As a nation, we face a distinct choice. We can perpetuate too big to fail, with its inequities and dangers, or we can end it. Eliminating TBTF won't be easy, but the vitality of our capitalist system and the long-term prosperity it produces hang in the balance.

Choosing the Road to Prosperity

Why We Must End Too Big to Fail—Now

by Harvey Rosenblum

More than three years after a crippling financial crisis, the American economy still struggles. Growth sputters. Job creation lags. Unemployment remains high. Housing prices languish. Stock markets gyrate. Headlines bring reports of a shrinking middle class and news about governments stumbling toward bankruptcy, at home and abroad.

Ordinary Americans have every right to feel anxious, uncertain and angry. They have every right to wonder what happened to an economy that once delivered steady progress. They have every right to question whether policymakers know the way back to normalcy.

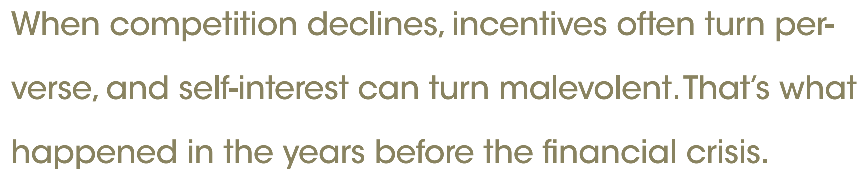
American workers and taxpayers want a broad-based recovery that restores confidence. Equally important, they seek assurance that the causes of the financial crisis have been dealt with, so a similar breakdown won't impede the flow of economic activity.

The road back to prosperity will require reform of the financial sector. In particular, a new roadmap must find ways around the potential hazards posed by the financial institutions that the government not all that long ago deemed "too big to fail"—or TBTF, for short.

In 2010, Congress enacted a sweeping, new regulatory framework that attempts to address TBTF. While commendable in some ways, the new law may not prevent the biggest financial institutions from taking excessive risk or growing ever bigger.

TBTF institutions were at the center of the financial crisis and the sluggish recovery that followed. If allowed to remain unchecked, these entities will continue posing a clear and present danger to the U.S. economy.

As a nation, we face a distinct choice. We can perpetuate TBTF, with its inequities and dangers, or we can end it. Eliminating TBTF won't be easy, but the vitality of our capitalist system and the long-term prosperity it produces hang in the balance.



When competition declines, incentives often turn perverse, and self-interest can turn malevolent. That's what happened in the years before the financial crisis.

Flaws, Frailties and Foibles

The financial crisis arose from failures of the banking, regulatory and political systems. However, focusing on faceless institutions glosses over the fundamental fact that human beings, with all their flaws, frailties and foibles, were behind the tumultuous events that few saw coming and that quickly spiraled out of control.

Complacency

Good times breed complacency—not right away, of course, but over time as memories of past setbacks fade. In 1983, the U.S. entered a 25-year span disrupted by only two brief, shallow downturns, accounting for just 5 percent of that period *(Exhibit 1)*. The economy performed unusually well, with strong growth, low unemployment and stable prices.

This period of unusual stability and prosperity has been dubbed the Great Moderation, a respite from the usual tumult of a vibrant capitalist economy. Before the Federal Reserve's founding in 1913, recession held the economy in its grip 48 percent of the time. In the nearly 100 years since the Fed's creation, the economy has been in recession about 21 percent of the time.

When calamities don't occur, it's human nature to stop worrying. The world seems less risky.

Moral hazard reinforces complacency. Moral hazard describes the danger that protection against losses encourages riskier behavior. Government rescues of troubled financial institutions encourage banks and their creditors to take greater risks, knowing they'll reap the rewards if things turn out well, but will be shielded from losses if things sour.

In the run-up to the crisis of 2008, the public sector grew complacent and relaxed the financial system's constraints, explicitly in law and implicitly in enforcement. Additionally, government felt secure enough in prosperity to pursue social engineering goals—most notably, expanding home ownership among low-income families.

At the same time, the private sector also became complacent, downplaying the risks of borrowing and lending. For example, the traditional guideline of 20 percent down payment for the purchase of a home kept slipping toward zero, especially among lightly regulated mortgage companies. More money went to those with less ability to repay.[1]

Greed

You need not be a reader of Adam Smith to know the power of self-interest—the human desire for material gain. Capitalism couldn't operate without it. Most of the time, competition and the rule of law provide market discipline that keeps self-interest in check and steers it toward the social good of producing more of what consumers want at lower prices.

When competition declines, incentives often turn perverse, and self-interest can turn malevolent. That's what happened in the years before the financial crisis. New technologies and business practices reduced lenders' "skin in the game"—for example, consider how lenders, instead of retaining the mortgages they made, adopted the new originate-to-distribute model, allowing them to pocket huge fees for making loans, packaging them into securities and selling them to investors. Credit default swaps fed the mania for easy money by opening a casino of sorts, where investors placed bets on—and a few financial institutions sold protection on—companies' creditworthiness.

Greed led innovative legal minds to push the boundaries of financial integrity

with off-balance-sheet entities and other accounting expedients. Practices that weren't necessarily illegal were certainly misleading—at least that's the conclusion of many postcrisis investigations.[2]

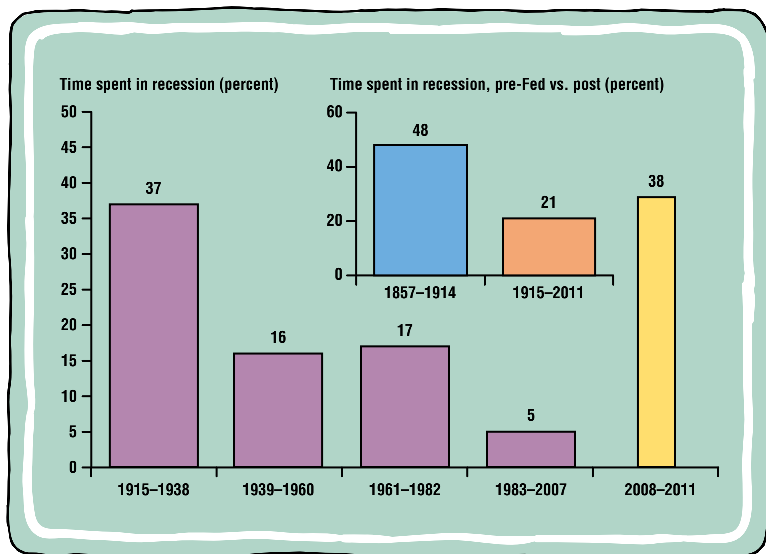
Complicity

We admire success. When everybody's making money, we're eager to go along for the ride—even in the face of a suspicion that something may be amiss. Before the financial crisis, for example, investors relied heavily on the credit-rating companies that gave a green light to new, highly complex financial products that hadn't been tested under duress. The agencies bestowed their top rating to securities backed by high-risk assets—most notably mortgages with small down payments and little documentation of the borrowers' income and employment. Billions of dollars of these securities were later downgraded to "junk" status.

