The Aging of America: Impacts on the Marketplace and Workplace
Theodore M. Crone

Closing Troubled Financial Institutions: What Are the Issues?
Leonard I. Nakamura
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Since "baby bust" followed "baby boom," the nation—and the three states in the Third Federal Reserve District—can expect slower population growth over the next 10 years. They can also expect a maturing of their populations. By the year 2000, there will be more people in their middle (and most productive) years and fewer young people to take entry-level jobs. Accordingly, we have a good idea of how many part-time workers will be available, how many of us will retire, how much of our income we will save, and how many new houses and cars we will buy.

CLOSING TROUBLED FINANCIAL INSTITUTIONS: WHAT ARE THE ISSUES?
Leonard I. Nakamura

In designing policies to close troubled banks and thrifts, regulators have two objectives: to protect the deposit-insurance fund and to promote efficient banking. Both goals would be made more attainable by a policy of "efficient closure"—in which regulators close only those insolvent banks and thrifts that are inefficiently run. But differentiating between efficient and inefficient institutions is no small task. It might be made easier if the inefficient ones were given more incentives to close themselves and if regulators had access to better signals about an institution's creditworthiness.
The Aging of America: Impacts on the Marketplace and Workplace
Theodore M. Crone*

With the dramatic changes the world has been witnessing, no one can really fault economic forecasters for being cautious in their 10-year outlooks these days. Nonetheless, the year 2000 still provides an inviting target for economic forecasts. And a horizon of 10 years is not too long for a business plan.

Fortunately, two important ingredients in any long-term forecast—the size and age distribution of the population—can be projected fairly accurately. These projections automatically give us some idea of what the marketplace and workplace will look like in the next 10 years. After all, the people who will make up the entire working and spending population by the year 2000 have already been born.

Official projections point to slower population and labor force growth both for the nation and for the three states in the Third Federal Reserve District—Pennsylvania, New Jersey, and Delaware. These slower growth rates will

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change the business environment in significant ways. The baby boom and the drop in births that followed will influence how many part-time workers will be available, how many of us will retire, how productive we will be, how much of our income we will save, and how many new houses and new cars we will buy.

POPULATION GROWTH WILL SLOW IN THE 1990s

The growth rates of the population and the labor force have largely been determined by two periods of unusual birth rates in the years since World War II.¹ The first was the familiar "baby boom" era between 1946 and 1964, when births in the U.S. averaged more than 4 million a year. The second period was the less familiar "birth dearth" era between 1972 and 1978, when the average number of births dropped to 3.2 million annually—800,000 fewer births a year than in the baby-boom years.

Movement of the baby-boom and birth-dearth generations through their life cycles will change the age distribution of the population significantly over the next 10 years. The baby-boomers, most of whom are now in their 30s, will move into their 40s. The birth-dearth babies, most of whom are now teenagers, will move into their 20s. In fact, by the year 2000, 40-year-olds will outnumber 20-year-olds—a reverse of the current age distribution. (See Figure 1.)

This shift in the population's profile will slow both population and labor force growth in the 1990s. Ages 15 to 44 are considered the child-bearing years, and in the United States most babies are born to women in their 20s. So with the baby-boomers no longer swelling the ranks of 30-year-olds, and with the birth dearth providing such a small number of 20-year-olds, birth rates are bound to drop. The number of births is projected to fall from the current 3.8 million per year to less than 3.4 million by the year 2000—a decline of 400,000 births per year. This projected decline will lower population growth from about 10.5 percent in the

¹Another important component of population change is net immigration. The U.S. Census Bureau projections used in this article assume continued legal immigration at recent historical levels and some decline in illegal immigration. So any major change in immigration policy would alter these projections.
1980s to only 7.1 percent in the 1990s.

But it is not just total population growth that is important for the economy. The different growth rates for various age groups will have far-reaching effects—on the marketplace and the workplace—in the 1990s.

**CHANGES IN THE MARKETPLACE**

With a more slowly growing population will come slower growth in the demand for consumer goods and services. In addition, most of the baby-boomers will be entering the 45-to-64 age group—the years in which Americans traditionally save more. Thus, over the next decade, the average person will be saving more income and spending less.

Of course, the slowdown will not have the same impact on all markets. Two important sectors, housing and autos—which are the largest purchases for most households—will fare differently.

**Housing Will Be Hit.** Some segments of the housing market will definitely feel the pinch. The fewer births that followed the baby boom mean that there will be fewer people in their 20s—the age at which most people initially form households, either as an individual or the head of a family. (See Figure 2.) At the same time, most people tend to buy and furnish their first home between the ages of 25 and 34, and the last of the baby-boomers will be moving out of this age category. Fewer new households and fewer first-time home buyers will severely limit the need for new rental housing and starter homes. Developers will likely concentrate on building higher-priced units for the trade-up market.

**Auto Buying Should Increase.** The older, more slowly growing population is likely to affect the auto market more positively. Two major trends are emerging, but they are moving in different directions. The birth dearth will reduce growth in the prime driving-age population to only half that of the 1980s. But the aging baby-boomers will keep the growth of people in their peak new-car-buying years, 35 to 54, at nearly the pace of the last 10 years. On net, Americans should be buying more cars

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in the year 2000 than they are now, but dealers will be marketing to an older customer. (See Figure 3.)

**A NEW LOOK FOR THE LABOR FORCE**

Besides challenging businesses to find their niche in slow-growing markets, the changing demographics will present firms with still another problem: finding enough workers to produce the goods.

Because fewer Americans will be seeking first-time jobs, the overall pool of available workers will grow more slowly. Labor force growth will be the slowest in 50 years, falling from an annual rate of 1.6 percent a year in the 1980s to 1.2 percent per year in the 1990s.

