# Voice

of the Federal Reserve Bank of Dallas

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# The Federal Reserve and Texas Banks in the Evolving Financial Structure

**An address by**

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**before the**

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With all that is going on in banking and the financial community today, the selection of topics that could be discussed is almost limitless. For example, an obvious choice would be monetary policy and the economy. After all, our economy, at least at the national level, still has some rather severely ingrained problems. And in one sense, we might be at a crossroads in that the policies followed in this country over the next year or so could well set the tone for our economy for many years to come. So, speaking on the economy and monetary policy would have been an obvious choice.

But I chose to talk today about something that is just as important and much closer to home—that is, the challenges to be faced in the years ahead by the Federal Reserve System, or more specifically the Dallas Reserve Bank, and commercial banks.

It is not news to you that banking is going through almost unprecedented change at the present time, but do you know that the Federal Reserve System faces similar change of a near-equal magnitude? It occurred to me that it might interest you to hear how we intend to conduct business at the Dallas Fed, particularly with commercial banks in Texas. And, as my later remarks will indicate, what happens to banks in Texas is not unrelated to what happens to the national economy.

Let me begin by discussing the Federal Reserve System. As suggested earlier, you may be surprised to learn that recent developments, such as the Deregulation and Monetary Control Act, probably have had as much effect, or possibly more, on the Federal Reserve as on commercial banks.

The Federal Reserve System is, of course, the central bank of the United States, and, as such, there are some functions it must perform to discharge this basic responsibility. But over the years, it has also become more involved in providing a broader range of financial services than most other Western central banks. Virtually all central banks are involved in issuing and destroying currency, transferring funds, and acting as the final settlement agent. But relatively few are as involved in the payments mechanism as the Federal Reserve System in the United States.

There are a number of other similarities and differences between the Federal Reserve System and other central banks around the world, but the point to be made is that over the years the Federal Reserve has collected a rather large number of functions only loosely related to the main function of central banking. Some of these we sought; some were placed upon us.

As you know, one of the major provisions of the Monetary Control Act was a mandate to the Federal Reserve System to price its services. While the Monetary Control Act has influenced the Federal Reserve System in many other ways, no decision is probably more important to the relationship of the Federal Reserve Bank of Dallas with the banks in the Eleventh District than the pricing of our services at full cost. This decision has required a substantial amount of soul-searching on the part of the Federal Reserve System. After all, pricing is entirely new to us and raises quite legitimate questions. For example, it has precipitated within the Federal Reserve System rather widespread discussion of our basic function and how the provision of these services may or may not be a necessary and desirable complement to the discharge of that function. Put more simply, should the Federal Reserve System just price its services at full cost and then passively accept whatever changes in volume might take place, or should the Fed attempt to maintain some predetermined level of service or at least maintain a presence in the provision of these financial services?

The answer to this question is not as obvious as it might first appear. To be quite candid, my initial reaction was to price our services at cost and then accept whatever volume might result. If the private sector could provide these services more efficiently, then it should, assuming, of course, that this would not impair the implementation of our basic responsibilities. On reflection, however, the situation is not quite that simple. It has been the responsibility of the Federal Reserve System to assure an efficient payments mechanism in order to achieve a smoothly functioning economy. There are a number of reasons why a public entity like the Federal Reserve Bank of Dallas might maintain a presence in the provision of financial services, even if it does not supply these services at the lowest cost in the short run.

First, the presence of a public institution might impose some competitive discipline in highly concentrated markets. This competition could stimulate innovation and technological improvements in the provision of the financial services that might not occur otherwise. In this circumstance, the Federal Reserve would act as a public-interest competitor stimulating competition.

Second, it may be desirable to have a public presence in these services where the private distribution of services does not appear to be equitable or uniform. For example, one might feel there should be some minimum level of service to all financial institutions. Left to private enterprise, this might not be achieved if the provision of the services in some areas were unprofitable. In that case, it might be deemed to be in the public interest if these services were provided by a public entity.

Third, this might be the case if one entity were to provide most of the financial services in a geographic area because of, say, economies of scale. That is, if there were to be a predominant supplier of services, some might prefer that supplier to be a public entity rather than a private one. While most would not like this concept, it could be argued that society's interests can be better protected by a public body than a private group.

These are just some of the reasons why a public institution such as the Federal Reserve might maintain a presence in the provision of financial services, even if it does not provide these services at the lowest cost in the short run. Whether any of these conditions prevail at the present time is yet to be determined.

The position of the Federal Reserve Bank of Dallas in this regard will be neither passive nor aggressive. That is, we plan to adopt a progressive posture in the provision of financial services. Initially, we will continue to provide the services we currently offer, but over time, we will be prepared to remove ourselves from the provision of those services where we find we are not an effective competitor and there are no overriding public considerations for maintaining an operational presence. We also intend to remain flexible in order to adapt to the changing needs of the banking industry and, as necessary, offer modified or new services and encourage innovation across the full range of financial services. But regardless of how all this turns out, be assured that the well-being of the public and the financial institutions in the Eleventh Federal Reserve District will be of prime importance to the Dallas Fed.

Now let me turn to some of your problems. I'm not a commercial banker, but looking in from the outside, it certainly seems to me that banking has been exciting in the past few years and appears likely to remain that way for some time to come.

Certainly, some of the changes now taking place

in the banking industry are also the immediate result of the Deregulation and Monetary Control Act—the new reporting requirements, the changes with respect to the maintenance of reserves, the introduction of NOW accounts, the removal of usury ceilings, and so on. I don't need to detail this list further, since you are intimately familiar with these changes as they affect banking.

