeated pattern in financial markets has been the periodic shift in risk attitudes, initiated by the state of the economy, among lenders and other asset holders. History instructs us that, during recoveries and booms, risk discounts erode as the level of optimism lowers the barriers to prudence. Even those lenders less inclined to reach for more risk-laden proposals are driven to maintain their share of the rising credit flow, if not to increase it.

The only way bankers can adhere to lending policies significantly more stringent than those of their competitors is to effectively exit significant areas of banking, pending, in their judgment, the return of

sanity to banking practices. Such an approach, however, is not consistent with a viable long-term banking franchise. To the majority of banks, the environment of contagious optimism makes more and more proposals seem bankable. Ever less attention is paid to potential problems as the cautious voices appear curiously quaint and have little quantitative support because all the recent news and facts are favorable. Even the supervisors and policymakers tend to be caught up by the process. Their voices of caution are rarely raised because they, too, find it difficult to make a case for restraint because the quantitative indicators do not support caution until too late in the lending expansion.

As cyclical imbalances inevitably develop, the typical pattern has been an evaporation of optimism among lenders and asset holders and a herdlike propensity to seek an increase in risk premiums. As the economy deteriorates, fewer projects seem attractive as more of the previously extended credits become nonperforming. Cautious voices, including those of the supervisors, become prominent, now supported by the increasing evidence of deterioration. In such a situation, the supervisors call for more chargeoffs and higher capital. Credit becomes less available, and risk spreads widen, adding to the pressures for a further business contraction.

The persistence of this self-reinforcing cycle is evidence that, despite the obvious advances in risk management over the years, our abilities to peer into the future, regrettably, have not improved all that much. Hindsight clearly underscores the value of countercyclical lending standards that would smooth out fluctuations in net interest earnings and thereby maximize the capitalized value of the bank. A broader recognition by the banking community of how important enhancing risk management is to the long-term value of the bank would effectively align the incentives of lending officers with regulators' desire for reduced cyclicity.

At the largest banks especially, the swings in lending policies seem to have become more pronounced over, say, the last twenty years or so as the average quality of their credit portfolios has declined with the increased reliance of high-quality borrowers on money and capital markets rather than banks. Notwithstanding well-diversified portfolios at these larger banks, the loss of their highest-quality borrowers has elevated the aggregate risks in their portfolios. To be sure, borrowers are affected by the business cycle. But though the earnings of high-quality borrowers may fluctuate, even widely fluctuate, with the business cycle, the range of default probabilities tends to be more muted than that for other borrowers. The solvency of borrowers with lower credit ratings is more vulnerable to the business cycle than is that of borrowers with Aaa ratings, whose concern is more with profit erosion during business retrenchments than with solvency. Hence a credit portfolio increasingly composed of lesser-quality credits is bound to have a greater cyclicity in nonperforming loans.

The loss of high-quality borrowers thus introduces not only systematic vulnerabilities but also portfolios that are less idiosyncratic and more sensitive to the business cycle. Idiosyncratic risks have always loomed larger in small bank portfolios because their borrowers' well-being reflects such a wide range of factors, especially local and regional developments. In an integrated economy like ours, small bank lenders are affected by national business conditions, just less so than lenders to large firms.

### **Formal risk management in banking**

The large institutions, with their declining overall asset quality, understandably have pioneered more-formal risk-management techniques designed to capture quantitatively the changing riskiness of exposures and presumably induce more rapid responses to such measures. This is the latest development in a changing balance of power between lending officers and risk-control officers. The lending officers, in a competitive economy, may tend to be more interested in getting business than in evaluating risk. Before the most recent period, risk officers often have not been heard clearly enough and early enough, perhaps because they have not had the quantitative justification for rejecting weak credits until it is too late. The revolution in credit-risk management, a revolution that is still in process I might add, is the growing ability to measure risk.

Better ability to quantify risk has begun to give the risk manager new authority in the credit-granting process. It has also given the credit risk manager the ability to make the case for absolute and relative riskiness even during periods of expansion and optimism. Making such a case may not necessarily reduce credit availability at banks for riskier borrowers; it does mean that banks can more knowingly choose their risk profiles and price that risk accordingly. Supervisors using such techniques--leveraging off the banks' measures of risk--can also better evaluate the risk taken by banks relative to the banks' control systems and capital positions, and respond accordingly. And evident increasing transparency will let uninsured creditors, especially subordinated debenture holders, also leverage off

the banks' improved risk measures, bringing to bear additional market discipline and hence enhanced risk oversight by counterparty.