Most Americans enter the labor force in their late teens or early 20s. However, the number of young people between the ages of 16 and 24 has actually been shrinking since 1980 and will continue to fall through the mid-1990s. Even with projected population increases in the final years of the decade, there will only be about as many young Americans at the turn of the century as there are now.

**As the Number of Young Workers Declines...** The declining number of young people is making it harder for employers to find qualified persons for entry-level jobs. Even more difficult to fill are part-time positions. Over a third of all part-time workers are 16 to 24 years old. Retailers, in particular, are being hit hard by the shortfall in part-time workers, since a third of all retail workers are part-time.3

There is one piece of good news in this shrinking young labor force: unemployment among young people is falling. Compared to other age groups, the 16-to-24 category has traditionally had the highest unemployment rate. As the population in this age group has declined, so has the group’s unemployment rate. This trend should continue through the rest of the century.

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...The Number of Older, More Productive Workers Will Increase. The changing demographics won't just affect the labor force at the entry level. It will leave its stamp on the prime-working-age population, as well. This group encompasses those between 25 and 54—the age groups in which most people have fully entered the labor market and have not yet begun to retire in large numbers.

Because of the decline in births after the mid-1960s, the youngest members of the prime-working-age group, those 25 to 34, will decline in number. But because the baby-boomers are aging, the oldest prime-age workers, those 45 to 54, will increase more than 40 percent. This maturation of the prime-age labor force should be positive for productivity, since work experience is generally thought to increase productivity. Studies undertaken by the Bureau of Labor Statistics in the 1950s and 1960s suggest that productivity peaks at about age 35; more recent research suggests that it continues to increase until about age 45. In both cases, however, it was found that when productivity declines, it does so rather slowly until after age 55. On balance, the 1990s should see a pickup in the growth of labor productivity, which has been slow in recent years.

Participation Rates for Prime-Age Workers Will Be High. Businesses trying to find workers for entry-level jobs might be tempted to look beyond the diminishing 16-to-24 age group to the older, more productive workers. But increasing the pool of available workers won't be easy. The labor force participation rate—the percentage of the labor force that either has a job or is looking for one—is already quite high among the prime-working-age population.

Labor force participation by men between 25 and 54 is greater than 90 percent. The rate for women in this age group is about 74 percent, up considerably from 1979's rate of 62 percent. Although we are unlikely to see such a large increase in the 1990s, the effort to attract more women into the job market is expected to raise the participation rate for prime-working-age women to more than 80 percent by the year 2000. This increased participation accounts for one-fourth of the projected annual growth of the labor force in the next 10 years.

Businesses May Seek Retirement-Age Workers. Besides trying to lure new participants into the labor force, businesses might want to think about the opportunities inherent in hiring—or retaining—people of retirement age.

People normally think of 65 as the retirement age in the United States, partly because workers become eligible for full social security retirement benefits at that age. But men have shown a growing tendency to retire at an earlier age, and the labor force participation rate for men 55 to 64 has dropped substantially since 1970, down to less than 70 percent from more than 80 percent. Some of this decline has undoubtedly been due to the early-retirement provisions introduced into the social security system in the 1960s.

The 1983 amendments to the Social Security Act made a number of changes to the retirement provisions, such as reducing benefits for early retirement, raising the age for full retirement benefits to 67, and gradually increasing the credit for delaying retirement. Eventually,

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these changes are expected to delay retirement and increase the labor force participation of older Americans. But except for some increase in the delayed-retirement credit, none of the changes will take effect before the year 2000 and their impact on labor force participation in the 1990s will consequently be minimal.

Private-sector incentives will have to provide the major impetus to keep older Americans in the work force in the 1990s. Companies have made some attempts to lure older workers back into the labor force, at least on a part-time basis, to relieve the shortage of young entrants. How successful these attempts will be remains to be seen. Even if they are successful, the pool of retirement-age Americans most likely to continue working will become progressively smaller. Population in the age group 65 to 69 is expected to decline nationwide over the decade, then rise again after the turn of the century.

THE REGIONAL OUTLOOK

The degree to which firms in the Third Federal Reserve District will be affected by national trends depends on their location in the district. Population growth in the 1990s for Pennsylvania, New Jersey, and Delaware combined will be much slower than the national rate. But population and labor force growth in the tri-state region will be very uneven.

Delaware's population growth will slow somewhat in the 1990s and New Jersey's will pick up. It is Pennsylvania, where population growth will slow to a mere 0.7 percent, that will pull tri-state growth below the national average. (See Figure 4.)

A Look at Growth by County. But even within states there is diversity. Each contains an interesting mix of fast- and slow-growing areas.

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8 This growth rate is calculated from projections by the Pennsylvania State Data Center. U.S. Census Bureau projections call for a 2.7 percent decline in Pennsylvania's population over the decade (see Projections of the Population of States by Age, Sex, and Race: 1988 to 2010, Current Population Reports, Series P-25, No. 1017, 1988), but that projection seems too low. In fact, the Census Bureau projection for 1990 would demand a 1.8 percent decline of Pennsylvania's population from the 1989 estimate, even though state population has been growing in the past few years.
While many counties in western and northeastern Pennsylvania will continue to lose population, several in the southeast and northeast sections should either match or outpace the national average. The winners include some southeastern counties like Chester, Lancaster, and York, where employment growth has been strong and unemployment rates low in recent years, and some northernmost counties like Pike, Wayne, and Monroe, which are growing because of in-migration from northern New Jersey and suburbanization in northeast Pennsylvania. The Pennsylvania counties expected to lose population include some with large central cities affected by continued suburbanization, such as Allegheny and Philadelphia, and some that have been experiencing high unemployment rates, such as Beaver, Cambria, and Blair.