Complicity extended to the public sector. The Fed kept interest rates too low for too long, contributing to the speculative binge in housing and pushing investors toward higher yields in riskier markets. Congress pushed Fannie Mae and Freddie Mac, the de facto government-backed mortgage

Exhibit 1

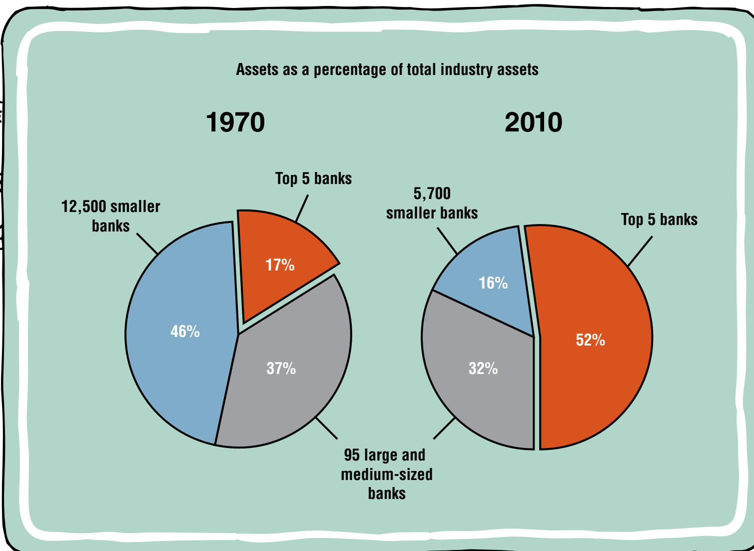
Reduced Time Spent in Recession



SOURCE: National Bureau of Economic Research.

Concentration amplified the speed and breadth of the subsequent damage to the banking sector and the economy as a whole.

Exhibit 2
U.S. Banking Concentration Increased Dramatically



NOTE: Assets were calculated using the regulatory high holder or top holder for a bank and summing assets for all the banks with the same top holder to get an estimate of organization-level bank assets.

SOURCES: Reports of Condition and Income, Federal Financial Institutions Examination Council; National Information Center, Federal Reserve System.

giants, to become the largest buyers of these specious mortgage products.

Hindsight leaves us wondering what financial gurus and policymakers could have been thinking. But complicity presupposes a willful blindness—we see what we want to see or what life's experiences condition us to see. Why spoil the party when the economy is growing and more people are employed? Imagine the political storms and public ridicule that would sweep over anyone who tried!

Exuberance

Easy money leads to a giddy self-delusion—it's human nature. A contagious divorce from reality lies behind many of history's great speculative episodes, such as the Dutch tulip mania of 1637 and the South Sea bubble of 1720. Closer to home in time and space, exuberance fueled the Texas oil boom of the early 1980s. In the first decade of this century, it fed the illusion that housing prices could rise forever.

In the run-up to the financial crisis, the certainty of rising housing prices convinced some homebuyers that high-risk mortgages, with little or no equity, weren't that risky. It induced consumers

to borrow on rising home prices to pay for new cars, their children's education or a long-hoped-for vacation. Prudence would have meant sitting out the dance; buying into the exuberance gave people what they wanted—at least for a while.

All booms end up busts. Then comes the sad refrain of regret: How could we have been so foolish?

Concentration

In the financial crisis, the human traits of complacency, greed, complicity and exuberance were intertwined with concentration, the result of businesses' natural desire to grow into a bigger, more important and dominant force in their industries. Concentration amplified the speed and breadth of the subsequent damage to the banking sector and the economy as a whole.

The biggest U.S. banks have gotten a lot bigger. Since the early 1970s, the share of banking industry assets controlled by the five largest U.S. institutions has more than tripled to 52 percent from 17 percent *(Exhibit 2)*.

Mammoth institutions were built on a foundation of leverage, sometimes misleading regulators and investors through the use of off-balance-sheet financing.[3] Equity's share of assets dwindled as banks borrowed to the hilt to chase the easy profits in new, complex and risky financial instruments. Their balance sheets deteriorated—too little capital, too much debt, too much risk.

The troubles weren't always apparent. Financial institutions kept marking assets on their books at acquisition cost and sometimes higher values if their proprietary models could support such valuations. These accounting expedients allowed them to claim they were healthy—until they weren't. Write-downs were later revised by several orders of magnitude to acknowledge mounting problems.

With size came complexity. Many big banks stretched their operations to include proprietary trading and hedge fund investments. They spread their reach into dozens of countries as financial markets globalized. Complexity magnifies the opportunities for obfuscation. Top management may not have known all of what was going on—particularly the exposure to risk. Regulators didn't have the time, manpower and other resources to oversee the biggest banks' vast operations and ferret out the problems that might be buried in financial footnotes or legal boilerplate.

These large, complex financial institutions aggressively pursued profits in the overheated markets for subprime mortgages and related securities. They pushed the limits of regulatory ambiguity and lax enforcement. They carried greater risk and overestimated their ability to manage it. In some cases, top management groped around in the dark because accounting and monitoring systems didn't keep pace with the expanding enterprises.

Blowing a Gasket

In normal times, flows of money and credit keep the economy humming. A healthy financial system facilitates payments and transactions by businesses and consumers. It allocates capital to competing investments. It values assets. It prices risk. For the most part, we take the financial system's routine workings for granted—until the machinery blows a gasket. Then we scramble to fix it, so the economy can return to the fast lane.

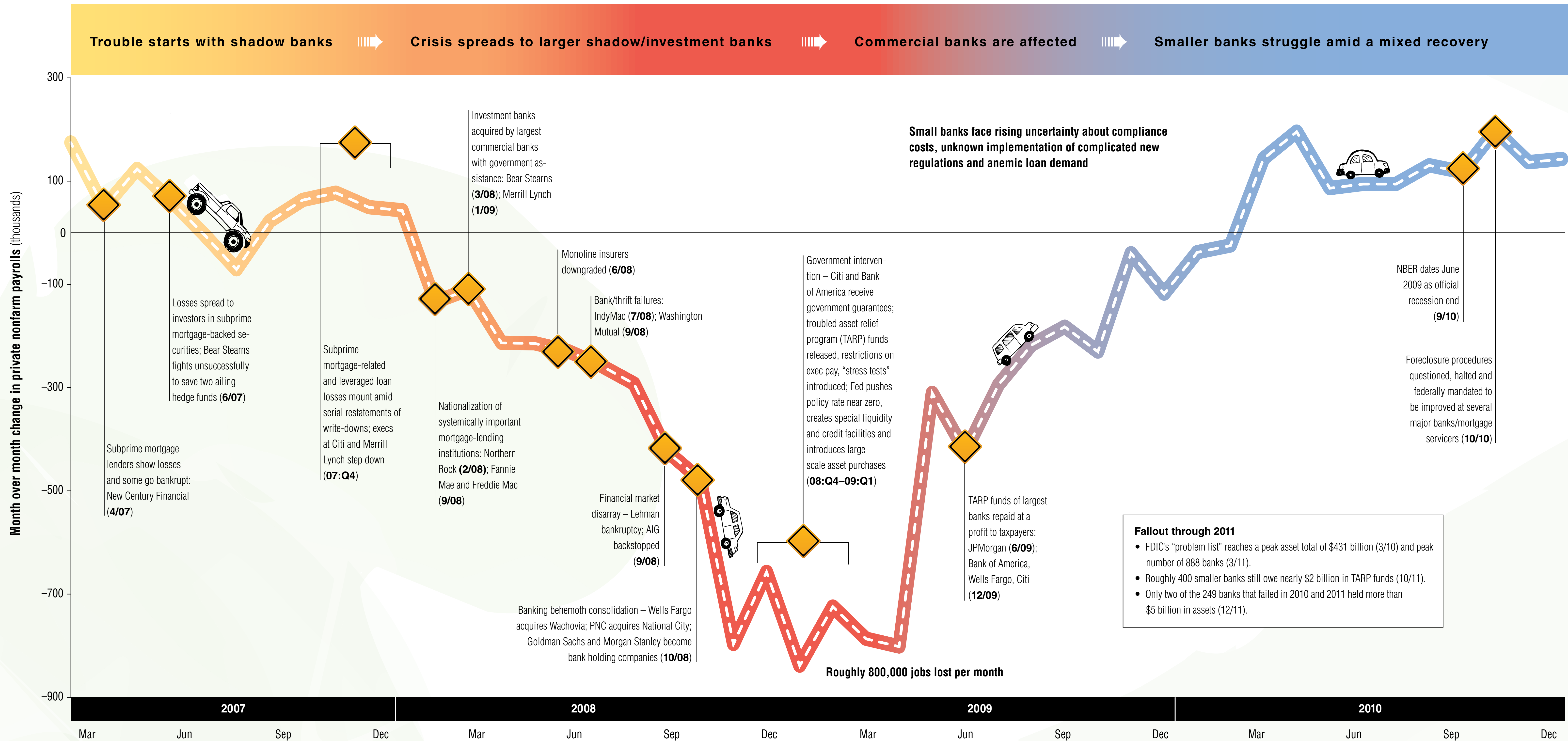
In 2007, the nation's biggest investment and commercial banks were among the first to take huge write-offs on mortgage-backed securities *(Exhibit 3)*.