Perhaps more critically, better risk management and the associated quantification have the real potential for reducing the wide attitudinal swings that are associated with the historical cyclical pattern in bank credit availability to which I referred earlier. Formal procedures for quantifying credit risk as an integral part of the operational loan process imply--and in the long run, virtually ensure--a process for recognizing, pricing, and managing risk. Risk quantification should lead to tighter controls and assigned responsibilities. The risk effects of lending officers' decisions can be recognized in a more timely fashion, thus reducing the cyclical attitudinal swings in banking.

I would like to emphasize, however, that all risk-management strategies rest on uncertain forecasts and that the models underlying the frontier approaches depend on key assumptions that rest on fragmentary or indirect evidence. Covariance matrices, for example, are backward looking and their use presumes that historical relationships among risk drivers will continue into the future. Similarly, the distributions of credit default and loss probability are notoriously difficult to estimate and validate, especially given relatively short data histories, and so tend to be guided as much by judgmental assumptions as by empirical analysis. Nonetheless, with all their limitations, formal risk-management models are essential in providing a consistent analytic framework for collecting, organizing, and summarizing information about individual risk exposures so that bank managers--and bank examiners--can assess the institution's overall risk profile in a rational and comprehensive manner. To be sure, even the most sophisticated risk models will never be a complete substitute for experienced judgment since there are too many idiosyncratic lending anomalies that pervade all asset portfolios. But risk models are an effective, perhaps an essential, means to organize and enhance judgment.

Supervisors are endeavoring to make this analytic framework the basis of a new more risk-sensitive Basel Capital Accord. The important goal may be less the resultant improvement in capital requirements than the predicate necessity for the formal risk-management techniques that Basel II would impose on a relatively small number of increasingly large, increasingly complex, and increasingly opaque banking organizations. The sad fact is that the adoption of best-practice risk-management techniques has been slower than desired. The slowness is understandable because change is expensive and disruptive. Time will be needed to develop and implement the new techniques. Some institutions have started; some have a longer way to go. What is needed is a way to incorporate advances in quantitatively based risk management more generally into the operations of our large complex banking organizations.

These banks need to be induced to create and use internal risk classifications in their banking book for establishing their minimum capital requirements. To ensure that minimum standards are used, the supervisor should be required to validate the conceptual and empirical basis of each bank's risk-classification and risk-management system. One of those tests could be the use of the system by the bank in making internal management decisions--pricing, reserving, and controls, for example. We should not try to establish separate regulatory and management systems, but one unified system in which supervisors and the managers are looking at the same thing. A weak or misused classification system would destroy any such process.

As critics correctly have noted, such an approach has the potential to create procyclical swings in the *minimum required* capital of banks as the risk classifications of credits migrate up and down in conjunction with the state of the economy. I think this is an example of what I referred to at the outset: Regulations in banking will have their own cyclical responses as events move banks toward and away from minimums. But that also would be the case for self-imposed management guidelines in an unregulated world.

Let me emphasize that the basic cause of procyclical bank lending is less the result of rules--regulatory or self imposed--and more our difficulty in predicting the future. No lender starts out to make loans that default. Risk management does not enable us to perceive unfolding events with any greater clarity. But it creates an analytical structure and enforces reference to past events and, in so doing, eliminates consideration of or suggests higher pricing for loans with a low probability of repayment. Enhanced risk management, by increasing our ability to focus better on probabilities, will tend to flatten cyclical lending patterns.

Indeed, though we are not going to eliminate cyclically correlated changes in attitudes of human beings, I am impressed by the effect that facts, historical relationships, and quantification can have on reducing such swings. First, relative to what we have today, Basel II is endeavoring to reduce cyclical reserving and write-offs that traditionally have come with the late recognition of excess risk taken

earlier. Second, the supervisory leg of Basel II is being structured to supplement market pressures in urging banks to build capital considerably over minimum levels in expansions as a buffer that can be drawn down in adversity and still maintain adequate capital. Finally, negotiators in Basel continue to fine-tune the proposed Accord in ways that promise to damp cyclical swings in capital requirements relative to what was implied by last year's proposal.

## **Conclusion**

To sum up, I think it is worth saying again that, as high-quality borrowers deserted banks for the commercial paper and direct debt markets, banks have tended to move in ways that, at a minimum, reinforce the business cycle. But technology, innovations, and increasingly efficient capital markets have reduced that contribution to the overall macroeconomic cycle. New developments in risk management hold the promise of further reductions, and they may already have delivered a downpayment on that hope. Basel II reinforces the expectation of less procyclical contribution from banking by trying to accelerate the adoption of more-formal, quantitative risk-management techniques.

Another important benefit that will accompany any success in reducing the cyclicity in credit quality in banking is the reduction in the degree of volatility in bank earnings that will increase the long-term capitalized value of banks. This is just another way of saying that better risk management in banking is in the long-term interest of everyone: bank management, bank regulators, the public, *and* the stockholders of banks.