In New Jersey and Delaware no county is projected to lose population in the 1990s. However, the New Jersey counties in the New York City area are expected to grow much more slowly than the national average.

The Regional Marketplace. For the regional marketplace, changing demographics will be a mixed bag. Most parts of the region can expect declines in the 25-to-34 age group, which includes most first-time home buyers. Only 12 counties can expect any increase in this age group. In fact, many counties, mostly in Pennsylvania but a few in New Jersey, will see large declines. People seeking to trade up from starter homes in these counties will find a considerably smaller pool of potential home buyers. (See Figure 5.)

As is true nationally, the shifting demographics should favor auto markets in the region. Even though the prime driving-age population will be growing more slowly, the

FIGURE 5
Only a Few Counties Will Gain 25-to-34-Year-Olds

Percentage Change of Persons Ages 25 to 34 (1990-2000)

less than -15.4%*
-15.4% to 0.0%
greater than 0.0%

* U.S. = -15.4%
Growth in the Philadelphia Metropolitan Area

Five of the eight counties that make up the Philadelphia metropolitan area should see population growth that exceeds the national average in the 1990s: Chester and Bucks in Pennsylvania, and Burlington, Camden, and Gloucester in New Jersey. But Philadelphia County (that is, the City of Philadelphia itself) still accounts for one-third of the metro area's population, and continued losses in the city will keep the area from growing as fast as the nation.

The area's housing market, like the nation's, will be affected by the shifting age distribution of the population. Every county in the metropolitan area is expected to experience declines in the number of persons in the primary household-formation years (20 to 29), and most counties will see a drop in the population of first-time home buyers (25 to 34).

In the Philadelphia metro area, the number of young working-age people between the ages of 16 and 24 will fall a staggering 10.2 percent in the 1990s—and all of that decline is expected to occur in the first half of the decade. Meanwhile, the prime working-age group (25 to 54) will increase 10.2 percent in the 1990s, matching the increase at the national level. The net result will be a 4.9 percent increase in Philadelphia's working-age population, compared to an 8.9 percent gain for the nation.

Labor force growth in the 1990s will depend on what happens to the labor force participation rate. If the participation rate in Philadelphia remains below the national rate, Philadelphia's labor force growth will be considerably less than the nation's 1.2 percent annual rate. But we could see greater increases in the area's labor force if various age groups increase their participation rates.

Throughout the 1980s, participation rates in the Philadelphia area have been lower than in the nation and lower than in most other metropolitan areas. A relatively larger proportion of people 65 and over in the Philadelphia area explains some of the difference. But even adjusting for that proportion, the labor force participation rate in Philadelphia is low. Philadelphia-area teenagers, in particular, have a lower participation rate than the national average. If participation rates in the various age groups simply caught up to the projected participation rates for the U.S. in the year 2000, Philadelphia's labor force growth could be as fast as the nation's and only slightly slower than the area's 1.3 percent annual rate of the 1980s.

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age group that buys the most new cars will be growing even faster in the tri-state area during the 1990s than in the 1980s.

A Look at Labor Force Growth. As in the nation, the three states' total labor force will grow at a slower rate in the 1990s than in the 1980s. Even with the higher labor force participation rates projected, growth in the number of workers is expected to slow in the 1990s. But, again, there is diversity. Labor force growth in New Jersey will match the national rate, and in Delaware it will be slightly lower. But Pennsyl-
vania's labor force growth, already slow, will drop to only 0.7 percent a year.

The drop in the number of young workers during the 1990s will be even more severe in the tri-state area than in the rest of the nation. Of the three states, only Delaware is expected to have more 16-to-24-year-olds in the year 2000 than today. (See Figure 6, p. 12.)

The decline in the number of people in their 20s is particularly bad news for the parts of the Third District faced with tight labor markets. Many counties in New Jersey, Delaware, and southeastern Pennsylvania are trying to attract workers from other parts of the country by advertising nationally and conducting interviews in different parts of the country. Ordinarily, they would count on getting the biggest response from young people—those looking for their first full-time job or those in the early stages of their careers. Studies show that people are most likely to relocate when they are in their 20s. But the decline in this age group—along with other factors, such as the increased number of two-wage-earner households—will probably reduce long-distance migration in the 1990s. Thus, the shortage of young workers

### The Labor Force Will Grow More Slowly in the 1990s

<table>
<thead>
<tr>
<th></th>
<th>Annual Growth Rate of the Labor Force</th>
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<tbody>
<tr>
<td>United Statesb</td>
<td>1.6</td>
</tr>
<tr>
<td>Pennsylvaniac</td>
<td>0.9</td>
</tr>
<tr>
<td>New Jerseyd</td>
<td>1.2</td>
</tr>
<tr>
<td>Delawared</td>
<td>2.7</td>
</tr>
<tr>
<td>Tri-state</td>
<td>1.1</td>
</tr>
</tbody>
</table>

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aThe annual growth rates in this column are calculated from the total change for a period of 10 and a half years, since the latest available data are for the fourth quarter of 1989 and the projections are yearly averages for the year 2000.


cThe Pennsylvania State Data Center does not project the state's labor force. The Pennsylvania Department of Labor and Industry in 1986 estimated the state's labor force through the year 2000 using the Data Center's population projections. See *Labor Market Trends Through the Year 2000: Pennsylvania Profile*, Pennsylvania Department of Labor and Industry, 1986. However, the State Data Center has revised its population projections since then, and the Department of Labor and Industry's forecasts are clearly too low. The original estimate for the year 2000 would imply an annual growth rate of only 0.1 percent a year over the next decade. The U.S. Bureau of Labor Statistics has projected national labor force participation rates by five- or 10-year cohorts separately for men and women in the year 2000. The growth rates in this table were obtained by applying these age- and sex-specific participation rates to the latest projections of Pennsylvania's population for the year 2000.

dLabor force projections for New Jersey and Delaware are based on data from the N.J. Department of Labor and the Delaware Population Consortium (for details, see *About the Population Projections*, p. 13).
in many parts of the tri-state region is unlikely to be relieved by any large influx of workers from other areas.9

All three states will experience slowdowns in the growth of the prime-working-age population, ages 25 to 54. But as in the nation, the oldest segment of the region's working-age population, those 45 to 54, will expand about 40 percent or more. So the region will garner productivity gains from a maturing labor force.