(continued on page 11)

Exhibit 3

Employment Plummets as Financial System Implodes

Selected Timeline, 2007–2010



The term TBTF disguised the fact that commercial banks holding roughly one-third of the assets in the banking system *did essentially fail*, surviving only with extraordinary government assistance.

Box 1

Degrees of Failure: Bankruptcies, Buyouts and Bailouts

For capitalist economies to thrive, weak companies must go out of business. The reasons for failure vary from outdated products, excess industry capacity, mismanagement and simple bad luck. The demise of existing firms helps the economy by freeing up resources for new enterprises, leaving healthier survivors in place. Joseph Schumpeter coined the term "creative destruction" to describe this failure and renewal process—a major driver of progress in a free-enterprise economy. Schumpeter and his disciples view this process as beneficial despite the accompanying loss of jobs, asset values and equity.

The U.S. economy offers a range of options for this process of failure and rebirth:

Bankruptcies

Enterprises beyond saving wind up in Chapter 7 bankruptcy, with operations ended and assets sold off. Firms with a viable business but too much debt or other contractual obligations usually file for Chapter 11 bankruptcy, continuing to operate under court protection from creditors. Both forms of bankruptcy result in a hit to stakeholders: shareholders, employees, top managers and creditors are wiped out or allowed to survive at a significant haircut. Bankruptcy means liquidation or reduction; whether the bankrupt firm dies completely or scales down and survives with the same or similar name, the end game is reallocation of resources.

Buyouts

A company facing potential bankruptcy may instead be sold. The acquisition usually produces similar stakeholder reduction results as a Chapter 11 bankruptcy, but without the obliteration of equity ownership and creditor fallout.

Bailouts

The government steps in to prevent bankruptcy by providing loans or new capital. The government becomes the most senior secured creditor and begins downsizing losses, management, the corporate balance sheet and risk appetite. As the company restructures, the government, often very slowly, weans the company off life support.

Banks are special

The FDIC handles most bank failures through a resolution similar to a private-sector buyout. The FDIC is funded primarily by fees garnered from the banking industry. The failed institution's shareholders, employees, management and unsecured creditors still generally suffer significant losses, while insured depositors are protected.

In the wake of the financial crisis, Dodd–Frank added a new option: the Orderly Liquidation Authority (OLA). In theory, OLA will follow the spirit of a Chapter 7 bankruptcy—liquidation of the failed firm's assets—but in an "orderly" manner. "Orderly" may involve some FDIC/government financing to maximize firm value prior to the sale, thus blending some of the degrees of failure already discussed.

Buyouts, bankruptcies and FDIC resolutions have a long history of providing a reasonably predictable process that imposes no costs to taxpayers. Bankruptcies and buyouts support creative destruction using private sector funding. By contrast, bailouts and OLA are specifically aimed at dealing with too-big-to-fail institutions and are likely to involve some form of taxpayer assistance since this degree of failure comes after private sector solutions are deemed unavailable. Bailouts provide delayed support of the creative destruction process, using sometimes politically influenced taxpayer funds instead of the free-enterprise route of reduction, rebirth and reallocation.

In essence, dealing with TBTF financial institutions necessitates quasi-nationalization of a private company, a process antithetical to a capitalist system.

But make no mistake about it: A bailout is a failure, just with a different label.

As housing markets deteriorated, policymakers became alarmed, seeing the number of big, globally interconnected banks among the wounded. The loss of even one of them, they feared, would create a domino effect that would lead to a collapse of the payment system and severely damage an economy already battered by the housing bust.

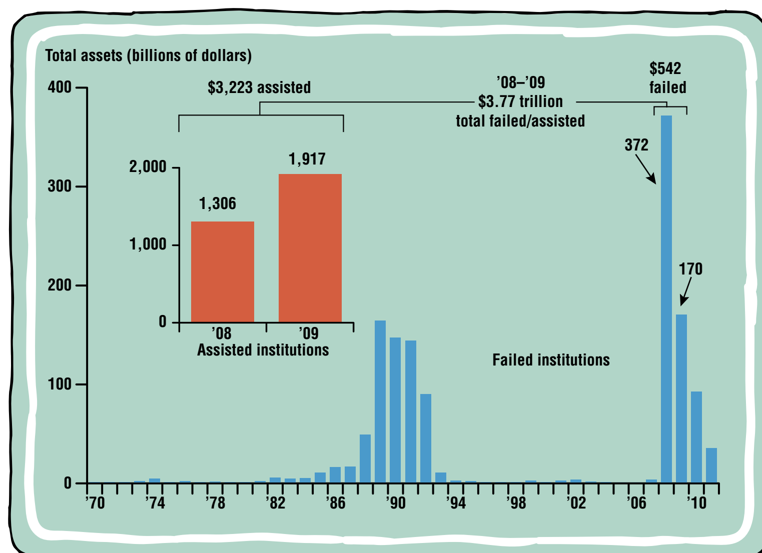
Capital markets did in fact seize up when Lehman Brothers, the fourth-largest investment bank, declared bankruptcy in September 2008. To prevent a complete collapse of the financial system and to unfreeze the flow of finance, the expedient fix was hundreds of billions of dollars in federal government loans to keep these institutions and the financial system afloat.