I would like you to consider the idea that many of the changes that have taken place in the financial community in the past few years can be traced to another, possibly overriding development—the acceleration in the rate of inflation. To be sure, other important changes have taken place, but I wonder if we fully realize how pervasive is the influence of inflation in the financial community.

Inflation affects financial markets in a number of ways. Most directly, interest rate levels tend to raise when the rate of inflation rises. Lenders realize that they are going to be paid back in cheaper dollars and demand compensation for the loss of purchasing power of the money they lend. Borrowers, on the other hand, are quite willing to pay the higher interest rates. After all, they will be able to pay back these loans with dollars that have a lower purchasing power. This results in the so-called inflation premium in interest rates to which economists refer.

In addition to raising the level of interest rates, inflation also increases the volatility of interest rates. An inflationary environment is a very uncertain one. This uncertainty manifests itself in heightened speculation as to future developments in the economy and financial markets, with a resultant increase in the volatility of interest rates.

This increased volatility of interest rates, of course, causes financial institutions some obvious problems. It brings an entirely new meaning to the term "portfolio management." And a bank's liquidity position, certainly insofar as that position is reflected in the liquidity of its assets, can change dramatically in a short period of time as interest rates fluctuate. Partially as a result of these interest rate gyrations, we have seen a shortening of the maturity of bank portfolios and even the development of a futures market in Treasury bills.

At the same time, the higher level of interest rates, increased volatility aside, has also had a rather dramatic effect on your lives. It is the higher level of interest rates that has caused much of the "financial innovation" in recent years. As interest rates rise, people become aware of the cost of idle balances—that is, balances that are not earning explicit interest. And as the level of interest rates rises, it becomes worthwhile to design a package that will attract funds out of the institutions in which they are held and make a profit in the process.

Consequently, it is the higher level of interest rates that has led to tying various financial instruments to market rates of interest. It is the higher market rates of interest that have led to the pressure for the introduction of NOW accounts nationwide. It is the high level of interest rates that has led to rapid growth in money market mutual funds. It is the high level of interest rates that has been a major catalyst in the push for financial deregulation. Usury ceilings, which once were only binding occasionally, if at all, became a major problem as market rates rose in recent years. In states that still have fairly restrictive usury ceilings, efforts are being made in most legislatures to remove or substantially raise them. Such an exercise has just been completed in Texas.

And, of course, the higher the level of interest rates, the greater the competition for funds by nontraditional lenders. Not being bound by the regulations and requirements for traditional lenders, these organizations often see a profit rate in credit that exceeds the average for their basic industry. All these forces have led to increased competition for bank funds.

Inflation has caused another problem for banks. It makes the proper accounting of bank profits more difficult. It is conventional wisdom that bank profits were at a record high last year; yet banks have had trouble raising capital, and their price-earnings ratios are lower than for comparable nonfinancial corporations. If banking is such a lucrative enterprise, why aren't investors more eager to participate in it? The answer is suggested by the recommendation of the Financial Accounting Standards Board that bank profits be adjusted to take account of the effects of inflation. If this is done, the bank profit picture is not as rosy as it might first appear. And one can understand why investors are not rushing to buy bank stocks, at least as quickly as the unadjusted figures on bank profits suggest they should. All this is just to say that inflation not only makes your job harder but also makes it harder just to figure out what kind of job you did.

Before I leave the effects of inflation, it should now be obvious to everyone that inflation was probably a major catalyst in getting the Deregulation and Monetary Control Act passed. For example, it was inflation and the resultant high interest rates that precipitated the increase in the loss of member banks from the Federal Reserve System. As interest rates increased, the opportunity cost of holding idle balances with the Federal Reserve System rose, and attrition picked up. The effects of inflation are seen throughout that legislation. The conditional removal of usury ceilings, the introduction of NOW accounts nationwide, the attempt to reduce the average level of reserve requirements, the earnings credit against services used at the Fed—all reflect the inflation-induced higher level of interest rates.

Having enumerated some of the effects of inflation on your industry, let me assure you that we in the Federal Reserve System consider the reduction of inflation our primary objective. Chairman Volcker has stated so and has given Congress this assurance in his statement of monetary objectives.

I have attempted to show that inflation really has affected all our lives—probably in some ways that may not have been obvious, or at least in ways we don't think about very often. We tend to look at the results of inflation as the cause of our problems. We might think our problems are caused by the passage of the Monetary Control Act or by the volatility or level of interest rates. But it is instructive to take a step backward and realize that these developments do not take place in isolation; laws are not passed in a vacuum, and financial markets do not behave as they do for no reason. Many times they reflect ongoing basic developments in the economy, and, in my opinion, that's what's going on here.

This has some obvious implications for the future. We could all probably make our lives much easier if we were able to slow the rate of inflation. Certainly, the resultant reduction in the volatility of interest rates would have to make our lives easier. And, as indicated earlier, as long as the level of interest rates remains high, we have every reason to believe that the volatility of interest rates will remain high. Only by reducing the rate of inflation can we eventually reduce the level of interest rates and, hence, the volatility of rates.

Furthermore, I have to believe that a reduction in the level of interest rates associated with the slowing in the rate of inflation would make it more difficult for those in less regulated fields to offer alternatives to the services you offer. That may or may not be true, but it does strike me that more people are interested in getting into the credit business as the level of interest rates rises.

Let me conclude by saying that whatever the future holds, we at the Federal Reserve Bank of Dallas would like to think that we are all in this together. We feel we are a part of the financial community in this area and would like to believe we are all working together toward a common goal—a stronger economy and financial system.

