FEDERAL RESERVE
SOUTHWEST ECONOMY
BANK OF DALLAS

ISSUE 3 MAY/JUNE 1998

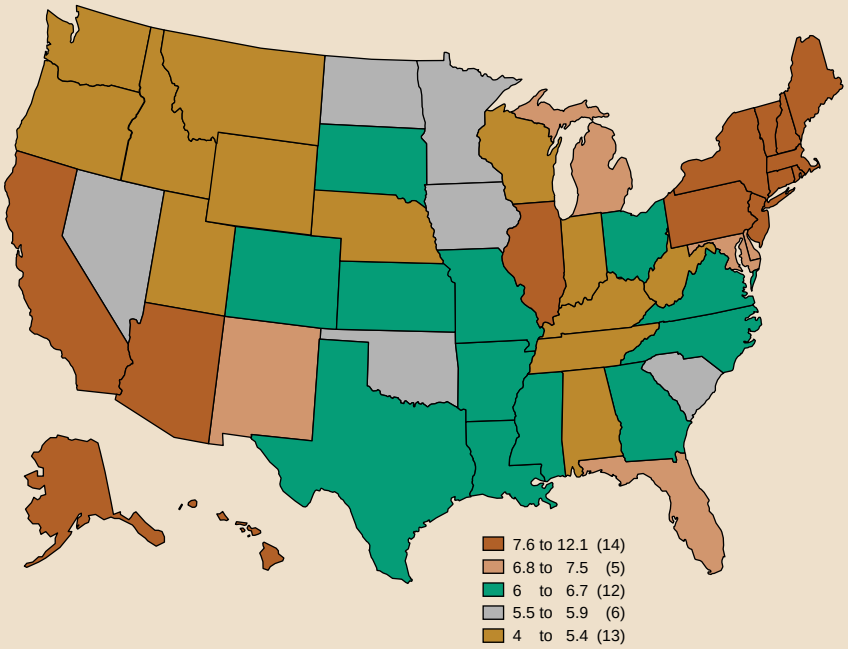
ELECTRICITY DEREGULATION LIKELY TO BENEFIT CONSUMERS: LATER, IF NOT SOONER

ELECTRICITY MAY BE getting cheaper. Market forces rather than regulators will soon be setting electricity rates in some areas of the United States. A wave of regulatory and legislative change has called for deregulation of electricity markets in 18 states over the next few years, and many more states are considering similar changes. Meanwhile, at the national level, the administration has proposed deregulating electricity markets by 2003.

Although the United States has low electric rates and high reliability by international standards, the rates are quite uneven across the nation (*Chart 1*). Proponents of deregulation argue that competition will lower electric rates, particularly in the regions with high rates, and make them more uniform throughout the nation. The high-rate states seem to be expecting such an outcome, as the states with above-average electricity rates have been more inclined to deregulate (*Chart 2*). Whether such an outcome is realized depends greatly on what is done in the name of deregulation.

INSIDE

CHART 1
AVERAGE REVENUE PER KILOWATT-HOUR (IN CENTS)



SOURCE: U.S. Energy Information Administration.

This article provides an overview of how deregulation could change the way electricity is produced and sold, the changes in competition and prices that are likely to result from deregulation, and the effect of deregulation on investors. System reliability, fuel mix and air quality are also briefly addressed.

The U.S. Electricity Industry Today

Currently, most regions of the country are served by integrated electric utilities, each of which performs all four functions of the electricity industry—generation, transmission, distribution and marketing. Each utility generates most of its own electricity and buys some from other producers. It then ships the electricity from its generators over its high-voltage transmission lines to its substations. At the substations, the utility steps down the voltage and from there distributes the electricity over lower voltage lines to its customers.

Most of the integrated companies are publicly traded firms. Their electric rates are subject to regulation at the state level, and in the typical process, rates are set to earn what the regulators deem to be a fair rate of return on prudent investments. In a few exceptional cases, state regulators have refused to allow a utility's rate base to reflect the costs of what they have judged to be poor investment decisions made by the utility.

The areas of the country with the highest electric rates typically have the highest cost generation facilities. The utilities owning these generation facilities invested in costly power plants, such as nuclear power plants. The costs of these investments are usually included in the utilities' rate bases, which are approved by state regulators. Many of these facilities were built during an era in which it was generally believed conventional energy prices would rise sharply over the foreseeable future.

In addition, various federal and, in some cases, state regulations compel the electric utilities to buy electricity from a variety of independent, high-cost producers at preferential rates. Most important among the producers receiving preferential rates are those using cogeneration or wind power to generate electricity. These regulations were justified on the basis of curbing oil imports, improving energy efficiency and reducing pollution.

It might seem that high-cost regions could reduce their electricity rates by purchasing electricity from low-cost regions, but transportation costs limit interregional electricity trade. Integrated companies buy and sell electricity from each other and exchange it over a nationwide grid of transmission lines, but transmitting electricity over long distances is expensive.

Proposals for Change

Deregulation consists of opening one or more segments of the current system to competition. Some segments could remain regulated. Although deregulation proposals vary considerably, the most common ones include these elements:

- Electricity generation and marketing would be opened to competition.
- Transmission and distribution would remain regulated monopolies and become contract carriers like natural gas pipelines.
- Electric marketers would buy electricity from generators, sell it to customers and arrange for its transportation from the generator to the customer.
- The integrated utilities would spin off their deregulated activities as separate companies.
- Some independent high-cost generators would lose their preferential rates.

Under some proposals, only large industrial customers would buy their electricity from the electricity marketing firms. Residential customers would continue to buy electricity from their distributor, as has been the case with natural gas deregulation.

As promoted, deregulation would lower electricity prices by introducing competition in generation and marketing. In the short run, deregulation would allow electricity generated in low-cost facilities in adjacent regions to

come into high-cost regions over the national grid of transmission lines and be sold in direct competition with local suppliers. (High transmission costs would prevent much competition from distant facilities.) The resulting competitive pressure would reduce the prices that the owners of the high-cost facilities could charge, immediately lowering rates in the high-rate regions. Over the long run, the free entry of new low-cost competitors and the potential for new entrants should also help promote lower, competitive prices.