In short, the situation in 2008 removed any doubt that several of the largest U.S. banks were too big to fail.[4] At that time, no agency compiled, let alone published, a list of TBTF institutions. Nor did any bank advertise itself to be TBTF. In fact, TBTF did not exist explicitly, in law or policy—and the term itself disguised the fact that commercial banks holding roughly one-third of the assets in the banking system *did essentially fail*, surviving only with extraordinary government assistance *(Exhibit 4)*.[5] Most of the largest financial institutions did not fail in the strictest sense. However, bankruptcies, buyouts and bailouts facilitated by the government nonetheless constitute failure *(Box 1)*. The U.S. financial institutions that failed outright between 2008 and 2011 numbered more than 400—the most since the 1980s.

The housing bust and recession disabled the financial system, stranding many institutions on the roadway, creating unprecedented traffic jams. Struggling

Exhibit 4

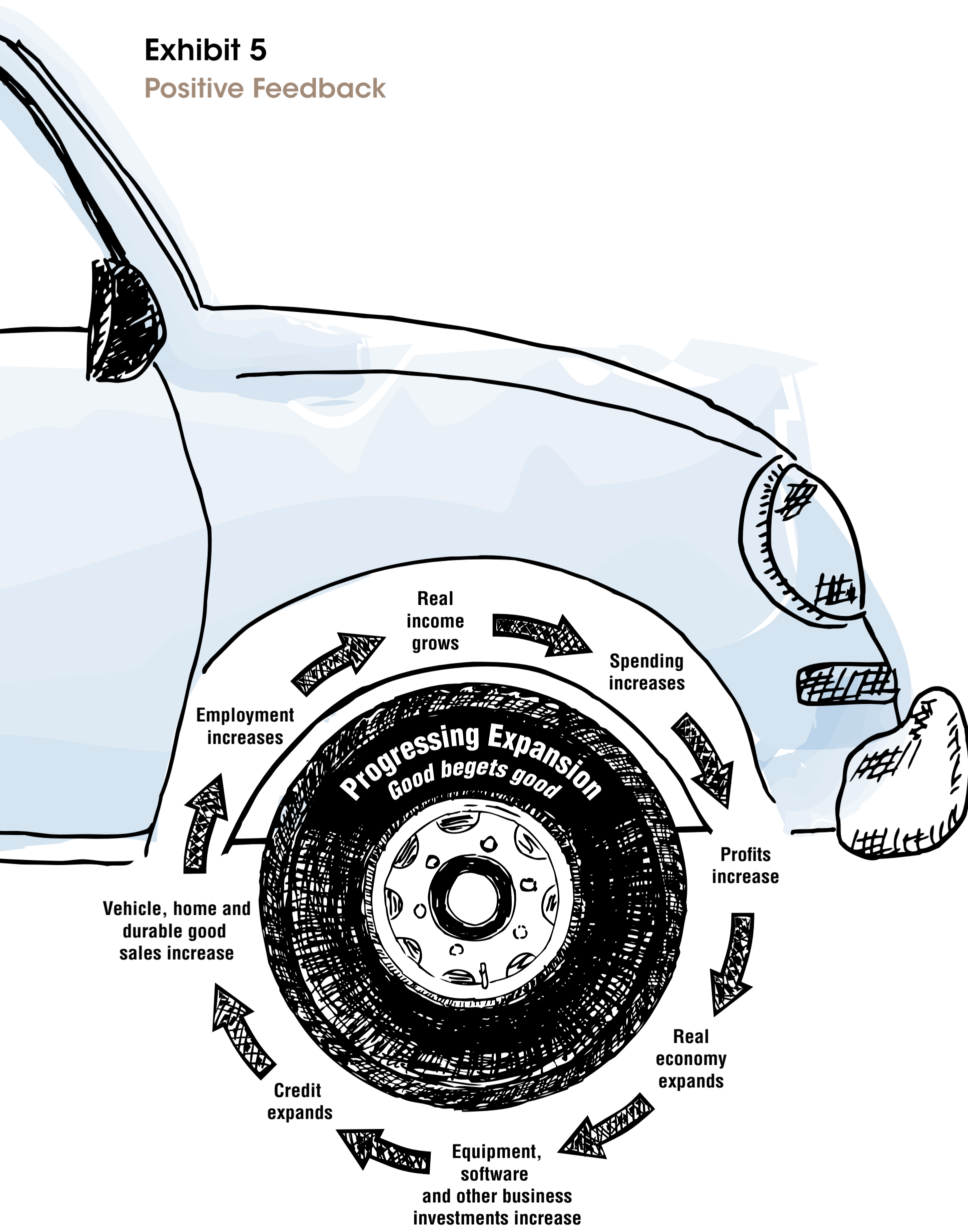
Total Assets of Failed and Assisted Institutions Reached Extraordinary Levels



SOURCE: Federal Deposit Insurance Corp.

Psychological side effects of TBTF can't be measured, but they're too important to ignore because they affect economic behavior.

Exhibit 5
Positive Feedback



banks could not lend, slowing economic activity. Massive layoffs followed, pinching household and business spending, which depressed stock prices and home values, further reducing lending. These troubles brought more layoffs, further reducing spending. Overall economic activity bogged down.

The chain reaction that started in December 2007 became the longest recession in the post-World War II era, lasting a total of 18 months to June 2009. Real output from peak to trough dropped 5.1 percent. Job losses reached nearly 9 million. Unemployment peaked at 10 percent in October 2009.

The economy began seeing a slight easing of congestion in mid-2009. With the roadway beginning to clear of obstacles, households and businesses sensed an opportunity to speed up. New jobs, higher spending, rising asset prices and increased lending all reinforce each other, building up strength as the economy proceeds on a growth path *(Exhibit 5)*.

Monetary Policy Engine

In an internal combustion engine, small explosions in the cylinders' combus-

tion chambers propel a vehicle; likewise, the monetary policy engine operates through cylinders that transmit the impact of Fed actions to decisions made by businesses, lenders, borrowers and consumers *(Exhibit 6)*.[6]

When it wants to get the economy moving faster, the Fed reduces its policy interest rate—the federal funds rate, what banks charge one another for overnight loans. Banks usually respond by making more credit available at lower rates, adding a spark to the bank loan cylinder that drives borrowing by consumers and companies. Subsequent buying and hiring boost the economy.

Interest rates in money and capital markets generally fall along with the federal funds rate. The reduced cost of financing taking place in the securities market cylinder enables many large businesses to finance expansion through sales of stock, bonds and other instruments. Increased activity occurs in the asset prices and wealth cylinder stemming from the propensity of falling interest rates to push up the value of assets—bonds, equities, homes and other real estate. Rising asset values bolster businesses' balance sheets and consumers' wealth, leading to greater capacity to borrow and spend.

Declining interest rates stimulate activity in the exchange rate cylinder, making investing in U.S. assets less attractive relative to other countries, putting downward pressure on the dollar. The exchange rate adjustments make U.S. exports cheaper, stimulating employment and economic activity in export industries. However, what other countries do is important; if they also lower interest rates, then the effect on exchange rates and exports will be muted.

From the first moments of the financial crisis, the Fed has worked diligently—often quite imaginatively—to repair damage to the banking and financial sectors, fight the recession, clear away impediments and jump-start the economy.