# Alcohol from Grain: A Transition Fuel

*By Jennifer D. Miles*

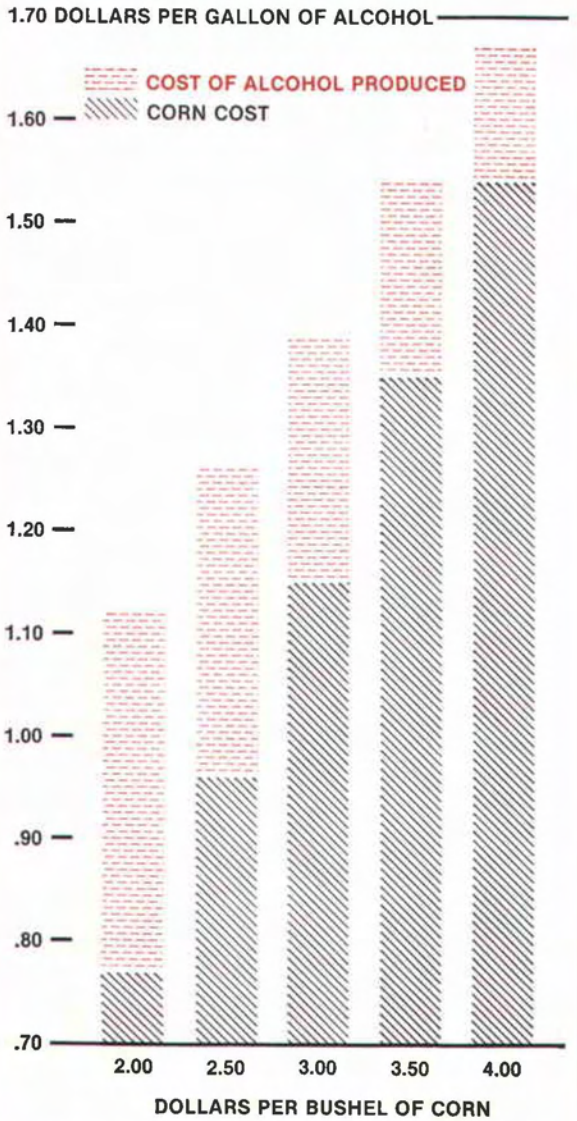
Oil and natural gas constitute about three-fourths of U.S. energy consumption. Because the prices of these fuels have risen rapidly during the past two years, the United States is attempting to shift from fossil fuels to alternative sources of energy. Alcohol produced from grain has been advocated as such an alternative because it can be burned directly, blended with gasoline, and used for industrial purposes.

Greater reliance on alcohol fuel once appeared attractive, particularly in the short run. Some experts have claimed that over the next five years, alcohol production from grain and increased conservation of energy will be the most important factors in reducing petroleum consumption.[1] A subsidized, corn-based gasohol industry was established by the Energy Security Act of 1980, and loan guarantees and excise tax reductions have been provided to encourage development of an alcohol production capacity of 920 million gallons per year by the end of 1982 and 4 billion gallons by 1984.

Recently, however, the weather in many parts of the world has been unfavorable for crop production, and worldwide demand for grain has increased. These developments have drastically reduced the previously abundant grain reserves. Competition between users of grain for fuel, feed, and food is likely to be more intense than previously anticipated if the United States produces alcohol from grain on a large scale. Because of the significant decline in gasoline consumption during the past two years and the tight fiscal policy of the Reagan Administration, the 4-billion-gallon production objective is not likely to be reached until perhaps the end of this decade. At that time, alternatives to corn as the primary input in alcohol production, such as cellulose from crop residues and wood products, should be available. Under these circumstances, producing alcohol from grain may not be an efficient means to carry the nation through the energy transition period.

1. Wallace E. Tyner, "Our Energy Transition: The Next Twenty Years," and Donald Hertzmark, Silvio Flaim, Daryll Ray, and Greg Parvin, "Economic Feasibility of Agricultural Alcohol Production Within a Biomass System," both in *American Journal of Agricultural Economics*, December 1980.

**Cost per gallon of alcohol produced and the cost of the corn input rise significantly as corn price rises**




NOTE: Assumes a plant size of 40 million gallons per year and a yield of 2.6 gallons of alcohol per bushel of corn, with Federal and state tax exemptions not considered.

SOURCE: *Gasohol: Prospects and Implications* (By Ronald Meekhof, Mohinder Gill, and Wallace Tyner for the U.S. Department of Agriculture).

### Alcohol production costs have risen with corn prices

The existing commercial technology for transforming biomass into liquid fuel converts corn to ethyl alcohol—ethanol.[2] The initial attraction of ethanol production came from two major sources. First, American farmers have often been troubled by lack of control over production, which has been characterized by large grain crops, sagging prices, and declining incomes. Government policy in the past has tended to focus on supporting grain prices through the accumulation of reserves and through programs designed to restrict planted acreage. Still, the season average price per bushel of corn during 1975-79 hovered at a low range of $2.02 to $2.54, and carryover stocks of corn averaged 833 million bushels per year during the 1970-80 period.[3] Ethanol production, therefore, was advocated to increase the demand for corn, alleviate the periodic problem of grain surpluses and costly storage of reserves, and increase farm incomes. Second, the capacity for producing ethanol from corn could be expanded fairly rapidly. An ethanol conversion plant of intermediate size can generally be brought into production within two years.