Stranded Assets: An Obstacle to Deregulation

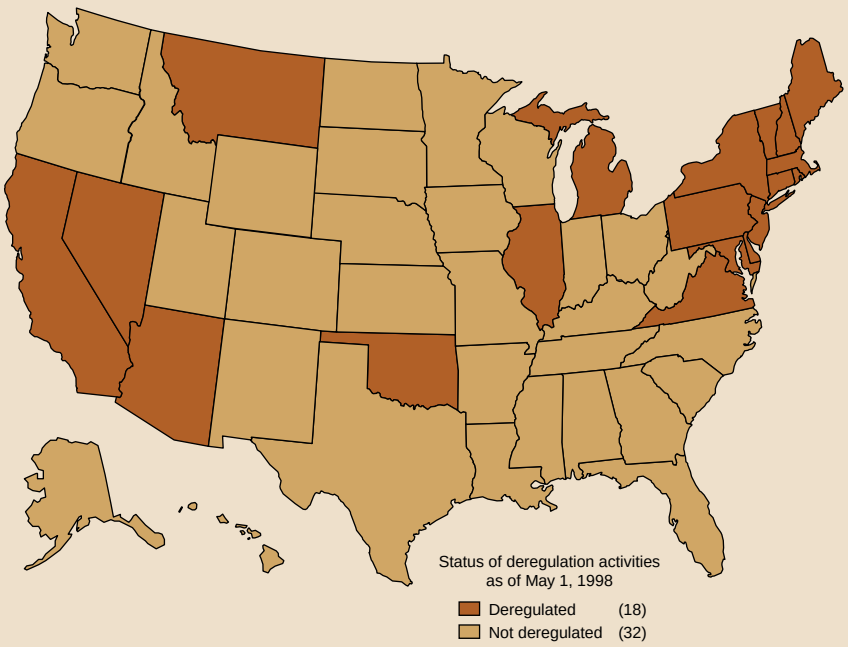
The treatment of high-cost generation facilities has been one of the major issues in deregulation. Under regulation, state regulatory authorities typically have set electricity rates to ensure that a utility's total revenues equal its total costs plus a fair market rate of return on plant investments. With the lower market prices for electricity that are expected after deregulation, owners of existing high-cost facilities are likely to find that their fixed investment costs are no longer covered. In discussions of deregulation, these investments are commonly known as stranded assets. Estimates of stranded assets resulting from deregulation range from $10 billion to $500 billion.[1] The unknowns that influence these estimates are the degree of competition under deregulation, future natural gas prices and the timing of deregulation.

The issue of who will pay for these stranded assets has been one of the major stumbling blocks to deregulation in the very regions of the country with high electric rates. Seventeen of the 18 states that have deregulated have made some provisions for recovery of stranded assets.[2] These states used a variety of measures to distribute the costs of previous electricity plant investments.

In most states, the legislation permitting deregulation requires the customers benefiting from lower, competitive prices to compensate the owners of stranded assets by paying exit fees or transition charges on top of the newly competitive electric rates. Proponents of

The treatment of high-cost generation facilities has been one of the major issues in deregulation.

CHART 2
STATE DEREGULATION ACTIVITY



SOURCE: U.S. Energy Information Administration.

Choosing Reliability of Electricity Service

The ability to pay for reliability is not completely new. The U.S. Energy Information Administration (EIA) reports that utilities for a long time have allowed a few customers to tailor the level of reliability to fit their needs and budgets.[1] The customers generally outline a set of conditions under which their electric service may be interrupted in exchange for a lower rate.

New technologies may also play a part in system reliability. Individuals could choose reliability by responding to price schedules announced by the utility. Utilities could then vary prices over time based on supply and demand. In peak periods of electricity use, the price would be higher, and during periods of lower use, the price would fall. No customers would be denied electricity if they were willing to pay the market-clearing price. Such a system would reduce electricity use during peak periods. Telephone companies have used a similar pricing system for many years.

One company that is operating in states with pilot projects for electricity competition gives customers Internet access to reports on their hour-by-hour energy use and charges. The company also sells new refrigerator-sized power plants that businesses such as restaurants or small factories can use to avoid paying peak rates or losing power in outages.

Another possibility is for utilities to selectively interrupt just part of a customer's service, such as the electricity that goes to a major appliance, under circumstances agreed upon in the customer's contract. The EIA reports that some utilities already have the technology to do so.[2]

[1] EIA, "Performance Issues for a Changing Electric Power Industry" (visited May 5, 1998) <http://www.eia.doe.gov/fuelelectric.html>.

[2] See note 1.

this approach argue that the compensation scheme would allow society to begin to capture the benefits of competition and prevent future investment in high-cost facilities while compensating the stakeholders in the current system for accepting its abolition. Of course, customer payment of exit fees or transition charges as part of the electric bill would delay the hoped-for decline in effective electricity prices in those regions with the highest electric rates. Such fees were cited by Enron as one reason that its attempt to sell electricity to California households was relatively unsuccessful.

Several other ideas have been offered for the resolution of stranded assets. One proposal is to let taxpayers compensate investors for the capital losses that result from changes in regulation. But taxpayer compensation of shareholders who suffer losses as the result of changes in legislation is rare.

Another approach is to let the shareholders of the electric utilities and independent generators bear the costs if competitive pricing yields less than a normal return on their capital investments. Opponents of this approach argue that the change in regulation amounts to a taking, which deserves compensation. Legally, they are probably wrong; there is no legal presumption that one may rely on continuing government regulation to earn a profit. Proponents of this approach argue that those who have invested in an industry in which the returns depend on continuing government regulation should have realized that they were taking a risk that government regulations could change and that the price they paid for their shares was lower to compensate for the risk.