And what of older workers over 55? In some parts of the tri-state area, efforts to increase the number of older workers will be hindered by little or no growth in this age group. The number of persons 55 to 64 is projected to decline in Pennsylvania over the decade. And all three states will experience a decline in the age group 65 to 69. It will be more difficult in the tri-state region than in the nation generally to find older workers for positions normally taken by young workers.

CONCLUSION

Demographic trends will leave their mark on the American economy in the 1990s. The baby-boomers will be moving into their middle years, and the birth dearth of the 1970s will leave fewer young people to take their place. In the marketplace, businesses will find the typical consumer a bit older and more likely to save a higher percentage of his income. Young people eager to buy their first home and fill it with furniture will be rarer.

In the workplace, baby-boomers will provide a large pool of mature, experienced workers. But as the birth dearth limits the number of new entrants to the labor force, growth in the overall size of the labor force will slow. Finding workers to fill entry-level positions will be particularly difficult.

To meet the challenge that relatively scarce labor creates, businesses will have to be innovative. Participation rates among men in their prime working years are about as high as they can go. But there is still room for the participation rate among women to increase. Firms are already offering flexible hours and improved day-care to make it easier for women to work outside the home. Businesses are also trying to

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9For a study on the ages at which people tend to relocate, see Larry Long, Migration and Residential Mobility in the United States (New York: Russell Sage Foundation, 1988).
tap the pool of retirement-age people by aggressively advertising job opportunities and by offering more part-time work.

In the meantime, public officials can do their part to eliminate the structural problems that keep some people out of the labor force. For instance, they can support job-training programs for people who lack basic skills. And they can improve public-transportation networks to help urban residents get to jobs outside central cities.

For Pennsylvania, New Jersey, and Delaware—the three states in the Third Federal Reserve District—the 1990s will be exceptionally challenging. The population growth slowdown and dearth of young people will be even more severe here than in the nation as a whole. In the eight-county Philadelphia metropolitan area, overall population growth is expected to hold steady into the 1990s, but the young working-age population will actually decline. Only if Philadelphia’s labor force participation rate rises to match the national rate can its labor force grow as rapidly as the rest of the nation’s.

About the Population Projections

The Bureau of the Census has projected U.S. population by age for each year through 2080 and has made similar projections for each of the 50 states through the year 2010. National projections in this article were taken from the following Census Bureau publication:


Most states also have at least one public agency that projects population at the state and county levels. Our tri-state area projections are based on the following sources:


In the final days of 1988, negotiators at the Federal Savings and Loan Insurance Corporation found themselves working nights and weekends to complete deals that would turn ailing thrifts over to new owners. By the end of the year they had placed, by General Accounting Office estimates, roughly $90 billion in thrift assets in new hands, at a loss to the FSLIC of $38.6 billion. And they were being criticized widely for their slowness in closing insolvent thrifts, many of which had been allowed to pile up massive losses through fraud and mismanagement.

The FSLIC could ill afford more losses. Despite a rise in premium collections and a special recapitalization loan arranged by a 1987 Act of Congress, the insurance program was already $75 billion in the red at the end of 1988, according to the GAO. In the end, the FSLIC disappeared into a new entity, the Savings Association Insurance Fund, with the special act of Congress that was required to mend the safety

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net for thrift depositors. The cost of that legislation, the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), has been estimated by the Administration at no less than $166 billion. The cost represents some 20 percent of the insured savings deposits the FSLIC was established to protect.

Has enough been done to prevent further costs on this scale? To find out, the Treasury Department is coordinating a FIRREA-mandated study of the deposit-insurance system. The need for such a study underscores continuing concern about the system's fundamental design. Past studies suggest that one area deserving more scrutiny is bank closure by regulators. Currently, deposit insurance subsidizes risky and insolvent banks and thrifts, sharply reducing their private incentive to close or reorganize themselves. The system can be protected only by reducing the subsidy and improving regulatory closure.

The Search for the Best Closure Policy.

Regulatory bank closure has two intertwined objectives. One is to protect the deposit-insurance fund and keep down the cost of deposit insurance. The other is to promote the efficiency of banking. Taken to its extreme, the first objective—protecting the deposit-insurance fund—can be met completely, and require relatively little information, if regulators always close any bank that nears insolvency. However, a brush with insolvency may be due merely to bad luck, and an unlucky efficient bank may find itself closed along with the inefficient bank. Ideally, regulators should be able to sort through the banks that come close to insolvency and keep open those banks that are well-managed and efficient. But to differentiate between efficient and inefficient banks, regulators need a great deal of information, some of it difficult to obtain.

Two key steps are necessary to improve closure policies: 1) reduce the subsidy to inefficient banks and thrifts so they are likelier to merge or close themselves without regulatory interference; and 2) improve the information available to bank regulators so that they can act in a timely, discerning manner.