The physical and economic situation for alcohol production from grain has changed rapidly since the spring of 1980. The monthly average cash price of No. 2 Yellow corn at Chicago rose over 80 cents per bushel from May 1980 through April 1981. Since corn can account for as much as 73 percent of the overall cost of production in a 50-million-gallon-per-year fermentation plant,[4] increases in the price of the corn feedstock have substantial impact on the profitability of ethanol production. Also, if corn prices rise faster than gasoline prices, gasohol (even with the present Federal and state tax exemptions) could easily remain more expensive than gasoline.

U.S. crop production in 1980 showed a marked decline from 1979. Moderate to severe drought over important agricultural areas in July, August, and September cut production of a number of major

2. Biomass is considered to be any plant material that can be used as a possible source of energy through chemical, bacterial, or enzymic conversion.

3. U.S. Department of Agriculture, *Agricultural Statistics, 1980* (Washington, D.C.: Government Printing Office, 1980).

4. "Gasohol: Analysis and Biomass Alternatives," *Energy*, Fall 1980.

crops, including corn. A report by the U.S. Department of Agriculture has revealed that the April 1, 1981, corn inventory was 4.0 billion bushels, 18 percent below a year earlier. Corn usage during the first three months of the 1980-81 crop year totaled 2.4 billion bushels, 2 percent more than during the same period the year before.

The lower than average inventory of corn portends a rise in prices. Average corn prices could increase 8 to 10 percent annually during the 1980's. Cattle herd rebuilding and growing demand from ethanol production can be expected to keep domestic corn demand quite strong for the next few years. The January 1981 stocks report showed feed usage of corn down only 2 percent from a year earlier. This indicates a higher feed usage than many had expected in view of low feeding profits during the last quarter of 1980, and it provides evidence that there is a strong livestock feeding base for corn, even at current price levels.

Another factor that may tend to keep corn prices on an uptrend over the next few years is the increasing world demand for grain. The overseas demand for agricultural products could increase at a near-record rate of 2.5 to 2.7 percent a year in the 1980's. However, growth in global agricultural production is expected to slow to an annual rate between 2.1 and 2.4 percent.[5] Forecasts for supplies of and demand for specific commodities suggest that the strongest growth in demand will be for feed grains and oilseeds.

This demand will come from the middle-income countries, the less affluent developed nations, and the richer developing countries. The potential for these countries to expand their feedstuff production fast enough to fill their strong, livestock-related growth in demand is quite limited. In many already established markets, import demand is likely to continue strong, with Western Europe and Japan remaining the world's largest food and feed importers.

With grain stocks undesirably low, the danger looms that disappointing harvests worldwide again this year could lead to widely fluctuating prices and perhaps serious food shortages in some areas of the world. The fact that such a prospect is faced just two years after accumulation of the largest global stocks of grains in over a decade underscores the continued fragility of the world food situation and how the balance between too much and too little food can tilt easily and rapidly from one direction to the other.

5. U.S. Department of Agriculture, *A Time to Choose: Summary Report on the Structure of Agriculture* (Washington, D.C.: Government Printing Office, January 1981).

### Grain alcohol production may disrupt soybean markets

Ethanol is currently produced from grain by fermentation or milling. Both processes yield valuable protein by-products that can be used in livestock feeds.[6] At present fuel and corn prices, ethanol producers can cover costs only if they obtain sufficient revenue from sales of these by-products. One study concludes, however, that an ethanol production rate above 1 billion gallons per year will substantially reduce the market values of the by-products.[7] This raises questions about the profitability of a large increase in grain alcohol production unless new markets, perhaps through exports abroad, are found for the by-products.

Other agricultural markets may also prove to be sensitive to the development of large-scale production of alcohol from corn. For example, the production of grain alcohol will lead to a reduction in the supply of soybeans, currently a major source of protein. Corn and soybeans are grown in rotation in many parts of the country. Thus, an increase in corn production to meet the demand from alcohol producers will probably lead to a reduction in soybean acreage. Estimates suggest that each billion gallons of ethanol produced from corn would require an additional 2 million acres of land in corn production, with an average yield of 65 bushels per acre.[8] As more marginal land is used,

6. Fermentation yields 2.57 gallons of 200-proof ethanol plus 17.35 pounds of distillers' dried grains per bushel of corn. Distillers' grains are useful as a protein supplement for beef and dairy cattle, substituting for soybean meal and other high-protein animal feeds. If the wet milling process or modified dry milling process is used, the protein by-products would be gluten feed and gluten meal (60 percent protein), which are suitable for poultry and animal feed diets.

7. Donald Hertzmark, Daryl Ray, and Gregory Parvin, *The Agricultural Sector Impacts of Making Ethanol from Grain*, Solar Energy Research Institute Report No. TR-352-554 (Golden, Colo., 1980).

8. Wallace E. Tyner, *The Potential of Using Biomass for Energy in the United States* (West Lafayette, Ind.: Purdue University, Institute for Interdisciplinary Engineering Studies, 1980).