Some argue further that electric companies deserve no compensation for their stranded assets *whether or not those companies should have anticipated deregulation.* Advocates of this view believe that stranded assets are the result of bad investment decisions (such as building nuclear power plants) made by electricity companies in the belief that, if the investment failed, pliant state regulatory agencies would permit these companies to recover their losses by raising rates charged to their customers. They argue that since the companies had no guarantee they would have been reimbursed under the prederegulation regime, companies have no right to insist upon reimbursement in a deregulated environment.

Free market economists have taken positions in favor of shareholders bearing the costs of stranded assets and in favor of customer payment of exit fees or transition charges. Although some would prefer that shareholders bear the cost for the reasons discussed above, they also believe that some payment from customers may be a political necessity to introduce competition and prevent future investment in high-cost facilities. One important complication here is that many state pension funds seem to be heavily invested in electric utility stocks and may take sizable losses if a state proceeds with uncompensated deregulation.

Concerns About Deregulation

Some analysts remain concerned that deregulation will result in monopolization rather than competition because transmission costs are high and firms will have locational advantages. Under the most common proposals, however, it seems that deregulation will result in a workable amount of competition. The outcome is likely to be one in which most firms have locational advantages resulting from high transmission costs but earn normal rates of return on their prudent investments. Shipment of electricity from neighboring regions and the entry or potential entry of low-cost generators will limit monopolistic pricing. The ability of customers to vote with their feet by moving to lower cost regions will also help foster competitive pricing.

Some individuals worry that the reliability of electricity provision will decline after deregulation. As an industry that has earned a regulated rate of return above the market average, the electric utility industry has had an incentive to overcapitalize. One result of that overcapitalization has been to provide more excess capacity (and reliability) than would exist in a competitive industry. Under deregulation, reliability is likely to be adjusted to levels preferred by the market. Those who want

considerable reliability will have an opportunity to pay for it (see box entitled "Choosing Reliability of Electricity Service).

Another concern about deregulation is the potential effect on air pollution. Not much will happen initially to the fuel mix used or the air pollution produced in generating electricity. Firms investing in new electricity-generating capacity will have an incentive to use the lowest cost sources. Such investment favors the direct use of carbon-based fuels over wind power, cogeneration and nuclear energy, which could increase air pollution. On a pure cost basis, one might predict that coal (the fuel with the most potential for emissions) could become more heavily used, but the U.S. Energy Information Administration (EIA) forecasts that most of the new electricity-generating capability added in coming years will be either combined-cycle gas turbine or combustion turbine/diesel technology.[3] Of course, such decisions will be greatly affected by changes in technology and environmental regulations.

The Bottom Line

Proponents of deregulation argue that introducing competition will lower electric rates. The states with the highest cost electricity seem to be expecting such an outcome because they have been the most aggressive in pursuing deregulation.

In the short run, deregulation would allow electricity generated in low-cost facilities in adjacent regions to be sent to high-cost regions over the national grid of transmission lines and to be sold in direct competition with local suppliers. The resulting competitive pressure would reduce the prices that the owners of the high-cost facilities could charge, immediately lowering rates in the high-rate regions. The short-run gains could be mitigated to some extent by state-imposed charges to compensate the owners of high-cost generation facilities. Over the long run, however, the high-cost generation facilities will be fully depreciated and the charges will be phased out. In addition, the free entry of new low-cost competitors and the potential for new entrants should also help promote lower, competitive prices.

Some critics have expressed concern about the possible development of unregulated monopolies, but the shipment of electricity from neighboring regions and the entry or potential entry of low-cost generators will limit the likelihood of monopolistic pricing. The ability of customers to vote with their feet by moving to lower cost regions will also help foster competitive pricing. In short, deregulation and the resulting competition should lower prices for customers over the long run even if gains are limited in the short run.

— Stephen P. A. Brown
Sheila Dolmas

Electricity Deregulation in the Southwest

Most of the Southwestern states have electricity rates close to the national average. All the states in the region are looking into electricity deregulation. Two states have moved forward with plans that would bring full competition to retail electricity markets by 2003.

With the highest electricity rates among the Southwestern states, Arizona was the quickest to move forward with electricity deregulation. Arizona issued a regulatory order in December 1996 to phase in retail electricity competition beginning in January 1999, with full competition by January 2003. The plan called for recovery of some stranded assets through exit fees.[1]

Despite having below-average electricity rates, Oklahoma passed a law in April 1997 that directs state officials to study and develop a framework to introduce retail electricity competition by July 2002. This law allows collection of transition charges over a three- to seven-year period to recover stranded assets. One limitation imposed by the state on these charges is that they must not cause the total price of electricity to rise above the price charged during the transition period.[2]

A large and diverse state, Texas has a mix of high- and low-cost electricity sources. Texas is still investigating electric utility deregulation.[3] Some areas of the state, such as Dallas/Fort Worth and Houston, could see substantially lower electric rates as a result of deregulation, while shareholders of the firms with stranded assets take sizable losses. Some such firms are trying to delay deregulation to gain time to recoup some of the stranded assets that might not be recovered under the final version of deregulation.

Louisiana, with electricity rates similar to those in Texas, is also investigating the implications of electricity deregulation. A 1997 legislative resolution created a study committee that will report on a variety of deregulation issues this year.[4]

In New Mexico, a pilot program is under way to introduce customer choice through the Texas–New Mexico Power Company's Community Choice plan. However, no statewide competition has yet been introduced. The New Mexico Public Utility Commission (PUC) is promoting deregulation and in February submitted a proposal to the governor and legislature that would give the PUC authority to resolve deregulation issues. However, legislation on the issue is not expected to be introduced until next year.[5]

[1] EIA, "Performance Issues for a Changing Electric Power Industry" (visited May 5, 1998) <http://www.eia.doe.gov/fuelelectric.html>.
[2] See note 1.
[3] See note 1.
[4] See note 1.
[5] See note 1.

Notes

[1] EIA, "Changing Structure of the Electric Power Industry: An Update" (visited May 5, 1998) <http://www.eia.doe.gov/fuelelectric.html>.
[2] Virginia's restructuring law allows recovery of some stranded assets, but the details won't be decided upon until 1999.
[3] See note 1.