The Fed has kept the federal funds rate close to zero since December 2008. To deal with the zero lower bound on the federal funds rate, the Fed has injected billions of dollars into the economy by purchasing long-maturity assets on a massive scale, creating an unprecedented bulge in its balance sheet. That has helped push down borrowing costs at all maturities to their lowest levels in more than a half century. While reducing the interest burden for borrowers, monetary policy in recent years has had a punishing impact on savers, particularly those dependent on shrinking interest payments.

In the United States, economic growth resumed in mid-2009—but it has been tenuous and fragile through its first two-plus years. Annual growth has averaged about 2.5 percent, one of the weakest rebounds of any post-WWII recovery. Stock prices quickly bounced back from their recessionary lows but seem suspended in trendless volatility. Home prices have languished.

At the same time, job gains have been disappointing, averaging 120,000 a month from January 2010 to December 2011, less than half what they were in the mid- to late 1990s when the labor force was considerably smaller. Through 2011, only a third of the jobs lost in the recession have been regained.

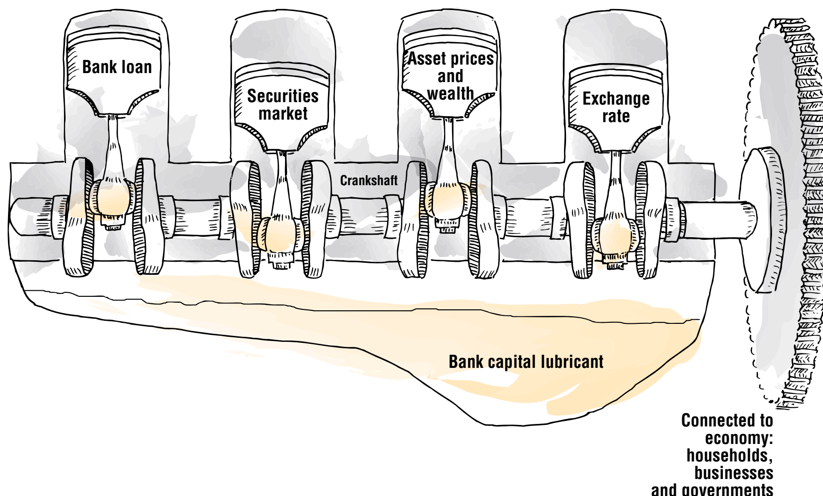
What's Different Now?

The sluggish recovery has confounded monetary policy. Much more modest Fed actions have produced much stronger results in the past. So, what's different now?

A vehicle's engine with one cylinder misfiring may get you where you want to go; it just takes longer. The same goes for the machinery of monetary policy, largely because of the interdependence of all the moving parts.

Exhibit 6

The Four Cylinders of the Monetary Policy Engine



Part of the answer lies in excesses that haven't been wrung out of the economy—falling housing prices have been a lingering drag. Jump-starting the housing market would surely spur growth, but TBTF banks remain at the epicenter of the foreclosure mess and the backlog of toxic assets standing in the way of a housing revival. Mortgage credit standards remain relatively tight.[7]

Loan demand lags because of uncertainty about the economic outlook and diminished faith in American capitalism. Even though banks have begun easing lending standards, potential borrowers believe the tight credit standards of 2008–10 remain in place.

Another part of the answer centers on the monetary policy engine. It still isn't hitting on all cylinders, impairing the Fed's ability to stimulate the real economy's growth of output and employment. As a result, historically low federal funds rates haven't delivered a large expansion of overall credit. With bank lending weak, financial markets couldn't play their usual role in recovery—revving up lending by nonbanks to the household and business sectors.

A vehicle's engine with one cylinder

misfiring may get you where you want to go; it just takes longer. The same goes for the machinery of monetary policy, largely because of the interdependence of all the moving parts. When one is malfunctioning, it degrades the rest. A scarcity of bank credit, for example, inhibits firms' capacity to increase output for exports, undermining the power within the exchange rate cylinder.

Similarly, the contributions to recovery from securities markets and asset prices and wealth have been weaker than expected. A prime reason is that burned investors demand higher-than-normal compensation for investing in private-sector projects. They remain uncertain about whether the financial system has been fixed and whether an economic recovery is sustainable. They worry about additional financial shocks—such as the euro zone crisis.

Sludge on the Crankshaft

A fine-tuned financial system requires well-capitalized banks, with the resources to cover losses from bad loans and investments. In essence, bank capital is a key lubricant in the economic engine *(see Exhibit 6)*. Insufficient capital creates a grinding friction that weakens the entire financial system. Bank capital is an issue of regulatory policy, not monetary policy. But monetary policy cannot be effective when a major portion of the banking system is undercapitalized.

The machinery of monetary policy hasn't worked well in the current recovery. The primary reason: TBTF financial institutions. Many of the biggest banks have sputtered, their balance sheets still clogged with toxic assets accumulated in the boom years.

In contrast, the nation's smaller banks are in somewhat better shape by some measures. Before the financial crisis, most didn't make big bets on mortgage-backed securities, derivatives and other highly risky assets whose value imploded. Those that did were closed by the Federal Deposit Insurance Corp. (FDIC), a government agency.

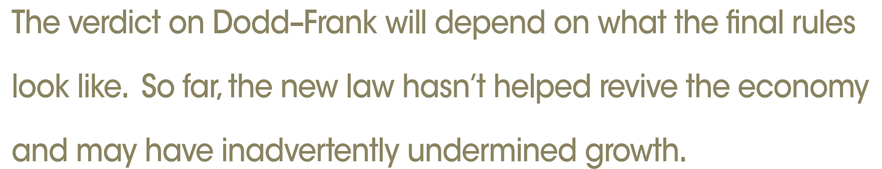
Coming out of the crisis, the surviving small banks had healthier balance sheets. However, smaller banks comprise only one-sixth of the banking system's capacity and can't provide the financial clout needed for a strong economic rebound.

The rationale for providing public funds to TBTF banks was preserving the financial system and staving off an even worse recession. The episode had its downside because most Americans came away from the financial crisis believing that economic policy favors the big and well-connected. They saw a topsy-turvy world that rewarded many of the largest financial institutions, banks and nonbanks alike, that lost risky bets and drove the economy into a ditch.[8]

These events left a residue of distrust for the government, the banking system, the Fed and capitalism itself *(Box 2)*. These psychological side effects of TBTF can't be measured, but they're too important to ignore because they affect economic behavior. People disillusioned with capitalism aren't as eager to engage in productive activities. They're likely to approach economic decisions with suspicion and cynicism, shying away from the risk taking that drives entrepreneurial capitalism. The ebbing of faith has added friction to an economy trying to regain cruising speed.

Shifting into Gear

Looking back at the financial crisis, recession and the tepid recovery that followed points to two challenges facing the U.S. economy in 2012 and beyond. The short term demands a focus on repairing the


The verdict on Dodd–Frank will depend on what the final rules look like. So far, the new law hasn't helped revive the economy and may have inadvertently undermined growth.

Box 2
TBTF: A Perversion of Capitalism

An unfortunate side effect of the government's massive aid to TBTF banks has been an erosion of faith in American capitalism. Ordinary workers and consumers who might usually thank capitalism for their higher living standards have seen a perverse side of the system, where they see that normal rules of markets don't apply to the rich, powerful and well-connected.