**CORN ACREAGE NEEDED FOR ALCOHOL PRODUCTION IN UNITED STATES**

(Millions of units)

| | Ethanol production (Billions of gallons per year) | | | | | |
|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 10 |
| Corn required (Bushels) | 389 | 778 | 1,167 | 1,556 | 1,946 | 3,891 |
| Soybeans displaced (Bushels) | 86 | 173 | 259 | 345 | 431 | 863 |
| Soybean acreage reduction (Acres) | 2.88 | 5.75 | 8.63 | 11.50 | 14.38 | 28.76 |
| Corn produced on soybean acres (Bushels) | 259 | 518 | 776 | 1,035 | 1,294 | 2,588 |
| Additional corn required (Bushels) | 130 | 261 | 391 | 521 | 651 | 1,303 |
| New corn acreage (Acres) | 2.0 | 4.0 | 6.0 | 8.0 | 10.0 | 20.0 |

Assumptions

1. Corn average yield per acre on existing corn-soybean land = 90 bushels.
2. Soybean average yield per acre on existing corn-soybean land = 30 bushels.
3. Average corn yield on new corn acreage = 65 bushels.
4. Distillers' dried grain (DDG) yield = 6.75 pounds per gallon of ethanol or 17.35 pounds per bushel of corn.
5. Alcohol yield = 2.57 gallons per bushel of corn.
6. DDG has 27 percent protein and soybean meal has 44 percent protein, and the substitution ratio is 1.63 pounds of DDG for 1 pound of soybean meal.
7. Soybean meal is 80 percent by weight of the soybeans (48 of 60 pounds per bushel).
8. The new corn acreage number represents the acreage addition required, assuming the existing quantity demanded for protein and starch is satisfied in addition to the alcohol demand for starch.

SOURCE: Wallace E. Tyner (*The Potential of Using Biomass for Energy in the United States*, Purdue University, Institute for Interdisciplinary Engineering Studies).

yields on the additional acreage will fall below the national average. Consequently, soybean acreage is expected to fall a little less than 3 million acres for each billion gallons of ethanol produced.[9]

In another study the impact on corn and soybean markets was estimated for levels of alcohol production ranging from 1 to 4 billion gallons.[10] Levels of 1 to 2 billion gallons of alcohol production had relatively little effect on corn and soybean prices and quantities. However, levels of 3 to 4 billion gallons tended to increase corn prices substantially and to increase price instability for both corn and soybeans. As more corn comes into production, displacing soybeans, the supply of protein is diminished because an acre of corn produces less protein than an acre of soybeans. This tends to raise the overall price of protein. Also, the reduction in soybean acreage exerts upward pressure on soybean prices, especially in established export markets, at high levels of alcohol production.

Thus, pressure on soybean prices may develop from both directions, making the effect of alcohol production on soybean prices difficult to predict. The downward pressure on soybean meal prices caused by production of large quantities of protein by-products may be opposed by the upward pressure from the reduction in soybean acreage.

### Alternative feedstocks are under study

Alcohol can be produced from three main types of biomass: (1) sugar-bearing materials, such as sugarcane, which contain carbohydrates in sugar form; (2) starches, such as corn, which contain carbohydrates in starch form; and (3) celluloses, such as wood and crop residues, whose carbohydrate form is more complex. The process of producing ethanol from cellulose involves converting the cellulose to sugar and then converting the sugar to ethanol.

Currently, there are no commercial technologies for the fermentation of celluloses. For these feedstocks, methanol synthesis is a far more likely route to alcohol fuel than is fermentation with existing technology.[11] However, most authorities

9. Ibid.

10. Ronald L. Meekhof, Wallace E. Tyner, and Forrest D. Holland, "U.S. Agricultural Policy and Gasohol: A Policy Simulation," *American Journal of Agricultural Economics*, August 1980.

11. Methanol, another form of alcohol, has a lower energy content than ethanol.

believe that by the late 1980's, cellulose conversion technologies will be commercially available to produce ethanol from both crop residues and wood.

Agricultural residues, particularly from corn and small grains, offer a huge supply of cellulosic biomass that could be collected and utilized. The total amount of crop residue produced in the United States each year is about 400 million dry tons. Of course, not all of this could be collected and used economically for ethanol production. One study has estimated that total usable residues amount to 80 million dry tons per year, or only about 20 percent of the total annual residue production.[12] Currently, usable residues, mostly in the form of stalks and leaves, are usually returned to the soil. Crop residues play a vital role in agriculture by controlling soil erosion, preventing rapid water runoff, maintaining soil organic matter and soil structure, and providing soil nutrients.

Although the potential supply of crop residue is large, wood is the most plentiful biomass energy resource in the United States. Wood resources include both forest residues and conventional wood harvests, and most of the residues will be used in the forest products industry. Wood can also be used to substitute for fuel oil in industrial or utility boilers or used for home heating. In addition, wood can be converted to methanol for fluid energy.

A major advantage of growing trees for production of liquid fuels is the option of continuous year-round operations for both harvesting and processing. The detrimental factors of long-term storage and short-term operation that may be associated with grain crops are then eliminated. New methods of growing trees for this purpose are very promising. These tree farms will consist of rapidly growing species, such as the poplar, sycamore, and eucalyptus, planted at close spacings and harvested at appropriate intervals.

The extent to which forest biomass can be utilized depends on research and development of the conversion technology necessary for commercial production. The technology available today for production of ethanol from cellulosic biomass utilizes acid hydrolysis to produce sugars that are then fermented to ethanol. More efficient and less expensive processes for use with cellulosic biomass are being investigated.

12. Tyner, *Potential of Using Biomass for Energy in United States.*

**TOTAL USABLE CROP RESIDUE IN UNITED STATES**

| Crop | Usable residue (Thousands of tons) | Harvestable acres (Thousands of acres) | Average yield (Tons per acre) |
|---|---|---|---|
| Corn ..... | 37,098 | 39,122 | 0.95 |
| Small grains ... | 33,623 | 36,324 | .93 |
| Sorghum ..... | 1,452 | 4,100 | .35 |
| Rice ..... | 5,457 | 2,516 | 2.17 |
| Sugarcane .... | 590 | 331 | 1.78 |
| Total ..... | 78,220 | 82,393 | .95 |

SOURCE: Wallace E. Tyner and J. Carroll Bottum (*Agricultural Energy Production: Economic and Policy Issues*, Purdue University, Agricultural Experiment Station).