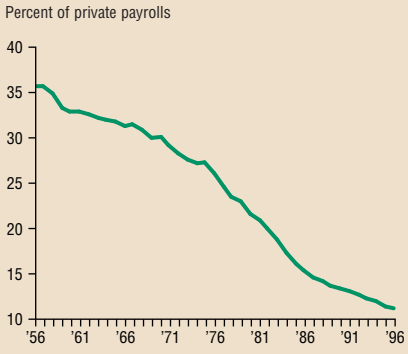
The New Labor Paradigm

More Market-Responsive Rules of Work and Pay

IN THE LAST year or so, inflation has drifted lower while the unemployment rate has fallen below trigger levels that historically have been associated with rising rates of inflation. Indeed, since mid-1996 the unemployment rate has been 5 percent or lower—well below the 5.5 percent to 6 percent trigger-level estimates of many mainstream empirical economists—while consumer price inflation has remained tame.[1]

One explanation for this combination of low unemployment and subdued inflation is that we are in an era in which massive technological innovation and intense competition are curtailing inflation. Under this new paradigm, three sources of inflation restraint are (1) cheaper imports from increased worldwide capacity, (2) fiercer competition among firms in nontraded goods industries, and (3) technological innovations that boost productivity.[2] Behind the first two sources is the idea that increased competition in product markets has restrained firms from bidding up wages and has led companies to find better ways of employing and paying workers that have made work and pay more market responsive.

CHART 1
UNIONS ON THE DECLINE



SOURCE: Duca and VanHoose (1998). See note 3.

After reviewing how and why the rules of work and pay have been changing, this article briefly assesses how well the new labor paradigm is functioning in the United States and how well other major economies are performing. Finally, the broader meaning of these new labor practices is discussed.

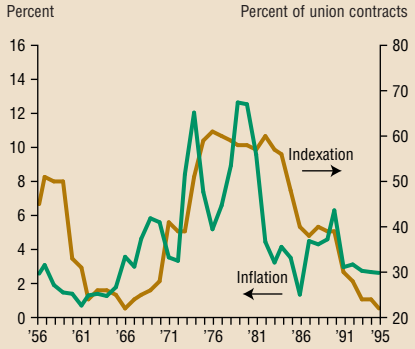
How New Rules of Work and Pay Are More Market Responsive

In general, work and pay have become increasingly market sensitive. With respect to employment, this sensitivity is reflected in a declining share of union workers covered by medium- and long-term wage contracts and in the rising use of temporary and part-time workers. Chart 1 shows the falling share of private-sector workers represented by unions and indicates that the most dramatic declines occurred in the late 1970s and early 1980s.[3]

The increased use of temporary and part-time workers has also made employment more market sensitive. By switching to such workers, firms lower production costs not only by paying fewer benefits but by better matching employment to swings in production—for example, using part-time workers to handle busier weekend shopping periods.

In three key ways, pay has also become more market sensitive. First, long-term wage contracts—which set wages well ahead of market conditions—are less prevalent, as evidenced by declining unionization rates. Second, fewer union contracts contain indexation clauses that boost wages for inflation according to a negotiated formula (*Chart 2*).[4] While indexation protects workers' purchasing power, it also ties a firm's wage bill more to general price

CHART 2
FEWER UNION CONTRACTS INDEXED FOR INFLATION AS COMPARED WITH THE 1950S



SOURCE: Duca and VanHoose (forthcoming). See note 7.

increases than to the price of that firm's particular output. Clearly, inflation risk, which is often measured by the inflation rate, boosts the use of indexation formulas. For example, in the high-inflation 1970s, indexation clauses were common as workers sought to protect their purchasing power from high and variable inflation. However, inflation is not the only factor affecting the use of indexation provisions. Inflation in the early 1990s was at levels near those of the 1950s, but indexation was only half as prevalent in the more recent period.

The third key change is that profit sharing has risen dramatically since the early 1980s. Chart 3 shows the increased portion of workers who enjoy profit-sharing provisions among those who have either defined-benefit or defined-contribution pension coverage.[5] Most of these profit-sharing provisions include employee stock-ownership plans or profit-based contributions to thrift plans. Other data show less use of non-deferred forms of profit sharing, such as cash bonuses.

Deferred profit sharing is more common because workers do not have

sufficient wealth to smooth their consumption if their weekly take-home pay were to vary with profits that are highly sensitive to market conditions. They are, however, better able to handle profit-related volatility in their compensation over a longer horizon, such as in their retirement accounts. Nevertheless, recent salary and Federal Reserve Beige Book surveys indicate that annual base/hourly pay is increasingly being supplemented by variable cash bonuses. This shift suggests that pay is becoming more market responsive in both the short run and the long run.

Why New Rules of Work and Pay Are More Market Responsive

Arguably, greater competition forces firms to become more efficient because of tighter profit margins and heightened fear of losing market share to lower cost competition. Fiercer competition can arise not only in traded goods industries facing foreign competition, but also in deregulated markets, such as telecommunications. In these markets, the entry of new firms and the ending of price and other regulations have forced firms to compete more with one another. In such an environment, firms no longer enjoy the safe profit margins and protection from competition that once enabled them to shield workers from swings in market conditions.

In particular, greater competition induces firms to make pay and work more market sensitive; to cut management and add incentives to compensation so workers become more self-managed; and to share profits in exchange for wage cuts when companies are restructuring. Greater competition also encourages firms to use profit sharing to make pay more market responsive. With tougher competition, profits are more tightly aligned with a worker's market value because prices and profits more closely reflect wage costs adjusted for productivity. As a result, profit sharing should trend upward with a measure of market competition. Chart 3 plots a measure of competition, which rises as firms' pricing power declines and which is adjusted for swings related to the business cycle, oil prices and exchange rates.[6] Research has shown that as this overall measure of competition rises, long-run wage contracts and inflation indexation in labor contracts become less prevalent.[7] But how can we tell competition is the key factor making work and pay more market sensitive? One way is to compare deregulated and traded goods industries with other sectors.

