# Mark W Olson: The importance of market structure

Remarks by Mr Mark W Olson, Member of the Board of Governors of the US Federal Reserve System, before the Annual Conference of the Central Bank of Chile Santiago, Chile, 13 December 2002.

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It is a great pleasure for me to participate in this interesting and thought-provoking conference, and I wish to begin by thanking Carlos Massad and the Central Bank of Chile for inviting me to attend.

My remarks today will address, from my perspective as a policymaker, a former banker, and a former adviser to the Congress, some of the issues that were raised in this morning's session and that will be discussed in this afternoon's presentations. Specifically, I would like to comment on some of the potential implications of the U.S. banking sector's changing structure for competition in the context of the Board's supervision and antitrust responsibilities. I will also discuss the deposit insurance system, which is administered through the Federal Deposit Insurance Corporation (FDIC) and the allocation of credit, with a focus on loans to small businesses.

As everyone here is fully aware, changes in market structure can have profound effects in each of these areas. By changes in market structure, I will refer primarily to changes in the number, size, charter, and other characteristics of firms on the supply side of banking and nonbanking markets brought about by the ongoing consolidation of the banking and financial services industry. However, the demand side of markets is also clearly relevant, and when necessary, I will include demand characteristics in my discussion.

The issues to which I refer are not new nor unique to the United States but, rather, have existed for many years and transcend national boundaries. In fact, the consolidation of banks and other types of financial institutions is one of the most notable features of the international financial landscape over the past decade or more. In recognition of the importance of financial consolidation, its potential impact on market structure, and its potential implications for public policy concerns, the Finance Ministers and central bank governors of the G-10 nations in late 1999 asked their deputies to study financial consolidation and its potential effects. My colleague, Roger Ferguson, directed this study, which was published in early 2001. Today, I would like to use some of the findings of the study as my starting point for addressing the issues I mentioned a few moments ago. Because the study was international in scope it will allow me to put some of my comments on the United States into a global context.

## Competition

In the United States and many other countries, a common concern is the potential for banking and financial consolidation to change the structure of banking markets in ways that reduce competition and thus harm consumers. The fact that the Federal Reserve has significant responsibility for enforcing antitrust laws in banking ensures that this issue has received considerable attention at the Fed.

Consolidation in the U.S. banking industry has occurred on a massive scale. In 1934, the year federal deposit insurance was implemented in the United States, the total number of bank charters was greater than 14,000. A similar number of chartered institutions were still functioning when the consolidation wave began in 1986. Today the number is just less than 8,000, a reduction of 43 percent. That consolidation, however, has not caused a diminution of competition for consumers or small businesses. For many reasons, including the rise of nonbank providers for many bank and bank-like services and the increased use of electronic banking, consolidation in the United States has generally been accompanied by heightened competition.

Still, in my view, ignoring the significance of market structure and its implications for competition would be a mistake. This was certainly the conclusion of the G-10 study. For example, the study found that, in the United States and the other nations included in the study, the markets for a number of key bank products - such as retail deposits and small business loans - appeared to be primarily local. Local, in this context was defined as a market that can be approximated geographically by such concepts as metropolitan areas and rural counties in the United States, and provinces and cantons in some other nations. On the demand side, studies in the United States indicate that both households and small

businesses procure key components of their banking services overwhelmingly from suppliers located within a few miles of themselves. It is still not common for these consumers to deal with institutions that can be reached only by telephone or the Internet. On the supply side, the number of banking offices in most developed countries, including the United States, continues to increase, despite a consolidation process that has reduced the number of independent banking organizations. In the United States, for example, although the number of bank charters has declined 43 percent over the past fifteen years, the number of bank branches has increased 47 percent (from 44,392 to more than 65,600). This increase suggests that firms continue to feel the need for a local presence to compete for the business of customers.

Of course, banks have many products for which the markets are not local in the way that I have defined the term. For example, markets for products such as large corporate loans, bond and equity underwriting, and credit cards are generally national or international in scope. Even products such as mortgages for single-family homes, which tend to be originated locally in the United States, are funded, serviced, and traded as securitized assets in national markets.

But the evidence continues to indicate that the structure of a properly defined market, regardless of whether its geographic scope is local, national, or international, makes a difference. Studies in the United States, Italy, and Switzerland find that substantial increases in market concentration have the potential to cause a reduction in deposit interest rates or an increase in loan interest rates.