## Future bright for alcohol from cellulose

To date, indications are that U.S. agriculture could absorb the demand for grain at the 2-billion-gallon level of alcohol production, plus the continually increasing domestic and export demands, without causing serious adverse impact in the agricultural sector or elsewhere.[13] Alcohol fuel from grain is not an attractive permanent solution to liquid fuel shortages, but it might serve as a transition fuel if access to imported oil is impeded.

The present uncertainty surrounding the economic prospects and Government involvement in the alcohol fuels industry notwithstanding, ethanol production using corn as a feedstock could possibly reach 4 billion gallons per year by the late 1980's.[14] Production of this magnitude would have a small effect on gasoline supplies, stretching them by perhaps 5 percent, but conceivably could have a major impact on corn prices and some agricultural markets. Possible consequences include higher meat prices, since most corn is used as cattle feed, and a reduction in U.S. corn exports at a time when world demand is increasing.

For the future, cellulose-to-alcohol factories show great promise. Estimates suggest that if managed properly, U.S. forests and crop residues could

13. Meekhof, Tyner, and Holland, "U.S. Agricultural Policy and Gasohol."

14. U.S. Department of Agriculture and Council on Environmental Quality, *National Agricultural Lands Study*, Final Report, January 17, 1981 (Washington, D.C., 1981).

provide huge amounts of alcohol—up to 39 billion gallons annually by the year 2000—far in excess of alcohol production achievable through the use of grain.[15] The alcohol plants now being built could be designed and constructed so that later conversion from grain to cellulose would be facilitated. Also, plants might be established in areas where adequate cellulosic feedstocks are available to run the plants solely on these raw materials.

By following this course, constructing grain alcohol plants today would establish a physical plant and technical base for future implementation of the cellulosic processes as they are developed during this decade. Unlike alcohol production from grain, cellulose conversion to alcohol will not compete with the world markets for food and feed grains.

15. U.S. General Accounting Office, *Potential of Ethanol as a Motor Vehicle Fuel,* Report to the Honorable Max Baucus, U.S. Senate, by the Comptroller General of the United States, no. EMD-80-73 (Washington, D.C.: General Accounting Office, 1980).

# "Fed Quotes"

Brief Excerpts from Recent Federal Reserve Speeches, Statements, Publications, Etc.

"Monetary restraint does not, unfortunately, work directly on prices. On the contrary, its initial effects are on real output and employment. As the experience of the past year and a half indicates, the process of reducing inflation through monetary restraint is an excruciating one, once inflationary expectations have become deeply embedded in economic decisions and economic institutions. When monetary restraint takes hold, it reduces employment and real incomes; pushes interest rates to painfully high levels; threatens the viability of thrift institutions; imposes enormous losses of sales and profits on homebuilders, auto dealers and other small businesses; results in a growing backlog of needs for housing, and even affects adversely the growth of business capital investment that we so badly need for productivity improvement. And its effects on inflation occur with agonizing slowness. The economic distress occasioned by firm monetary restraint since the fall of 1979 has kept inflation from getting worse, but as yet there are no clear signs that the hard-core rate of inflation has begun to come down."

"If you ask why the Federal Reserve persists in its policy of restraint in light of these disappointing results, the answer is that there is no real alternative. Reducing the rate of expansion in money and credit is an indispensable ingredient of any anti-inflation program. But there is no reason why our country must, or should, fight inflation with monetary policy alone.

"We in the Federal Reserve are extremely encouraged by the efforts presently underway by the new Administration and the Congress to hammer out agreement on an effective anti-inflationary budgetary policy. It is of fundamental importance, I believe, that the budget deficit be brought down as rapidly as possible."

**Lyle E. Gramley, Member, Board of Governors of the Federal Reserve System (Before the Boston Economic Club, Boston, Massachusetts, March 18, 1981)**

"To get some perspective on the role, and limitations, of monetary targeting in the inflation problem, I sometimes find it useful to look at the experience of other countries—especially the industrial countries most similar to our own. Since inflation has become a worldwide phenomenon, and since the importance of controlling monetary growth in controlling inflation is widely recognized, monetary targeting has also been a prominent feature of the anti-inflation policies of many of these countries. And, like the U.S., many foreign industrial countries have sought to moderate inflation by gradually slowing the rate of monetary expansion.

"On the whole, the experience abroad tends to confirm the suspicion that slowing monetary growth by itself may not be enough to control price inflation within acceptable periods of time and without unacceptable side effects. A good record on achieving money growth targets has not necessarily ensured a good performance on the inflation front—and conversely. Over periods of up to three or four years, there seems to be at best only a rather loose relationship between the growth of the aggregates and price inflation. Over longer periods, to be sure, the relationship is closer."

Anthony M. Solomon, President, Federal Reserve Bank of New York (Before the Eleventh Annual Banking Industry and Bank Stock Symposium of the Financial Analysts Federation, New York, New York, March 26, 1981)

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**New Nonmember Bank**

Lone Star Bank, Baytown, Texas, a newly organized nonmember bank located in the territory served by the Houston Branch of the Federal Reserve Bank of Dallas, opened for business April 1, 1981.

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# Regulatory Briefs and Announcements

## Board Studying Alternatives to Weekly Reporting of Money Supply Data

The Federal Reserve Board has requested public comment on the desirability of continuing to report money supply data on a weekly basis or whether another reporting procedure should be used.