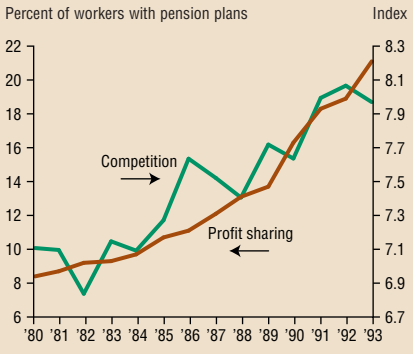
Industry data indicate that the drop in unionization since the early 1980s stems mostly from declines in unionization rates within industries rather than from shifts in employment from more unionized industries to less unionized ones. Moreover, the biggest declines in unionization rates were in manufacturing and deregulated industries, as shown in Chart 4.[8] Declines in the use of inflation indexation also follow these patterns.

Some industries are more suited to profit sharing than others because the nature of work and the ability to measure an individual's contributions vary across sectors. Such factors would account for differences across industries in a given time period, while changes in generational attitudes might account for why profit sharing has risen in general. However, changes in how much competition an industry faces relative to others might explain why profit sharing has risen more in some industries than in others. Indeed, the largest increases in profit sharing have occurred in sectors with greater foreign competition, such as manufacturing, or in deregulated sectors, such as transportation (*Chart 5*).[9]

How Well Are the New Rules of Work and Pay Performing in the United States?

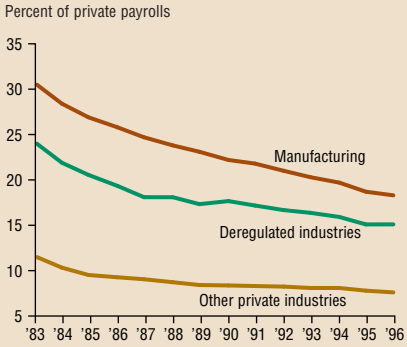
For Americans, the new labor paradigm has (1) increased short-run job and pay variability, (2) fostered the use of portable pensions like IRA and thrift plan accounts, (3) forced workers to focus more on lifetime employability than lifetime employment at a particular firm, and (4) boosted the use of profit sharing. Quite apart from business cycle

CHART 3
THE RISE OF PROFIT SHARING AND GOODS MARKET COMPETITION



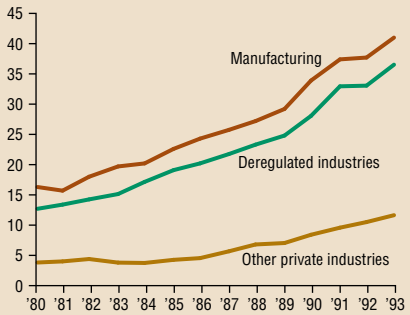
SOURCE: Duca and VanHoose (forthcoming). See note 6.

CHART 4
UNIONIZATION DECLINES IN MANUFACTURING AND DEREGULATED INDUSTRIES



SOURCE: Bureau of Labor Statistics; author's calculations.

CHART 5
PROFIT SHARING RISES IN MANUFACTURING AND DEREGULATED INDUSTRIES



SOURCE: Bureau of Labor Statistics; author's calculations.

fluctuations, American workers face more uncertainty. By this standard alone, the new labor paradigm seems to be a step down. However, economic conditions change, which implies that older labor practices may no longer function well, particularly in a more competitive marketplace. Therefore, determining whether we would have been better off with the old rules and whether labor practices used in other industrialized nations have worked better in recent years would be better criteria for evaluating the new labor paradigm.

How Well Are Other Labor Markets Performing?

In Germany, France and Italy, laws protect workers from being fired and industries from domestic and foreign competition. Consequently, senior workers at big established firms enjoy job security, long vacations and high pay indexed for inflation. However, by boosting labor costs above market levels, these rigid practices have resulted in stymied job creation for the young; mounting, double-digit unemployment rates; slow economic growth; and high taxes and high budget deficits.

In Japan and South Korea, as in Continental Europe, laws protect workers from being fired and firms from much competition. However, two key differences exist. First, pay includes a year-end company-wide bonus that partly reflects company profits. Second, large conglomerates dominate these economies and move workers with lifetime employment from slack industries to faster growing ones. Thus, the Japanese/South Korean system makes pay and employment more market sensitive than in Continental Europe, but this market sensitivity is far less so than in the United States. As a result, the need to lay off workers or to cut pay dramatically in dying industries has mounted over the long run. So rather than continuously make enough minor market adjustments, Japanese and South Korean firms have allowed problems to build to the point that very large and painful changes will be required.

One international bright spot is Great Britain, which has allowed restructurings, scaled back legal "job protections" and cut unemployment and welfare benefits that encourage idleness. Like American workers, British workers now endure increased short-run job and pay uncertainty. But, paradoxically, they enjoy greater long-run employability within their whole economy. They also can expect better income prospects in the form of lower unemployment and faster growth, which have resulted from adopting a more market-oriented system.

What Is the Broader Meaning of the New Labor Paradigm?

Fundamentally, new labor practices in the United States have made pay and work more market responsive. Furthermore, the new labor paradigm in the United States and Great Britain has outperformed the older ones of other major economies in the 1990s. But this paradigm also has implications for monetary policy and economic policy in general.

With respect to monetary policy, the new labor paradigm has several implications for economic gauges and for Federal Reserve policy. First, increased profit sharing has made obsolete our existing wage measures, which exclude many deferred forms of profit sharing. Thus, labor costs are likely rising faster and are more flexible than our gauges indicate.

More significantly, the greater competition that has spawned new rules of work and pay affects the relationship between tight labor markets and inflation in several ways. First, the more important foreign trade, the more significant import prices are for our inflation rate. Second, greater competition implies that capacity pressures affect inflation more slowly because when the economy is overheated, individual firms risk losing more market share if they increase prices before competitors do. Third, firms are willing to produce more at a given price under greater competition, implying that the economy can sustain higher capacity levels without causing a rise in inflation.[10] Nevertheless, there is a good deal of uncertainty about where the new trigger levels are. Fourth, to some extent the increased market sensitivity of work and pay enables the economy to adjust more readily to new technology, which boosts the incentives for innovation and, consequently, long-run sustainable growth.