Here are some ways TBTF has violated basic tenets of a capitalist system:

Capitalism requires the freedom to succeed and the freedom to fail. Hard work and good decisions should be rewarded. Perhaps more important, bad decisions should lead to failure—openly and publicly. Economist Allan Meltzer put it this way: "Capitalism without failure is like religion without sin."

Capitalism requires government to enforce the rule of law. This requires maintaining a level playing field. The privatization of profits and socialization of losses is completely unacceptable. TBTF undermines equal treatment, reinforcing the perception of a system tilted in favor of the rich and powerful.

Capitalism requires businesses and individuals be held accountable for the consequences of their actions. Accountability is a key ingredient for maintaining public faith in the economic system. The perception—and the reality—is that virtually nobody has been punished or held accountable for their roles in the financial crisis.

The idea that some institutions are TBTF inexorably erodes the foundations of our market-based system of capitalism.

financial system's machinery, so the impacts of monetary policy can be transmitted to the economy quickly and with greater force. To secure the long term, the country must find a way to ensure that taxpayers won't be on the hook for another massive bailout.

Both challenges require dealing with the threat posed by TBTF financial institutions; otherwise, it will be difficult to restore confidence in the financial system and the capitalist economy that depends on it.

The government's principal response to the financial crisis has been the Dodd–Frank Wall Street Reform and Consumer Protection Act (Dodd–Frank), signed into law on July 21, 2010. It's a sprawling, complex piece of legislation, addressing issues as diverse as banks' debit card fees and systemic risk to the financial system. Since Dodd–Frank became law, at least a dozen agencies, including the Fed, have been working to translate its provisions into regulations to govern the financial system. They're unlikely to finish until 2013 at the earliest.

The verdict on Dodd–Frank will depend on what the final rules look like. So far, the new law hasn't helped revive the economy and may have inadvertently undermined growth by adding to uncertainty about the future.

A prolonged legislative process preceded the protracted implementation period, with bureaucratic procedure trumping decisiveness. Neither banks nor financial markets know what the new rules will be, and the lack of clarity is delaying repair of the bank-lending and financial market parts of the monetary policy engine.

The law's sheer length, breadth and complexity create an obstacle to transparency, which may deepen Main Street's distrust of Washington and Wall Street, especially as big institutions use their lawyers and lobbyists to protect their turf. At the same time, small banks worry about a massive increase in compliance burdens.

Policymakers can make their most immediate impact by requiring banks to hold additional capital, providing added protection against bad loans and investments. In the years leading up to the financial crisis, TBTF banks squeezed equity to a minimum. They ran into trouble because they used piles of debt to expand risky investments—in the end finding that excessive leverage is lethal.

The new regulations should establish basic capital levels for all financial institutions, tacking on additional requirements for the big banks that pose systemic risk, hold the riskiest assets and venture into the more exotic realms of the financial landscape.[9] Mandating larger capital cushions tied to size, complexity and business lines will give TBTF institutions more "skin in the game" and restore some badly needed market discipline. Overall, the revised regulatory scheme should provide incentives to cut risk. Some banks may even rethink their mania for growing bigger.

Higher capital requirements across the board could burden smaller banks and probably further crimp lending. These institutions didn't ignite the financial crisis. They didn't get much of a helping hand from Uncle Sam. They tend to stick to traditional banking practices. They shouldn't face the same regulatory burdens as the big banks that follow risky business models.

TBTF banks' sheer size and their presumed guarantee of government help in time of crisis have provided a significant edge—perhaps a percentage point or more—in the cost of raising funds.[10] Making these institutions hold added capital will level the playing field for all banks, large and small.

Higher capital requirements across the board could burden smaller banks and probably further crimp lending. These institutions shouldn't face the same regulatory burdens as the big banks that follow risky business models.

Facing higher capital requirements, the biggest banks will need to raise additional equity through stock offerings or increased retained earnings through reduced dividends. Attracting new investment will be comparatively less burdensome for the healthiest institutions, difficult for many and daunting for the weaker banks.

Dodd–Frank leaves the details for rebuilding capital to several supervisory agencies. The specifics are still being worked out; it appears banks will have until 2016 or 2017 to meet the higher thresholds.

Given the urgent need for restoring the vitality of the banking industry, this may seem a long wait. However, capital rebuilding will likely take place faster as the stronger banks recognize the advantages of being first movers. Recently, many of the largest banks have made efforts to raise capital and have met or surpassed supervisory expectations for capital adequacy under stress tests.[11]

Banks that quickly clean up their balance sheets will have a better chance of raising new funds—so they can then be in shape to attract even more new capital. Past evidence shows that financial markets favor institutions that offer the best prospects for returns with acceptable risk.[12]

Laggards will be worse off, finding it even more difficult to attract new investors. Ultimately, these institutions will further weaken and may need to be broken up, their viable parts sold off to competitors. With the industry already too concentrated, it's important to redistribute these banking assets in a way that enhances overall competition.

Ensuring that banks have adequate capital is essential to effective monetary policy. It comes back to the bank capital linkage, which recognizes that banks must have healthy capital ratios to expand lending and absorb losses that normally occur. Repairing the damaged mechanism through which monetary policy impacts the economy will be the key to accelerating positive feedbacks.

To some extent, the Fed's zero interest rate policy, adopted in December 2008 at the height of the financial crisis, assisted the banking industry's capital rebuilding process. It reduced banks' costs of funds and enhanced profitability. But short-term interest rates cannot cross the zero lower bound, limiting any additional impact from this capital-building mechanism. It could

be argued that zero interest rates are taxing savers to pay for the recapitalization of the TBTF banks whose dire problems brought about the calamity that created the original need for the zero interest rate policy.

Unfortunately, the sluggish recovery is a cost of the long delay in establishing the new standards for bank capital. Given the urgent need to restore economic growth and a healthy job market, the guiding principles for bank capital regulation should be: codify and clarify, quickly. There is no statutory mandate to write hundreds of pages of regulations and hundreds more pages of commentary and interpretation. Millions of jobs hang in the balance.

A Potential Roadblock

Dodd–Frank says explicitly that American taxpayers won't again ride to the rescue of troubled financial institutions. It proposes to minimize the possibility of an Armageddon by revamping the regulatory architecture.

As part of its strategy to end TBTF, Dodd–Frank expanded the powers of the Fed, FDIC and most other existing regulators. New watchdogs will be put on alert. A 10-member Financial Stability Oversight Council (FSOC), aided by a new Office of Financial Research, has been charged with monitoring systemic risk. It will try to identify and resolve problems at big banks and other financial institutions before they threaten the financial system. In an effort to increase transparency, much of the new information will be made public. Opaque business practices thwart market discipline.

Can Dodd–Frank do what was unthinkable back in 2008—identify and liquidate systemically important financial institutions in an orderly manner that minimizes risk to the financial system and economy?

The current remedy for insolvent institutions works well for smaller banks, protecting customers' money while the FDIC arranges sales or mergers that transfer assets and deposits to healthy competitors. During the financial crisis, however, the FDIC didn't have the staff, financial resources and time to wind down the activities of even one truly mammoth bank. Thus, many TBTF institutions stayed in business through government support.[13]

Dodd–Frank envisions new procedures for troubled big banks and financial institutions, directed by the FSOC watchdog and funded by fees charged to the biggest financial institutions.