Under its present procedure the Board publishes money supply data each Friday. Although there is considerable agreement that weekly money supply statistics are erratic and often poor indicators of underlying trends, the Board has not concluded that the present procedure should be changed and will continue to publish money supply data each Friday.

However, as a result of the concerns about the reaction to and significance of the weekly figures, the Federal Reserve has considered possible revisions of its current publication schedule or of its method of presentation. The following alternatives to the present procedure are being considered:

- To delay weekly publication an additional seven days to incorporate more data.
- To publish only data that are not seasonally adjusted.
- To publish data only monthly—as is now the case with the broader definitions of money—or use moving average data.

Comments, which need not be limited to the options above, should be sent to Thomas D. Simpson, Chief of the Banking Section, Division of Research and Statistics, Federal Reserve Board, Washington, D.C. 20551.

## Board Issues Revised Regulation Z, New Regulation M

The Board of Governors of the Federal Reserve System has issued a restructured, shortened, and simplified version of its Regulation Z to implement the Truth in Lending Simplification and Reform Act. The Board expects the simplified rules for disclosure of the full cost of borrowing to help both consumers and creditors. Although the new regulation was effective April 1, 1981, creditors have been given the option of continuing to comply with the older regulation until March 31, 1982.

The new Regulation Z covers the Truth in Lending and Fair Credit Billing Acts. The sections in the previous version that dealt with the Consumer Leasing Act were removed and have been issued as a separate regulation, new Regulation M.

Some 40 percent shorter than its predecessor, the revised regulation: (1) exempts a number of transactions covered by the previous regulation; (2) deletes a substantial amount of detail, such as specified terminology and specifications for type size and location of disclosures; (3) gives creditors more flexibility in making disclosures; and (4) reduces the burden of compliance for creditors, which is reflected in costs to consumers.

To make compliance with the new rules easier, the Board provided in the new regulation a series of standard disclosure forms. Proper use of the forms, written in plain nontechnical language, will assure compliance with the regulation.

The Board will publish in the near future a commentary on the regulation to provide guidance on its use. The commentary will address the material covered by many of the existing staff interpretations. These interpretations will be rescinded effective April 1, 1982.

## NOW Accounts: Board Proposes Interpretation of Rules to Clarify Eligibility of Depositors

The Federal Reserve Board has proposed an interpretation of its rules to clarify which depositors are eligible to hold interest-bearing checking accounts at member banks. The proposed interpretation would affect eligibility for negotiable order of withdrawal (NOW) accounts authorized nationwide by the Consumer Checking Account Equity Act of 1980.

At present, NOW accounts are available only to individuals and to organizations operated primarily for religious, philanthropic, charitable, educational, fraternal, or other similar purposes and not operated for profit. The Board's proposed interpretation would permit the following to establish NOW accounts at member banks:

- Individuals, if the funds are not used primarily for business purposes. These individuals—only—would also be eligible to hold automatic transfer service (ATS) accounts.
- Nonprofit organizations eligible for tax exemption under specified sections of the Internal Revenue Code.
- Governmental units, if the funds are used for the purposes of schools, colleges, universities, libraries, or hospitals.

Other governmental units and all businesses operated for profit—including sole proprietorships, partnerships, and corporations—would not be permitted to maintain interest-bearing checking accounts at member banks.

The interpretation proposed by the Board is intended to make the eligibility criteria for NOW accounts more understandable and to preclude the need for Board review of numerous individual questions of eligibility.

Issues raised by the proposal on which the Board would particularly like to receive comment include: (1) the use of Section 501(c)(3) through (13) and (19) of the Internal Revenue Code as the criteria for determining which nonprofit organizations would be eligible for NOW accounts; (2) the exclusion of sole proprietorships from NOW and ATS account eligibility; (3) the prohibition of NOW accounts for governmental units except where the funds are used for the purposes of schools, colleges, universities, hospitals, and libraries; (4) the phaseout of existing NOW and ATS accounts that would no longer qualify under the proposed rules; (5) the potential problems that could arise in attempting to distinguish whether funds of an individual are used primarily for personal rather than business purposes; and (6) whether the proposed revised rules concerning NOW and ATS eligibility would be more understandable and easier to administer for member banks.

Comments must be received by June 15, 1981, and should be addressed to James McAfee, Assistant Secretary, Board of Governors of the Federal Reserve System, 20th Street and Constitution Avenue, N.W., Washington, D.C. 20551, with reference to Docket No. R-0356.

# Now Available

Recently issued Federal Reserve circulars, speeches, statements to Congress, publications, etc., may be obtained by contacting the Department of Communications, Financial and Community Affairs, Federal Reserve Bank of Dallas, Station K, Dallas, Texas 75222, unless indicated otherwise. Requests for circulars should specify the circular numbers.

## Circulars

**Fee Schedule for Commercial Check Clearing and Collection Services.** 11 pp. Circular No. 81-64 (April 1, 1981).

**U. S. Postal Service Money Orders.** 1 p. Circular No. 81-67 (April 6, 1981).

**Bulletin 8: "Collection of Cash Items."** 19 pp. Circular No. 81-68 (April 7, 1981).

**Title 12—Chapter XII—Interest on Deposits: Changes in the Effective Dates of 2½ Year or More Small Saver Certificates and 26-Week Money Market Certificates; Proposals to Provide for the Phaseout of Interest Rate Ceilings.** 13 pp. Circular No. 81-70 (April 8, 1981).