The new labor paradigm has other, more general policy and economic implications. Increased profit sharing means that current wage measures understate total pay, further implying that living standards for U.S. workers have been understated. And the increased use of stock options and profit sharing indicates that outside investors face the risk that future profits will be diluted when stock options are exercised or profits are shared. Therefore, additional and better disclosure of profit-sharing arrangements is needed. New rules requiring firms to report profits on a diluted basis constitute a major step in this direction.

At another level, the new labor-market flexibility fosters more frequent economic adjustments. While this boosts short-run uncertainty, it reduces the risk of big, costly adjustments. For this reason, fewer imbalances build that typically come to a head during economic downturns when finding new jobs is harder for laid-off workers. Paradoxically, the very labor paradigm that has subjected American workers to increased short-run adjustments and uncertainty has reduced long-run uncertainty and boosted growth by creating a healthier overall economy. In contrast, workers abroad who have more legal job protection are facing mounting unemployment and huge, costly adjustments.

Some nations, particularly those in Continental Europe, are reluctant to shed the job-firing laws and anticompetition policies that have contributed to their double-digit unemployment rates. Instead of letting their labor markets adapt to the economic churn of job (and firm) creation and destruction, Germany, France and Italy are pursuing a currency union as an elixir to their poor economic performance at a time,

(Continued on page 12)

Financial Crisis and Structural Reform Plans in Korea

AFTER EXPERIENCING SEVERE turmoil for several months, the foreign exchange market in South Korea seems to be stabilizing (*Chart 1*). Recently we have seen some implementation of reform plans supported by the International Monetary Fund (IMF), extension of $24 billion in short-term loans to Korean commercial banks (with government guarantees), and four consecutive months of trade surplus ($11 billion in first quarter 1998). Are these signs of the end of Korea's financial crisis? Assessing the future of the Korean economy requires a review of the processes by which the structural reform plans are implemented.

The underlying conditions for the financial crisis in Korea have been nourished by the government's long-time control of and intervention in the economy. With the hope of expanding the economy, the Korean government deliberately managed the distribution of resources so that conglomerates, called *chaebols*, could grow without constraints. Consequently, the nation's private financial sector never seriously took off. The chaebols' inefficiencies increased as they became larger. The crisis broke when foreign investors realized that the chaebols' investments were not efficient and the government might no longer be able to feed all the ailing chaebols.

The structural reform plans in the IMF-supported program were designed to restructure the economy to function more efficiently in the long run as well as stabilize the foreign exchange market in the short run. Many of the reform measures represent a departure from the traditional Korean styles of economic and corporate management. So the question is whether the measures can be implemented effectively, thereby changing the traditional styles.

Although the Korean government promised to observe the structural reform plans, implementation has been slow. The only exception has been liberalization of capital inflows, which the government believes is urgently needed to stabilize the foreign exchange market.

In February the government ordered banks to grant loan extensions of $24 billion to small and mid-size companies for an additional six months (an exchange rate of 1,000 Korean won for one U.S. dollar is used throughout this article). It also declared that it would not allow further bankruptcy of big companies until the end of this year. However, this bankruptcy delay does not seem to accompany any concrete plan for recapitalizing the financial sector, which will cost an estimated $100 billion.

Since the crisis broke, the financial status of the chaebols has not improved. The debt–capital ratio of major chaebols has increased, and the practice of self-lending within the chaebols has continued. As of yet there are no significant signs that the chaebols are becoming more market driven. For example, Hyundai and Samsung are competing to take over defunct Kia Motors to increase size, not profits.

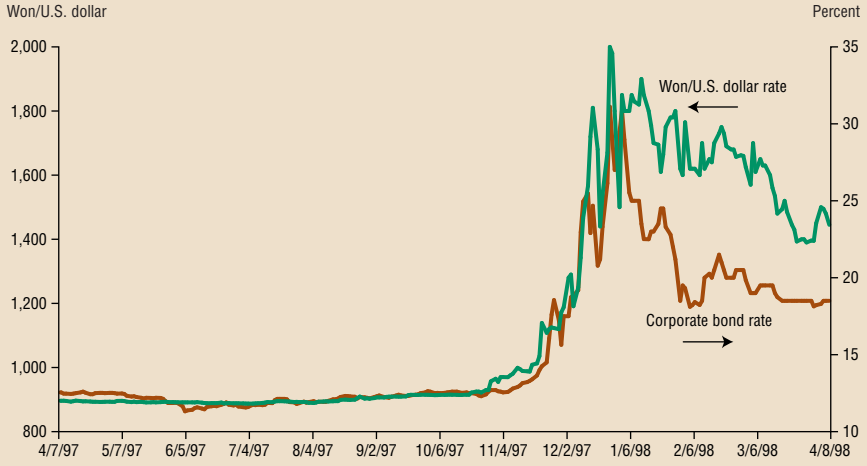
The labor laws have been amended to allow for a more flexible labor market and to make foreign investment in the highly unionized banking sector more attractive. But in a society with a poor safety net for the unemployed, social resistance against massive layoffs is strong.

So far the Korean government has been more concerned about dealing with the immediate foreign exchange problem than solving the long-term problem of a weak banking sector. The reform effort has been unfocused as there has been no single authority implementing the various government ministries' reforms. Furthermore, the structure of this hierarchical Confucian society is still rigid, with the feudal chaebols trying to keep their traditional privileges.

Unless the Korean government sets up a system to implement the reforms effectively and individuals view the changes as positive for the long-run health of the economy, Korea will continue to be vulnerable to relatively small shocks inside and outside the country.

—Jahyeong Koo

CHART 1
THREE-YEAR CORPORATE BOND RATE AND EXCHANGE RATE



SOURCE: Dow Jones.