This article is intended as a primer on the issues surrounding efficient closure of insured banks and thrift institutions. DEPOSIT INSURANCE CAN ENCOURAGE INEFFICIENT BANKING

Before the institution of deposit insurance, depositors frequently enforced a policy of quick closure. Regulatory bank closure has two intertwined objectives. One is to protect the deposit-insurance fund and keep down the cost of deposit insurance. The other is to promote the efficiency of banking. Taken to its extreme, the first objective—protecting the deposit-insurance fund—can be met completely, and require relatively little information, if regulators always close any bank that nears insolvency. However, a brush with insolvency may be due merely to bad luck, and an unlucky efficient bank may find itself closed along with the inefficient bank. Ideally, regulators should be able to sort through the banks that come close to insolvency and keep open those banks that are well-managed and efficient. But to differentiate between efficient and inefficient banks, regulators need a great deal of information, some of it difficult to obtain.

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Closing Troubled Financial Institutions: What Are the Issues?

Leonard I. Nakamura

closure by withdrawing their deposits en masse in a bank run. However, depositors often were not able to distinguish sound banks from unsound banks, and runs could force both solvent and insolvent institutions to close their doors. By guaranteeing deposits, deposit insurance prevents bank runs.

The troubling aspect of deposit insurance is that it can encourage failing institutions to continue operating unless they are closed by regulators. An insolvent bank or thrift can continue to attract funds because the deposits are guaranteed by the insurance fund and the depositors feel protected. Thus, losses do not necessarily lead depositors to force an insured bank out of business, as would happen in the absence of deposit insurance.

On the other hand, the bank or thrift will not close itself, since to do so would leave its shareholders empty-handed. The shareholders will opt to keep the bank in business, hoping that a lucky investment or a change in the environment allows a return to profitability. Worse yet, dishonest bank managers may make loans to themselves or associates, gaining favorably priced loans at the expense of the dying institution and the deposit-insurance fund.

**Inefficient Banks Have an Incentive to Stay Open.** The current flat-rate premiums for deposit insurance give an inefficient, risky bank—whether insolvent or nearly so—a strong incentive to stay in business. All insured banks pay the same premiums, as do all insured thrifts: banks pay $1.20 per $1,000 of deposits, and thrifts pay $2.08 per $1,000 of deposits. In exchange, the insured financial institution is able to guarantee that deposits (up to the statutory limit of $100,000 per account) will be repaid, even if the financial institution proves insolvent.

If the true riskiness of deposits is greater than its payments for insurance and any premiums necessary to attract deposits, then the financial institution is effectively being subsidized by the deposit insurer. And a subsidized institution has an incentive to stay in business even if it is inefficient.

**ORIGINS OF THE THRIFT PROBLEM**

The mortgage rate was around 9 percent from 1974 to 1977. It increased to 9.6 percent in 1978, then leapt each year thereafter, finally reaching 16.4 percent in November 1981. All rates went up, including the interest rates savings banks paid to depositors. As a consequence, the thrift industry as a whole lost money: the mortgages that had been made in the 1970s were not earning enough to cover the cost of funds in the early 1980s (see Historical Data on the FSLIC, p. 18).

There is now widespread agreement that thrift regulators, during the 1980s, permitted too many thrifts to stay open for too long. This policy of forbearance was, in fact, sanctioned by the Federal Home Loan Bank Board and by legislation such as the Garn-St. Germain Depository Institutions Act of 1982. During the early 1980s, thrifts were permitted to abandon generally accepted accounting principles in favor of a far less stringent set of accounting rules, dubbed regulatory accounting practices. As a consequence, hundreds of insolvent thrifts were able to keep their doors open.

Closing thrifts during the deep recession of the early 1980s would have been extremely difficult and expensive. At that time, almost all thrifts were losing money, and there would have been few potential merger partners. With the end of the recession in 1982, and the rapid decline in interest rates that followed, many thrifts were able to return to health. By 1986, however, interest rates were down to about 10 percent, and housing activity had rebounded. But instead of accelerating closure, the FSLIC

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4Beginning in 1991, banks will pay $1.50 and thrifts will pay $2.30 per $1,000 of deposits. Thrift premiums will decline to $1.80 in 1993 and to $1.50 in 1998, at which point thrifts will again be paying the same amount as banks.
### Historical Data on the FSLIC

<table>
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<tr>
<th>Year</th>
<th>Mortgage Rate (percent)</th>
<th>FSLIC Reserves (billion $)</th>
<th>S&amp;L Income (billion $)</th>
<th>S&amp;Ls In Operation (thousands)</th>
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- aConventional loans on new homes, effective interest rate in percent, annual average, Federal Home Loan Bank Board (FHLBB).
- bTotal FSLIC reserves, year-end, FHLBB.
- cNet income after taxes, FSLIC-insured savings institutions (includes FSLIC-insured savings banks), FHLBB.
- dNumber of FSLIC-insured savings institutions (includes FSLIC-insured savings banks), year-end, FHLBB.

Data for the above series through 1988 are available in convenient form in the *Savings Institutions Sourcebook 1989*, United States League of Savings Institutions.


found itself with insufficient funds to close thrifts rapidly, and it permitted more and more insolvent thrifts to remain open.

A New Attitude Apparently Prevails. Now the pendulum appears to be swinging in the opposite direction, in favor of quick closure: it is now being proposed that thrifts and banks, even though solvent, be closed if their net worth—which provides a cushion against deposit-insurance losses—falls too low. For example, five academic experts on banking have called for closing depository institutions "when the market value of net worth goes below some low but positive percentage, such as 1 or 2 percent of assets." But is the pendulum swinging too far? If that principle had been in place in 1981, virtually the entire savings and loan industry would have been closed. And

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5This proposal is in Benston and others (1986), p. 309.
with few available buyers, the losses would have been enormous.