The goal is an alternative to the TBTF rescues of the past three decades. In practice, these rescues have penalized equity holders while protecting bond holders and, to a lesser extent, bank managers. Disciplining the management of big banks, just as happens at smaller banks, would reassure a public angry with those whose reckless decisions necessitated government assistance.

Will the new resolution procedures be adequate in a major financial crisis? Big banks often follow parallel business strategies and hold similar assets. In hard times, odds are that several big financial institutions will get into trouble at the same time.[14] Liquid assets are a lot less liquid if these institutions try to sell them at the same time. A nightmare scenario of several big banks requiring attention might still overwhelm even the most far-reaching regulatory scheme. In all likelihood, TBTF could again become TMTF—too *many* to fail, as happened in 2008.

A second important issue is credibility. Going into the financial crisis, markets assumed there was government backing for Fannie Mae and Freddie Mac bonds

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despite a lack of explicit guarantees. When push came to shove, Washington rode to the rescue. Similarly, no specific mandate existed for the extraordinary governmental assistance provided to Bear Stearns, AIG, Citigroup and Bank of America in the midst of the financial crisis.[15] Lehman Brothers didn't get government help, but many of the big institutions exposed to Lehman did.[16]

Words on paper only go so far. What matters more is whether bankers and their creditors actually believe Dodd–Frank puts the government out of the financial bailout business. If so, both groups will practice more prudent behavior.

Dodd–Frank has begun imposing some market discipline and eroding the big banks' cost-of-funds advantage. Credit-rating agencies have lowered the scores for some larger banks, recognizing that the law reduces government bailout protections that existed just a few years ago and that Washington's fiscal problems limit its ability to help beleaguered financial institutions in a financial emergency.

While decrying TBTF, Dodd–Frank lays out conditions for sidestepping the law's proscriptions on aiding financial institutions. In the future, the ultimate decision won't rest with the Fed but with the Treasury secretary and, therefore, the president. The shift puts an increasingly political cast on whether to rescue a systemically important financial institution. (It may be hard for many Americans to imagine political leaders sticking to their anti-TBTF guns, especially if they face a too-many-to-fail situation again.)

If the new law lacks credibility, the risky behaviors of the past will likely recur, and the problems of excessive risk and debt could lead to another financial crisis. Government authorities would then face the same edge-of-the-precipice choice they did in 2008—aid the troubled banking behemoths to buoy the financial system or risk grave consequences for the economy.

The pretense of toughness on TBTF sounds the right note for the aftermath of the financial crisis. But it doesn't give the watchdog FSOC and the Treasury secretary the foresight and the backbone to end TBTF by closing and liquidating a large financial institution in a manner consistent with Chapter 7 of the U.S. Bankruptcy Code *(see Box 1)*. The credibility of Dodd–Frank's disavowal of TBTF will remain in question

until a big financial institution actually fails and the wreckage is quickly removed so the economy doesn't slow to a halt. Nothing would do more to change the risky behavior of the industry and its creditors.

For all its bluster, Dodd–Frank leaves TBTF entrenched. The overall strategy for dealing with problems in the financial industry involves counting on regulators to reduce and manage the risk. But huge institutions still dominate the industry—just as they did in 2008. In fact, the financial crisis increased concentration because some TBTF institutions acquired the assets of other troubled TBTF institutions.

The TBTF survivors of the financial crisis look a lot like they did in 2008. They maintain corporate cultures based on the short-term incentives of fees and bonuses derived from increased oligopoly power. They remain difficult to control because they have the lawyers and the money to resist the pressures of federal regulation. Just as important, their significant presence in dozens of states confers enormous political clout in their quest to refocus banking statutes and regulatory enforcement to their advantage.

The Dallas Fed has advocated the ultimate solution for TBTF—breaking up the nation's biggest banks into smaller units.[17] It won't be easy for several reasons. First, the prospect raises a range of thorny issues about how to go about slimming down the big banks. Second, the level of concentration considered safe will be difficult to determine. Is it rolling things back to 1990? Or 1970? Third, the political economy of TBTF suggests that the big financial institutions will dig in to contest any breakups.

Taking apart the big banks isn't costless. But it is the least costly alternative, and it trumps the status quo.[18]

A financial system composed of more banks, numerous enough to ensure competition in funding businesses and households but none of them big enough to put the overall economy in jeopardy, will give the United States a better chance of navigating through future financial potholes and precipices. As this more level playing field emerges, it will begin to restore our nation's faith in the system of market capitalism.

Taking the Right Route

Periodic stresses that roil the financial system can't be wished away or legislated out of existence. They arise from human weaknesses—the complacency that comes from sustained good times, the greed and irresponsibility that run riot without market discipline, the exuberance that overrules common sense, the complicity that results from going along with the crowd. We should be vigilant for these failings, but we're unlikely to change them. They're a natural part of our human DNA.

By contrast, concentration in the financial sector is anything but natural. Banks have grown larger in recent years because of artificial advantages, particularly the widespread belief that government will rescue the creditors of the biggest financial institutions. Human weakness will cause occasional market disruptions. Big banks backed by government turn these manageable episodes into catastrophes.

Greater stability in the financial sector begins when TBTF ends and the assumption of government rescue is driven from the marketplace. Dodd–Frank hopes to accomplish this by foreswearing TBTF, tightening supervision and compiling more information on institutions whose failure could upend the economy.

These well-intentioned initiatives may

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be laudable, but the new law leaves the big banks largely intact. TBTF institutions remain a potential danger to the financial system. We can't be sure that some future government won't choose the expediency of bailouts over the risk of severe recession or worse. The only viable solution to TBTF lies in reducing concentration in the banking system, thus increasing competition and transparency.

The road to prosperity requires recapitalizing the financial system as quickly as possible. The safer the individual banks, the safer the financial system. The ultimate destination—an economy relatively free from financial crises—won't be reached until we have the fortitude to break up the giant banks.

Harvey Rosenblum is the Dallas Fed's executive vice president and director of research. Special mention and thanks go to Richard Alm for his journalistic assistance, to David Luttrell for research and documentation, and to Samantha Coplen and Darcy Melton for their artistry in the exhibits.

Notes

[1] "Taming the Credit Cycle by Limiting High-Risk Lending," by Jeffery W. Gunther, Federal Reserve Bank of Dallas *Economic Letter,* vol. 4, no. 4, 2009.

[2] See speech by U.S. Attorney General Eric Holder, Columbia University Law School, New York City, Feb. 23, 2012, in which he noted that "much of the conduct that led to the financial crisis was unethical and irresponsible … but this behavior—while morally reprehensible—may not necessarily have been criminal." www.justice.gov/iso/opa/ag/speeches/2012/ag-speech-120223.html

[3] A structured investment vehicle (SIV) is an "off-balance-sheet" legal entity that issues securities collateralized by loans or other receivables from a separate but related entity while investing in assets of longer maturity. Several of the largest banks used SIVs to issue commercial paper to fund investments in high-yielding securitized assets. When these risky assets began to default, the banks reluctantly took them back onto their balance sheets and suffered large write-downs.