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REGIONAL UPDATE

IN VIEW OF the recent fluctuations in the value of the Texas Leading Index, it is important to understand the source of this volatility.[1] These movements can be attributed to the Real Texas Value of the Dollar (TXVD). The TXVD is one of the eight components of the Texas Leading Index and has lately become one of its most important contributors. From September 1997 through January 1998, the TXVD was the largest overall contributor to the Leading Index.

The TXVD, the Texas equivalent of the Trade Weighted Value of the Dollar (TWVD), is an index of the weighted value of the inflation-adjusted dollar relative to the inflation-adjusted currencies of other countries. Each country is assigned a weight based on the size of exports it receives from Texas relative to total exports. There are 48 countries in the TXVD, accounting for 94.7 percent of the Texas exports. Mexico is the largest country in this index, with 35.9 percent of the weight, followed by Canada (9.8 percent) and Japan (4.06 percent). Therefore, movements in the value of the Mexican peso will affect the TXVD more than movements in any of the other currencies.

The TXVD is inversely related to the Texas Leading Index (*Chart 1*). In other words, an increase in the TXVD affects the Texas Leading Index negatively, while a decrease in the TXVD gives it a positive boost. The TXVD is included in the Leading Index because it serves as an indicator for the price of Texas exports. When the value of the TXVD increases, these exports become more expensive for Texas' trading partners. This could result in a reduction in the volume of Texas exports.

From September 1997 through January 1998, the TXVD saw rapid growth of 5.4 percent. The bulk of this growth can be attributed to the Asian crisis, during which most of the East Asian countries suffered strong devaluations of their currencies. Indonesia, Thailand, Philippines, South Korea and Malaysia were affected the most by the crisis. Indonesia saw its currency depreciate by as much as 140 percent against the dollar in real terms. As Chart 2 shows, growth in the TXVD would have been insignificant if the Asian countries had been excluded from this index. The combined weight of all the Asian countries included in the TXVD is 20 percent of the total. This weight is significant enough to cause important changes in the TXVD.

During the September 1997–January 1998 period, the Texas Leading Index fell each month except January. The cumulative decline was 0.5 percent. If the TXVD had remained unchanged,

CHART 1
TEXAS LEADING INDEX VERSUS TXVD

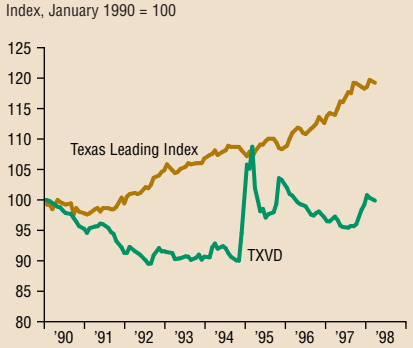
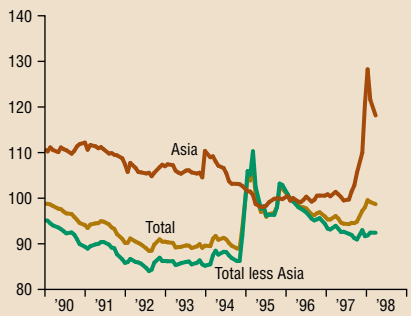


CHART 2
TEXAS VALUE OF THE DOLLAR



NOTE: Asia includes Japan, South Korea, Malaysia, China, Hong Kong, Singapore, Indonesia, Thailand, Taiwan and Philippines.

the Leading Index would not have fallen.

The effects of the Asian crisis are similar to those observed during the peso crisis at the end of 1994. From December 1994 to March 1995, the Mexican peso lost as much as 50 percent of its value against the dollar in real terms. This dramatic devaluation of the peso caused the TXVD to rise sharply—by 20.1 percent—during the November 1994–March 1995 period. At the same time, the Texas Leading Index declined by 1.6 percent. It is important to note that even though the peso devaluation was not as large as some of the devaluations that took place during the Asian crisis, it had a bigger effect on the TXVD—a consequence of Mexico's greater weight in this index. During both of these crises, the TXVD was the largest contributor to the changes in the Texas Leading Index and, hence, was the driving force in its decline.

Currently, the TXVD has edged down, driven by a decline in the value of the dollar against the Asian currencies as these currencies strengthened. This decline in the TXVD contributed, along with other positive components, to a 0.6 percent increase in the Leading Index from January through March 1998.

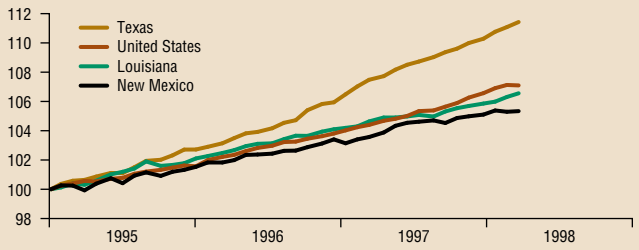
—Ricardo Llaudes

Note

[1] The Texas Leading Index is a measure of the current conditions in the Texas economy; the higher its value, the better are economic conditions in Texas. The index leads changes in Texas employment by six months.

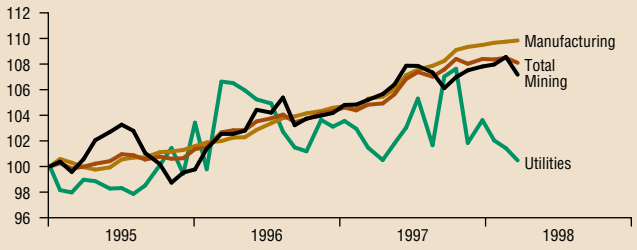
Total Nonfarm Employment

Index, January 1995 = 100



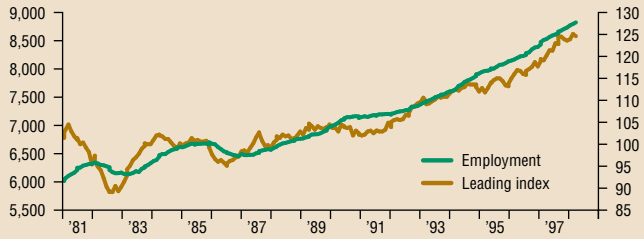
Texas Industrial Production Index (TIPI)