Clearly, today's first order of business is to return thrift regulators toward a standard of efficient closure, which is an important element of the FIRREA. But this closure of insolvent thrifts needs to be buttressed by more efficient decisions on closure, providing regulators with more information to help them separate the sound and unsound institutions. Though forbearance created severe problems, speeding closure alone is not a sufficient response. Improving the efficiency of closure decisions also requires increasing both the quality and quantity of the information brought to bear by regulators and other parties.6

HOW BANKS ARE CLOSED

How are banks actually closed? At present, bank regulators first make a preliminary identification of problem banks using the quarterly Reports of Condition and the quarterly Reports of Income required of all insured banks. Banks earmarked by these "early warning systems" are then investigated further. Bank regulators identify problem banks using a system nicknamed CAMEL, which rates banks on capital, asset quality, management, earnings, and liquidity. Banks classified as problem banks are then told to correct deficiencies, first voluntarily and then, if necessary, through cease-and-desist orders.

Under current law, banks and thrifts can be closed only if they are deemed insolvent by the bank- or thrift-chartering regulator—the state regulator, the Comptroller of the Currency, or the Office of Thrift Supervision. Thus, the accounting rules that define solvency are an additional, and crucial, issue.

What Makes an Institution Insolvent. Any institution is insolvent when an accounting of its assets and liabilities reveals that liabilities exceed assets. Unfortunately, the proper method for accounting for assets and liabilities is not straightforward.

Suppose a thrift makes a mortgage for $100,000 at a fixed interest rate of 8 percent. The mortgage is entered into the thrift's books as an asset of $100,000 and initially earns $8,000 a year in interest. But suppose that after the loan is made, interest rates skyrocket and the fixed rate for mortgages rises to 16 percent. If the thrift were to make the mortgage again, it could earn $16,000 per year. The economic value of the old mortgage loan—discounted by the higher interest rate—falls roughly in half, to $57,000 (assuming the mortgage is held until maturity).7 However, under "generally accepted accounting principles," referred to as GAAP, the mortgage remains on the thrift's books at its "book value" of $100,000, unless the mortgage is actually sold at the lower value, in which case the loss in value must be written off.8

6 Passage of the FIRREA does not mean that the problems created by general forbearance are gone for good. There are strong reasons to believe that over the decade many banks and thrifts, perhaps numbering in the thousands, will close because of increasing competition among financial institutions. For a discussion of the problems facing smaller banks, see Sherrill Shaffer, "Challenges to Small Banks' Survival," this Business Review (September/October 1989). For an overview of the problems faced by the banking system and some suggested solutions, many of them already widely accepted, see George J. Benston and others (1986).

7 The effect of a change in interest rates on the value of a mortgage can be calculated using discounted present value. The monthly payment on a 30-year mortgage debt of $100,000 at 8 percent interest is $714.40. The discounted value of a payment $i months from now is $714.40/(1.08)^(i/12), and the present discounted value of the mortgage is the sum of these values as $i$ goes from 1 to 360. When the interest rate rises to 16 percent, the denominator increases to (1.16)^(i/12) and the sum falls, to $56,735.

8 Under the looser regulatory accounting principles used by thrifts in the 1980s, the value lost when mortgages were sold did not have to be written off all at once.
The key point is that the economic value of the mortgage is what the market is willing to pay if the thrift is closed. Suppose the thrift has on its books $2 million in deposits, $2 million in mortgages at 8 percent, and $200,000 in cash on hand. Its GAAP net worth is thus $200,000. But with mortgage rates at 16 percent, the economic value of the mortgages is just $1.14 million and the thrift is then economically insolvent. If the thrift were closed and its assets sold to repay depositors, the deposit insurer would have to provide $660,000 to fully pay off the depositors.

On the other hand, mortgage rates may well return to their previous rate of 8 percent. If the thrift is well managed, it might be desirable to wait to see if interest rates will drop and the thrift can return to solvency. The corresponding danger is that the mortgages earn only $160,000 per year. If the thrift must pay more than that in interest on its deposits—as would be likely in a period of high interest rates—the thrift will lose money while the regulators delay closure.

**Should Loans Be “Marked to Market”?**

Some argue that mortgages and other loans should be “marked to market”—that is, their accounting value should equal their economic value. The existence of secondary markets, on which existing mortgages and other loans can be bought and sold, provides a basis for pricing a wide variety of assets. For example, if bank loans to Mexico are priced on the secondary market at 65 cents on the dollar, a bank with $100 million of Mexican loans would have to report this as an asset worth $65 million.

An important caveat is that the market may not always be a good guide to asset valuation. Some secondary markets are very thin—with low-volume, infrequent trading—and may not be representative of the assets we want to value. And at times even very large markets may experience disruptions that distort value.

Under GAAP, loans are entered as assets at their book value, so an institution that is insolvent when marked-to-market may well not be technically insolvent. When this occurs, it may not be legally possible to close the bank or thrift. Moreover, if such a bank or thrift is closed by regulators, the owners often can sue the regulators, arguing that the bureaucrats have unreasonably deprived the owners of property. One step the deposit insurer can take to protect itself is to remove deposit-insurance protection from new deposits to the institution. Then the bank or thrift will typically be unable to attract new deposits and will become insolvent as its deposit base declines.

On the other hand, determining legal insolvency by marking-to-market might force regulators to close an efficiently managed bank or thrift simply because it became insolvent temporarily. And it is possible that marking-to-market itself may induce imperfect measurement of assets if the market does not accurately represent the value of the bank’s assets, a situation that would exacerbate the potential mistakes of forced closure. Indeed, in the late 1970s and early 1980s, Congress and thrift regulators felt that even the GAAP rules were too harsh in the rising-interest-rate environment of that period. Unfortunately, their decision to move toward general forbearance proved extremely costly.