In both research and policy analysis in the United States, the supply structure of banking markets has been measured by the shares of, say, the top three or five firms, and an indicator of overall structure, using a measure of concentration known as the Herfindahl-Hirschman Index. At the antitrust policy level, in the United States we use screens based on such measures to determine if a proposed merger has the potential to adversely affect consumers. There are indications, however, that our banking system's ongoing evolution may be making these traditional measures less reliable as indicators of the degree of competition in a given market. I would like to report the results of some interesting research that the Board staff has been doing in this area.

In three recent studies, members of the Board staff have analyzed the possible effects of aspects of market structure not considered in more traditional research. These studies strongly reinforce the importance of local markets for antitrust analysis of certain financial products, especially retail deposits and small business loans.<sup>1</sup> But they also suggest that the current focus of U.S. antitrust analysis on the traditional measures of local market concentration that I mentioned earlier, to the exclusion of other structural measures, is perhaps becoming less appropriate. Specifically, the relative market presence of banks that operate in multiple markets and the market share of large banks may also be significant.

## Supervision and administration of the safety net

A critical issue addressed by the G-10 study was whether ongoing changes in banking system structure in the studied nations were affecting the risk of individual institutions or, more important, the level of systemic risk in the overall banking industry. The study concluded that, for both types of risk, the effects of changes in market structure were unclear.

With regard to the risk of an individual institution, the study came to the intuitively appealing conclusion that the evaluation of individual firm risk must be done case by case no matter what the market structure. The one area in which consolidation seems likely to reduce single institution risk is diversification gains, although even here the possible outcomes are complex. For example, diversification gains seem likely to occur from consolidation across regions of a given nation and from combinations across national borders. In the United States, there is some evidence that diversification gains have generally resulted from the expansion of interstate banking. Bankers in the United States

<sup>&</sup>lt;sup>1</sup> Berger, Allen N., Richard J. Rosen, and Gregory F. Udell, "The Effect of Market Size Structure on Competition: The Case of Small Business Lending," FEDS Working Paper 2001-63, Board of Governors of the Federal Reserve System, 2001; Hannan, Timothy H., and Robin A. Prager, "The Competitive Implications of Multi-market Bank Branching," FEDS Working Paper 2001-43, Board of Governors of the Federal Reserve System, 2001; and Heitfield, Erik, and Robin A. Prager, "The Geographic Scope of Retail Deposit Markets," FEDS Working Paper 2002-49, Board of Governors of the Federal Reserve System, 2002.

well remember the mid-1980s, when our nation was hit with systemic weaknesses in both the agriculture and the energy segments of the economy. Throughout the Plains states and extending to the Southwest, these sector weaknesses led to significant bank failures. It is not a coincidence that many states affected by these bank failures responded by dropping their prohibition on interstate bank ownership and prospectively allowing for greater diversification of these banks.

Consolidation of banks in the United States has not been uniformly consistent with management or shareholder expectations, however. The strategic justification for mergers typically takes one of two forms - either to consolidate presence in an existing market or to enter a new market. Consolidation within an existing market is typically expected to achieve greater efficiency through significant consolidation of operations. Mergers to enter new markets provide fewer opportunities to achieve these efficiencies. Not uncommonly, a consolidated bank, particularly when entering a new market, does not achieve the cost saving or efficiency gains initially expected. As a result, some mergers actually increase operational or reputational risk of the consolidated institution.

In part because the net effect of consolidation on the risk of an individual firm must be assessed case by case, the net effect of consolidation on systemic risk is also uncertain. The G-10 study, however, concluded that, if a large and complex banking organization becomes impaired, then consolidation and any attendant organizational complexity may increase the probability that the workout, or winddown, of such an organization would be difficult and could be disorderly. Because such firms are the ones most likely to be associated with systemic risk, this aspect of consolidation has probably increased the chances that a wind-down could have broad economic implications.

These conclusions regarding individual firm and systemic risk reinforce the need for central banks and other financial regulators to prudently administer the safety net extended to depository institutions - a central topic of this conference. The precise meaning of prudence is complex, and it includes interrelated concerns such as the need to intervene promptly in failing institutions, the necessity of carefully administering the lender of last resort function, the willingness to let insolvent institutions die, the insistence on the maintenance of adequate capital, the need for supervision that focuses hard on risk measurement and management, and the encouraging of market discipline through putting stockholders, managers, and uninsured creditors truly at risk.