[4] In conjunction with the 1984 rescue of Continental Bank, the Comptroller of the Currency, the supervisor of nationally chartered banks, acknowledged the TBTF status of the largest banks. See "U.S. Won't Let 11 Biggest Banks in Nation Fail," by Tim Carrington, *Wall Street Journal*, Sept. 20, 1984.

[5] In 2008 and 2009, the Federal Deposit Insurance Corp. (FDIC) facilitated the failure of 165 institutions with $542 billion in assets. The largest bank failure in history occurred when Washington Mutual shuttered its doors in late September 2008, its $307 billion in assets accounting for the lion's share of the $372 billion total of failed institutions' assets that year. Although staggering, the amount of capital drained from the banking system due to failures during the crisis pales in comparison with the $3.2 trillion in assets associated with institutions receiving extraordinary assistance from the FDIC during this period, most of it involving just two entities, Citigroup and Bank of America.

[6] "Regulatory and Monetary Policies Meet 'Too Big to Fail,'" by Harvey Rosenblum, Jessica K. Renier and Richard Alm, Federal Reserve Bank of Dallas *Economic Letter*, vol. 5, no. 3, 2010.

[7] According to the July 2011 Federal Reserve Senior Loan Officer Opinion Survey, a majority of large banks have eased standards for consumer loans and for commercial and industrial loans. However, credit standards on residential and commercial real estate lending remain tight over the period since 2005.

[8] Taxpayers' money wasn't "given" to the banks. It was loaned, and most loans have been repaid with interest. Nevertheless, the perception remains that bailout dollars were gifts. And perception drives public sentiment.

[9] At this time (March 2012), it appears that bank capital regulations under Dodd–Frank will follow the Basel III framework, with capital surcharges of at least 1 percentage point imposed on global systemically important financial institutions (G-SIFIs). In addition, a more realistic definition of capital is likely to be put in place to avoid a repeat of the situation in 2008–09, when two of the largest banks were never rated less than "adequately capitalized" at the height of the crisis, while at the same time they together received hundreds of billions in capital infusions and loan guarantees and never made it onto the FDIC's Problem Bank List.

[10] See "How Much Did Banks Pay to Become Too-Big-to-Fail and to Become Systemically Important?," by Elijah Brewer III and Julapa Jagtiani, Federal Reserve Bank of Philadelphia, Working Paper no. 11-37, 2011, and the literature cited therein.

[11] The Federal Reserve's Comprehensive Capital Analysis and Review (CCAR) evaluates the capital planning processes and capital adequacy of the largest bank holding companies. This exercise includes a supervisory stress test to evaluate whether firms would have sufficient capital in times of severe economic and financial stress. In the CCAR results released on March 13, 2012, 15 of the 19 bank holding companies were estimated to maintain capital ratios above regulatory minimum levels under the hypothetical stress scenario, even after considering the proposed capital actions, such as dividend increases or share buybacks. For more information, see www.federalreserve.gov/newsevents/press/bcreg/20120313a.htm.

[12] In the early 1990s, financial markets rewarded banks for increasing their capital-to-asset ratios. Banks that held more capital had higher returns on equity (ROE) primarily because of reduced interest rates paid for uninsured liabilities. See "Banking in the 21st Century," by Alan Greenspan, remarks at the 27th Annual Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, May 2, 1991, especially pp. 9–10. In addition, banks were rewarded with *higher* equity prices for dividend retention and issuance of new stock, two methods of raising capital that bankers generally claim will *reduce* stock prices. See "Bank Capital Ratios, Asset Growth and the Stock Market," by Richard Cantor and Ronald Johnson, Federal Reserve Bank of New York *FRBNY Quarterly Review*, Autumn 1992, pp. 10–24 (emphasis added).

[13] For other large nonbank financial firms (for example, Lehman Brothers, AIG and Bear Stearns) and for bank holding companies, there was no resolution authority at all. The choice came down to buyouts, bankruptcies or bailouts (see Box 1). With no private-sector buyers willing to step up, and with bankruptcy generally a long and uncertain process, government intervention in the form of bailouts became the least disruptive alternative, at least in the short run.

[14] The FDIC estimates that it could have performed an orderly liquidation of Lehman, if it had Dodd–Frank powers six months before Lehman declared Chapter 11 bankruptcy in September 2008, and would have paid creditors 97 percent of what they were owed. But this assumes that other giant financial institutions did not require simultaneous and similar attention.

[15] On March 24, 2008, the Federal Reserve Bank of New York announced that it would provide term financing to facilitate JPMorgan's buyout of Bear Stearns at $10/share, or $1.4 billion. On Sept. 15, 2008, the world's largest underwriter of mortgage bonds, Lehman Brothers, filed for the world's largest bankruptcy with listed liabilities of $613 billion. The following day, one of the world's largest insurance organizations and counterparties for credit default swaps, AIG, received Federal Reserve support: an $85 billion secured credit facility amid credit rating downgrades and financial market panic. On Nov. 23, 2008, the Treasury, Federal Reserve and the FDIC entered into an agreement with Citigroup to provide a package of guarantees, liquidity access and nonrecourse capital to protect against losses on an asset pool of approximately $306 billion of loans and securities. On Jan. 16, 2009, a similar government loan-loss agreement was offered to Bank of America, backstopping an asset pool of $118 billion, a large majority of which was assumed as a result of BofA's acquisition of broker-dealer Merrill Lynch.

[16] More than three years have passed since the Lehman bankruptcy. A vigorous debate persists regarding (1) whether the Fed could have found a way to bail out Lehman and (2) whether this might have avoided a global financial and economic collapse. Using data from late 2008 and early 2009 shown in Exhibit 3, the inescapable answer to both questions is: It would not have mattered. Two days later, AIG was essentially nationalized, and within a matter of a few months, the already imbedded but unrecognized and undisclosed losses at Citigroup and Bank of America necessitated a combined Fed and FDIC assistance package that quasi-nationalized these institutions. The extent of these losses was disavowed by managements up until assistance packages were announced.

[17] "Taming the Too-Big-to-Fails: Will Dodd–Frank Be the Ticket or Is Lap-Band Surgery Required?," speech by Richard Fisher, president and chief executive officer of the Federal Reserve Bank of Dallas, Columbia University's Politics and Business Club, New York City, Nov. 15, 2011; "Financial Reform or Financial Dementia?," by Richard Fisher, Southwest Graduate School of Banking 53rd Annual Keynote Address, Dallas, June 3, 2010; "Paradise Lost: Addressing 'Too Big to Fail,'" speech by Richard Fisher, Cato Institute's 27th Annual Monetary Conference, Washington, D.C., Nov. 19, 2009.

[18] Evidence of economies of scale (that is, reduced average costs associated with increased size) in banking suggests that there are, at best, limited cost reductions beyond the $100 billion asset size threshold. Cost reductions beyond this size cutoff may be more attributable to TBTF subsidies enjoyed by the largest banks, especially after the government interventions and bailouts of 2008 and 2009. See "Scale Economies Are a Distraction," by Robert DeYoung, Federal Reserve Bank of Minneapolis *The Region*, September 2010, pp. 14–16, as well as Brewer and Jagtiani, note 10. However, Dodd–Frank seeks to reduce these TBTF subsidies.