**WHY GENERAL FORBEARANCE HAS BEEN SO COSTLY**

Severe problems accompanied general forbearance. These problems are considerably more evident with hindsight than they were when the policy was being implemented in the early 1980s.

First, and probably most important, general forbearance raises the monetary losses of the insurer and thus the direct costs of deposit premiums. After all, deposit insurance subsidizes insolvent banks and thrifts, and the longer regulators allow them to stay in business, the larger the costs ultimately charged to the deposit-insurance fund.
Permits Excessive Risk-Taking by Banks. A bank that is failing may seek to avoid bankruptcy by taking greater risks. In this case, the motives to generate profit and continue in business may conflict with the traditional principles of carefully assessing the risks and returns to lending.

For example, consider the profit motives of an insolvent thrift in the Southwest that must decide whether to lend additional funds to a large real-estate developer in the area. If the whole real-estate market in the area has gone sour, the developer is likely to go bankrupt, even with the infusion of cash. But as long as the market remains bad, the thrift itself has no hope of a return to solvency. If the market does turn around, the developer will be able to repay the loan and the thrift will no longer be insolvent. The decision to make the loan pushes the thrift deeper into danger. But if the developer's venture is successful, the thrift's shareholders will be the beneficiaries. If it is not, the cost of failure will be borne entirely by the deposit insurer.

An additional risk of general forbearance is that insolvent banks are temptations for fraud. An insolvent bank is a tempting target for a crook, because it may be for sale at a low price. The crook can then make loans to his own enterprises or to cohorts at concessionary rates, siphoning dollars out of the bank.9

"Zombie" Thrifts Can Exacerbate the Problem. Allowing inefficient banks to remain in business under a policy of general forbearance imposes social costs on other banks and the community. When inefficient insolvent banks compete aggressively for deposits and loan business, they can harm better-managed banks, which are forced to compete in a deteriorating environment. Professor Edward Kane has dubbed such insolvent thrifts "zombie thrifts," to underscore how the "living dead" can bring about more of their own kind, multiplying the problems of the insurance system.10

WHY EFFICIENT CLOSURE IS SUPERIOR TO QUICK CLOSURE

Undeniably, many of the problems of forbearance can be solved by quick closure. Quick closure reduces the monetary losses of the insurer, and this has the fundamental benefit of protecting taxpayers from losses. Not incidentally, it also will tend to result in lower deposit premiums. In addition, by making it likelier that a bank encountering difficulties will be closed, quick closure guards against excessive risk-taking by banks. Fearing bad outcomes that may lead to quick closure, banks will tend to take steps to raise their capital and make less risky loans. Finally, quick closure closes banks that, because of their weak balance sheets, would be most likely to engage in risky or fraudulent behavior.

Unfortunately, quick closure increases the number of efficient banks that are closed or merged when they experience what otherwise would be a temporary setback. When efficient banks close, valuable resources to the community are lost. Goodwill and expertise, the building blocks for business centers, are sacrificed. If a region’s major industry suffers a severe blow—as when an agricultural community suffers a prolonged drought or when an oil-producing state is hit by low energy prices—both well-managed and poorly managed banks may show losses and become insolvent. Under quick closure, both types of banks would be closed, and the region would suffer an additional blow that could harm its ability to recover.

9The FIRREA widens the authority of regulators to disapprove bank and thrift directors and senior executives, and it strengthens criminal penalties for misconduct.

Typically, the well-managed bank will have fully reported its losses, and with sound banking practices it will be able to return to profitability in short order. But the poorly managed bank often will not have a good system for reporting its losses, and its return to profitability will be prevented because of old and new mistakes. To the extent that regulators can efficiently sort out good and bad banks, costs will be minimized and benefits to the community will be greatest.

**Banks Must Not Avoid Risk.** Quick closure also increases regulatory interference in bank conduct. In particular, it may have the chilling effect of making banks too averse to risk. The business of banking is to manage risk in lending through diversification and through knowledge of the business scene. It is important for banks to know that if they are fundamentally sound, they will be given the opportunity to return to profitability. That way, they will be more willing to pursue profitable but risky lending, which helps keep the U.S. economy flexible and growing.

**IMPROVING PRIVATE INCENTIVES**

Closing banks whenever losses are possible is obviously not the best way to regulate bank risk. The focus should be on enhancing the efficiency of closure decisions—first by increasing shareholders’ incentives to close and merge inefficient banks, and then by improving the information regulators can use to identify and close inefficient banks.

A bank’s shareholders are the most likely party to know when a solvent bank is losing money. Giving shareholders the right incentives to close or merge an inefficient bank increases the presumption that banks that remain open are efficient. This places less of a burden on regulators to close solvent institutions and permits them to focus more keenly on insolvent institutions.

**Risk-based Deposit Premiums and Capital Requirements.** One way to provide the right incentives to shareholders is to base deposit premiums on a bank’s level of risk. When a nearly insolvent bank has to pay fully for its riskiness, its incentive to stay independent diminishes. Unfortunately, setting premiums to the right amount is an extremely difficult task. Current proposals, which set premiums based on the composition of the bank’s assets, go only part way toward capturing the bank’s riskiness, but are a step in the right direction.

Another step toward improving private incentives is risk-based capital requirements. In 1988, the United States and 11 other nations signed an agreement establishing minimum risk-based capital requirements for banks, to be phased in by 1992. Under this system, banks investing in riskier assets will have to raise additional capital, which will provide additional protection for the FDIC against losses. This will tend to discourage weak banks from taking risky positions. However, the provisions are quite broad and do not cover all forms of risk-taking; the risk of interest rate movements, for example, is not included.