One aspect of such prudence in the United States concerns the administration of the deposit insurance system. Of the sixty-eight deposit insurance systems evaluated by the International Monetary Fund in a 1999 worldwide study, the U.S. system is the oldest. Created in 1933, the Federal Deposit Insurance Corporation (FDIC) began insuring deposits for approved banks in January 1934. In its original form, the FDIC was a model of clarity regarding its mission and function. Its mission was to insure the deposits of small-dollar savers up to \$2,500. Its function was essentially to be a paying agent for insured depositors in the event of a bank failure. At that time, it was only an insurer, it had no supervisory or regulatory authority. The original construct lasted only one year. The following year, the Congress amended the charter to give the FDIC supervisory authority and doubled the amount of coverage to \$5,000.

For the next forty-five years, the changes in deposit insurance were subtle. But these subtle changes had significant public policy implications. Insurance coverage was increased in several stages, but it remained relatively stable in constant dollar terms until 1980. Of greater long-term significance was the FDIC's practice of resolving bank failures of that era by arranging mergers of failed banks; by doing so it instituted a de facto policy of effectively insuring 100 percent of all deposits. This practice did not receive careful scrutiny during the period, and the public policy implications of 100 percent coverage remained unnoticed. The public policy implications finally received attention after the failure of the Continental Illinois Bank in 1984 and the subsequent decision to hold all depositors harmless. In the volatile 1980s, the public policy issues implicit in that policy - "moral hazard," "too big to fail," and expansion of the "safety net" - became unavoidable and needed to be addressed. Through a series of legislative initiatives, from 1989 to 1999 the Congress addressed, in varying degrees, each of the issues.

Not only the banking industry and the FDIC insurance fund faced public policy issues in that decade. The savings and loan industry and its insurer, the Federal Savings and Loan Insurance Corporation (FSLIC), were under even more severe pressure. With a loan portfolio consisting largely of fixed-rate mortgages, the thrift industry came under extraordinary duration-risk pressures in the late 1970s and early 1980s, when inflation drove deposit rates into a double-digit range and maturities on deposit instruments dropped from more than four years to less than one year on new savings deposits. The thrift regulators responded by allowing and, at times, encouraging mergers, many with little or no

tangible capital. As a result, when real estate loans went sour a few years later, the savings and loan industry did not have the capital strength to withstand the strain. Eventually, the Congress was compelled to step in and recapitalize the underfunded FSLIC fund and, at the same time, move its administration to the FDIC.

Current FDIC Chairman Donald Powell, like his predecessor, has offered a number of proposals to reform the current FDIC law. The extent to which the FDIC is in need of fundamental updating can best be described through the following examples.

A well-managed, well-capitalized bank with \$1 billion in deposits can have its annual premium for deposit insurance range from a low of zero to a high of \$2.3 million, entirely on the basis of the overall level of the FDIC fund. In other words, that range bears no relationship to the risk profile of the individual institution.

As a second example, a newly chartered insured institution - say, a bank affiliate of a securities firm - could grow very rapidly by aggressively marketing insured deposit products and, because of the accumulated premiums of long-time institutions, could enjoy a free ride by paying no deposit insurance premiums in times when the insurance fund is above its mandated threshold of 1.25 percent of total insured deposits. Yet several fast-growing, free-riding institutions could trigger premium increases for the entire industry by altering the ratio of the fund's level to total industry deposits.

Adding to the need to address fundamental change to the FDIC statute is the arbitrary nature of the 1.25 percent designated reserve ratio, the maintenance of which can trigger wide premium swings. The ratio was the product of political expediency when written into the law a decade ago and has now assumed relevance far exceeding its value.

All in all, the current deposit insurance system has a number of aspects that one would never observe in the private sector and that need to be reformed. Indeed, most parties to the deposit insurance issue agree on the need to provide the FDIC with greater flexibility in setting premiums, to eliminate the freerider provision, and to encourage increased risk-based assessment of premiums. The Federal Reserve Board of Governors of the Federal Reserve System endorsed these proposed changes.

My final observations on deposit insurance reform concern the most controversial part of the current debate in the United States: whether to raise the deposit insurance limit. As many of you know, my fellow Board members and I oppose an increase in, or an indexing of, the current \$100,000 deposit insurance ceiling. In our judgment, increased coverage would be unlikely to add in any measurable way to the stability of the banking system. Macroeconomic policy and other elements of the federal safety net for depository institutions, including the still-significant level of deposit insurance, continue to be effective deterrents against bank runs.