**Holidays [All Federal Reserve banks and branches].** 1 p. Circular No. 81-71 (April 8, 1981).

**Money Supply Data: Proposals Regarding Reporting Procedures.** 5 pp. Circular No. 81-76 (April 14, 1981).

**Revised List of OTC Margin Stocks.** 20 pp. Circular No. 81-78 (April 15, 1981).

**Cross-Zone Presentment of Cash Letters.** 1 p. Circular No. 81-79 (April 16, 1981).

**Regulation Z—Truth in Lending: Final Revision of Regulation.** 243 pp. Circular No. 81-80 (April 21, 1981).

**Bulletin 2: "Loans."** 2 pp. Circular No. 81-84 (April 27, 1981).

**Regulation Q [Interest on Deposits]: Eligibility for NOW Accounts.** 10 pp. Circular No. 81-85 (April 24, 1981).

**Amendment to Regulation D [Reserve Requirements of Depository Institutions] (Exempting Certain Kinds of Time Deposits Representing Funds of Deferred Compensation Plans from Reserve Requirements).** 9 pp. Circular No. 81-87 (April 29, 1981).

**Revised Schedule of Operating Hours for the Transfer and Settlement of Funds Effective May 1, 1981; Revised Schedule of Operating Hours for Net Settlement Arrangements Effective May 1, 1981.** 2 pp. Circular No. 81-88 (April 30, 1981).

**Deferral of Reserve Reporting for Small Nonmember Institutions.** 1 p. Circular No. 81-90 (April 30, 1981).

## Speeches and Statements

Remarks by **Henry C. Wallich ("The Limits of Monetary Control")** to the **Midwest Economics and Finance Associations,** Louisville, Kentucky. 17 pp., including summary. April 3, 1981.

Remarks by **Henry C. Wallich ("Methods of Strengthening Capital Movements to Developing Countries")** at the **International Conference on the Financial Development of Latin America and the Caribbean,** Caracas, Venezuela. 15 pp. April 4, 1981.

Remarks by **Paul A. Volcker** before **The Economic Club of New York,** New York City. 13 pp. April 6, 1981.

Statement by **Frederick H. Schultz** before the **Committee on Small Business,** U.S. House of Representatives. 9 pp. April 7, 1981.

Remarks by **Lyle E. Gramley** at the **1981 NACHA SurePay Conference,** New York City. 14 pp. April 14, 1981.

Remarks by **Paul A. Volcker ("Dealing with Inflation: Obstacles and Opportunities")** at the **Alfred M. Landon Lecture Series on Public Issues,** Kansas State University, Manhattan, Kansas. 14 pp. April 15, 1981.

Statement by **Robert H. Boykin** before the **Joint Economic Committee Hearing on Housing and the Economy,** Dallas, Texas. 13 pp. April 16, 1981.

Remarks by **Lyle E. Gramley ("Financial Innovation and Public Policy")** at the **Financial Innovation Conference,** Northwestern University, Evanston, Illinois. 15 pp. April 22, 1981.

Remarks by **Emmett J. Rice ("The Prospects for Interstate Banking")** before **The South Carolina Bankers Association,** Myrtle Beach, South Carolina. 14 pp. April 25, 1981.

Statement by **Frederick H. Schultz** before the **Committee on Banking, Housing, and Urban Affairs,** U.S. Senate. 30 pp., including appendix. April 28, 1981.

## Pamphlets, Brochures, and Reports

**Annual Report of the Federal Reserve Bank of Dallas, 1980.** 20 pp.

## New Member Banks

American Bank of Commerce, N.A., Del Rio, Texas, a newly organized institution located in the territory served by the San Antonio Branch of the Federal Reserve Bank of Dallas, opened for business April 13, 1981, as a member of the Federal Reserve System. The new member bank opened with capital of $1,000,000 and surplus of $1,000,000. The officers are: C. V. Uranga, Chairman of the Board; Paul G. Arnold, President; and Jerry H. Richter, Senior Vice President and Cashier.

Alta Mesa National Bank, Fort Worth, Texas, a newly organized institution located in the territory served by the Head Office of the Federal Reserve Bank of Dallas, opened for business April 15, 1981, as a member of the Federal Reserve System. The new member bank opened with capital of $1,000,000 and surplus of $1,000,000. The officers are: Philip E. Norwood, President, and Jeffrey R. Guy, Vice President and Cashier.

First National Bank of Burleson, Burleson, Texas, a newly organized institution located in the territory served by the Head Office of the Federal Reserve Bank of Dallas, opened for business April 20, 1981, as a member of the Federal Reserve System. The new member bank opened with capital of $750,000 and surplus of $750,000. The officers are: R. G. Boone, Chairman of the Board; Jim F. Woodard, President and Chief Executive Officer; and Pat Cogburn, Vice President and Cashier.

Community National Bank, Hondo, Texas, a newly organized institution located in the territory served by the San Antonio Branch of the Federal Reserve Bank of Dallas, opened for business April 20, 1981, as a member of the Federal Reserve System. The new member bank opened with capital of $800,000 and surplus of $800,000. The officers are: Lloyd E. Hardt, Chairman of the Board; Herb Fulcher, President; Douglas Bohmfalk, Vice President and Cashier; and Beverly Brown, Assistant Vice President.

Marble Falls National Bank, Marble Falls, Texas, a newly organized institution located in the territory served by the San Antonio Branch of the Federal Reserve Bank of Dallas, opened for business April 27, 1981, as a member of the Federal Reserve System. The new member bank opened with capital of $750,000 and surplus of $750,000. The officers are: H. G. Counts, Chairman of the Board; Burrell Dulany, Jr., President; Richard Kanz, Vice President; and Elizabeth Henderson, Cashier.