Since setting risk-based deposit premiums and capital requirements properly is likely to be imperfect, it is also crucial to provide bank regulators with better information.

**IMPROVING INFORMATION FOR CLOSURE**

Proposals to provide regulators with better information begin with timely and accurate financial reporting. In principle, accounting practices and appraisals would use current market values of assets and liabilities to accurately reflect economic solvency. At a minimum, banks and thrifts would report the market value of assets whenever accurate pricing is possible.

If such information on economic solvency were available, then more careful consideration could be given to proposals that permit regulators to close or merge institutions that are near economic insolvency. But to avoid the
undesirable effects of quick closure under such proposals, regulators would have to retain substantial discretion to keep open banks and thrifts that can show they are well managed.

The FIRREA encourages better accounting information by increasing the penalties for false reporting of assets. For the first time, the accounting firms hired by banks and thrifts can face severe penalties for countenancing false reporting.

But accurate accounting data are not enough to assure efficient closure, and the information of all parties should be brought to bear. Several current proposals make it more likely that depositors, capital markets, and even other banks will signal to regulators a lack of faith in particular banks, buttressing the early warning signals currently in use. But some of these proposals also have pitfalls.

Information from Depositors. Some depositors may know a lot about their bank and its fortunes. Large depositors at a small bank, for example, may know how its portfolio is doing because they are deeply involved in the local business environment.

Moreover, if deposit-insurance protection is reduced below 100 percent—an idea known as "co-insurance"—depositors are more likely to signal failures by removing funds from risky or failing institutions. One form of this proposal is to reduce the maximum-size deposit protected by insurance. The idea here is that the most savvy depositors are likely to be large depositors, and a run of their deposits can signal insurers of impending trouble.\(^{11}\)

The drawback to co-insurance is that depositors’ runs were the problem in the first place. Deposit insurance exists largely because depositors’ information and incentives all too often led to failures of good banks. Co-insurance may provide a useful signal, but if depositors act on poor information, they may make aiding good banks harder rather than easier.

Information from Other Banks. Before the system of deposit insurance was created, clearing houses, which were consortia of banks, successfully propped up banks threatened by panics. They were successful largely because competitors are often in the best position to judge whether a rival bank is well managed.\(^{12}\) Professor Charles Calomiris has pointed out that these consortia sometimes have acted very successfully as mutual deposit-insurance groups, precisely because banks had good information about one another.\(^{13}\) Calomiris proposes to make groups of banks responsible for one another in just this way.

The mutual-insurance concept may no longer be credible, however, given the FIRREA. A key to mutual insurance is the fundamental notion that the group suffers when any bank goes under. This mutual dependence ensures that banks have a strong incentive to report bad banks. If banks interpret FIRREA to mean that taxpayers will bail out the insurance fund in the future, then the banking industry has little incentive to help construct sound rules for bank closure. If banks pay the full cost of deposit insurance, they will have a strong interest in seeing that closure is quick and efficient.

Information from Capital Markets. At present, regulators are keen observers of banks’ stock prices and costs of funds, and the capital markets are thus useful in signaling bank problems. But most banks and thrifts have stocks


\(^{12}\)There is a risk, however, that even a well-managed bank may be forced out of business by rivals seeking to reduce competition.

that either are not publicly traded or are traded on thin markets.

One way to obtain additional information from capital markets is to raise capital standards. This forces banks and thrifts to raise cash outside the umbrella of deposit insurance. Under FIRREA, thrifts are required to meet the higher capital standards that banks face. This requirement is forcing thrifts to raise additional equity, borrow money from capital markets, or shrink their assets. But before a thrift can convince lenders to put up new cash, its management must provide credible information that the thrift will remain profitable. While a powerful sign of creditworthiness, raising additional equity or debt is not a panacea. For example, given widespread press reports of problems in the S&L industry, good thrifts may be unable to convince outside investors that they are sound.

**Limits on Assets of Banks and Thrifts.** A final way to reduce the problem of insufficient information is to limit the types of assets banks and thrifts can hold. Such a move would make it easier to evaluate the performance of the institution and its management, simply by reducing the number of asset categories regulators would need information about. At the extreme end are proposals to create “safe banks,” which would be restricted to holding extremely safe assets such as U.S. Treasury bills. However, an important rationale for deposit insurance is to ensure that banks and thrifts are able to lend to businesses and consumers. Preventing these loans would harm the economy’s ability to allocate savings to those who would use them best.

Among the less radical reform proposals are those that suggest reining in the ability of banks and thrifts to diversify into risky assets and to limit the expansion of their powers into new areas, such as direct real-estate investment or securities underwriting. In particular, the FIRREA requires thrifts to keep nearly 70 percent of their assets in mortgage-related investments. A drawback of this requirement, however, is that it prevents possible diversification of portfolios, which, if properly managed, can reduce the risk of bank failure.

**CONCLUSION**

Under the current system of deposit insurance, troubled banks and thrifts do not have the right incentives to close themselves, and failing banks have incentives to jeopardize the funds with which they are entrusted. Consequently, the job of closing failing banks falls to the deposit insurer. If the deposit insurer fails to do so—or is somehow prevented from doing so—then losses from deposit insurance will inevitably multiply.

Vigorous closure of inefficient banks and thrifts is crucial to the health of our deposit-insurance system. But vigorous closure is an aim that needs to be buttressed by 1) reducing the subsidy to risky and inefficient banks and thrifts, via risk-based deposit-insurance premiums and capital requirements; 2) improving the accuracy of information provided to insurers and other regulators; and 3) giving all parties concerned more incentives to signal to insurers their lack of faith in inefficient banks and thrifts—and their faith in efficient ones.
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