Index, January 1995 = 100



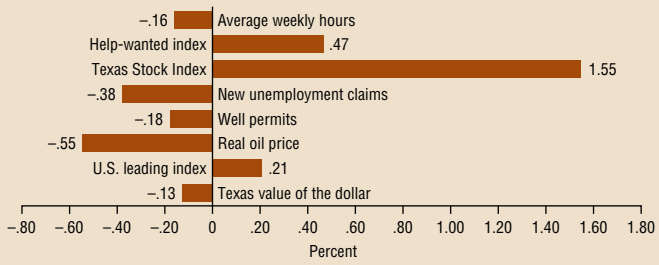
Texas Leading Index and Nonfarm Employment

Thousands of persons — Index, 1987 = 100



Net Contributions of Components to Change in Leading Index

January–March 1998



Regional Economic Indicators

	Texas Leading Index	TIPI total	Texas employment*					Total nonfarm employment*		
			Mining	Construction	Manufacturing	Government	Private service-producing	Texas	Louisiana	New Mexico
3/98	124.6	128.5	167.9	476.7	1,094.7	1,498.1	5,586.8	8,824.2	1,867.2	714.3
2/98	125.1	128.9	169.2	474.4	1,092.2	1,494.5	5,566.5	8,796.8	1,862.8	714.0
1/98	123.9	128.8	168.4	470.7	1,090.1	1,494.3	5,548.1	8,771.6	1,857.2	714.6
12/97	123.6	128.8	166.8	464.5	1,091.5	1,492.0	5,519.1	8,733.9	1,854.9	712.7
11/97	123.9	128.4	166.7	462.1	1,089.2	1,490.0	5,502.4	8,710.4	1,852.0	711.9
10/97	124.5	128.8	166.8	458.6	1,086.1	1,487.0	5,481.6	8,680.1	1,849.4	711.1
9/97	124.6	127.9	166.6	460.1	1,085.6	1,486.5	5,462.2	8,661.0	1,845.4	708.8
8/97	122.8	127.2	166.4	459.4	1,084.5	1,481.3	5,442.7	8,634.3	1,839.4	710.0
7/97	123.0	127.6	166.5	456.7	1,082.3	1,474.2	5,430.7	8,610.4	1,841.3	709.4
6/97	121.3	127.0	165.4	457.2	1,081.8	1,471.3	5,417.3	8,593.0	1,839.5	708.9
5/97	121.4	125.5	164.6	456.2	1,078.6	1,477.3	5,389.7	8,566.4	1,838.2	707.5
4/97	120.2	124.7	163.6	452.9	1,075.4	1,475.7	5,363.6	8,531.2	1,838.2	704.4

* in thousands

Further Information on the Data

For more information on employment data, see "Reassessing Texas Employment Growth" (*Southwest Economy*, July/August 1993). For TIPI, see "The Texas Industrial Production Index" (Dallas Fed *Economic Review*, November 1989). For the Texas Leading Index and its components, see "The Texas Index of Leading Indicators: A Revision and Further Evaluation" (Dallas Fed *Economic Review*, July 1990).

Online economic data and articles are available on the Dallas Fed's Internet Web site, www.dallasfed.org.

The New Labor Paradigm

(Continued from page 8)

ironically, when fixed exchange rate arrangements are failing or are under pressure around the world.[11] On a brighter note, other nations such as Great Britain and Canada have taken strides toward deregulating their economies. Still others, like South Korea and perhaps Japan, have only just begun.

—John V. Duca

Notes

My thanks to Mike Cox for useful suggestions and to John Benedetto for research assistance.

1 This is true even if the volatile food and energy components are excluded from the consumer price index (CPI) and if the CPI is adjusted for recent technical changes.

2 This is not to say that the so-called new paradigm lasts forever, of course, but that it lasts sufficiently long to be identified as such.

3 Data are from John V. Duca and David D. VanHoose, "The Rise of Goods Market Competition and the Fall of Nominal Wage Contracting," manuscript, 1998. Duca and VanHoose splice estimates from the Bureau of Labor Statistics and from Leo Troy and Neil Sheflin, *Union Sourcebook*, 1985, (West Orange, NJ: Industrial Relations Data and Information Services).

4 Bureau of Labor Statistics.

5 See Linda Bell and Douglas Kruse, "Evaluating ESOPs, Profit Sharing, and Gain Sharing Plans in U.S. Industries: Effects on Worker and Company Performance," U.S. Department of Labor, manuscript, March 1995.

6 For data and discussion, see John V. Duca and David D. VanHoose, "Goods Market Competition and Profit-Sharing: A Multisector Macro Approach," *Journal of Economics and Business*, forthcoming.

7 See John V. Duca and David D. VanHoose, "The Rise of Goods Market Competition and the Decline in Wage Indexation," *Journal of Macroeconomics*, forthcoming.

8 Data are from John V. Duca and David D. VanHoose, "The Rise of Goods Market Competition and the Fall of Nominal Wage Contracting," 1998, manuscript.

9 See John V. Duca and David D. VanHoose, "Goods Market Competition and Profit Sharing: A Multisector Macro Approach," *Journal of Economics and Business*, forthcoming. In addition to making it more desirable to make pay more market sensitive via profit sharing, increased competition may have induced more profit sharing through a restructuring channel. In deregulated industries, some firms have gained wage and layoff concessions by agreeing to share future profits. For example, workers at United Airlines agreed to wage concessions in early 1994 in exchange for eventually owning a majority stake in that airline.

10 For evidence and discussion, see John V. Duca and David D. VanHoose, "Has Greater Competition Restrained United States Inflation?" 1998, manuscript.

11 For further discussion, see W. Michael Cox, "The Churn: The Paradox of Progress," *1992 Annual Report*, Federal Reserve Bank of Dallas, 1992, 5–18.

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