Moreover, that household depositors would benefit from an increase in coverage is not apparent. According to our periodic surveys of consumer finances, most U.S. household depositors have balances well below the current insurance limit, and those who have larger balances appear to have been adept at achieving the level of deposit insurance coverage they desire by opening multiple accounts. Such spreading of asset holdings is perfectly consistent with the counsel always given to investors to diversify their assets - be they stocks, bonds, mutual funds, or certificates of deposit - across different issuers.

Some small banks argue that they need increased deposit insurance coverage to compete effectively with their larger and more diversified cousins. An analysis of small bank performance does not support that claim. For example, since the mid-1990s, smaller banks' assets and uninsured deposits, adjusted for the effects of mergers, have expanded at twice the pace of those at the largest banks. Throughout the 1990s, small banks' return on equity was well maintained, and the viability of small banks is evidenced further by the fact that more than 1,350 new banks were chartered over the past decade in the United States, virtually all of them small institutions.

With few, if any, benefits, raising the ceiling would risk incurring substantial net costs by expanding the safety net, increasing the government subsidy to banking, encouraging moral hazard, and reducing the incentive for market discipline.

#### Supply of credit to small business

I now turn to my final topic for today - possible implications of the changing structure of the U.S. banking sector for the supply of credit to small businesses. In the United States and many other

countries, consolidation in the banking industry has involved large numbers of small banks. As a net result of mergers, failures, and new entry, the number of commercial banks in the United States with total assets under \$100 million (in 1994 dollars) fell from a little more than 8,800 in 1990 to not quite 4,800 at the end of 2001. Although, as I have indicated, these small banks have generally been doing quite well, some observers have expressed concern that such changes in the structure of the banking industry may adversely affect the availability of credit to small businesses. Given the importance of small businesses to all of our economies, the supply of credit to such firms deserves serious attention. For this reason, the effect of consolidation on small business lending was a focus of the G-10 study. It has continued to be a topic of research by Board staff, and I am pleased to see that it is the subject of papers presented at this conference.

Concern about the effects of consolidation on the supply of credit to small businesses is predicated on the view that the larger banks resulting from consolidation may restructure their portfolios by discontinuing credit relationships with smaller borrowers and expanding lending to larger borrowers. To the extent that the credit relationship between a bank and a small business is characterized by a relatively high level of specialized knowledge by the bank about its customer, small firms could face difficulties in finding credit from other sources.

Early statistical studies of the effect of bank consolidation on small business lending provided some support to the concerns I have just summarized, as early studies suggested that banks reduce the percentage of their portfolio invested in small businesses after consolidation. However, subsequent research has allayed some of these fears, at least in the United States. Importantly, more recent research has recognized that what is relevant is what effect of changes in market structure have on the total availability of credit to small borrowers and whether such changes are associated with more accurate pricing of risk.

In the United States, studies that have examined the effect of mergers and acquisitions on small business lending by other banks in the same local markets have found that other banks and new bank entrants tend to offset any reduction in the supply of credit to small businesses by the consolidating banks. In addition, a recent study by Board staff and others suggests that earlier conclusions regarding the behavior of larger banks may need some qualification.<sup>2</sup> This study finds that the creation of large banks may not significantly reduce lending to small businesses. Evidence is beginning to emerge that technological change, such as the use of credit-scoring models for small business loans, may serve to expand the supply of credit to small businesses.<sup>32</sup> In any event, the remaining uncertainties suggest to me that this topic will be a fertile one for all of us in the coming years.

#### Conclusion

I would like to close my remarks by returning to where I began. It is a great pleasure for me to participate in this conference, and once again I thank our hosts for their invitation to me and for their generous hospitality. The topics we are discussing are important, and I hope that I have contributed to our understanding of some of the relevant issues. Thank you.

<sup>&</sup>lt;sup>2</sup> Berger, Rosen, and Udell (2001).

<sup>&</sup>lt;sup>3</sup> See Allen N. Berger, W. Scott Frame, and Nathan H. Miller, "Credit Scoring and the Availability, Price, and Risk of Small Business Credit," FEDS Working Paper 2002-26, Board of Governors of the Federal Reserve System, 2002.