

Too much government protection makes things worse, not better

# How Real Is the Risk of a Massive Banking Collapse?

BY GEORGE G. KAUFMAN



HOW REAL IS THE RISK OF A MASSIVE BANKING collapse? The answer depends, in part, on the meaning of “collapse.” Will banks disappear as a result of recent or ongoing bank crises? Highly

unlikely; banks have been around for hundreds of years and have survived many similar crises. Will some bank depositors and shareholders lose money? I certainly hope so.

It is the government’s protection of depositors and, in some countries, also of other bank stakeholders, such as shareholders, that is a primary cause of the recent crises. That protection will almost certainly guarantee similar, and potentially even larger, crises in the future. Moreover, through such protection, the cost of the crises is largely shifted from protected bank depositors and shareholders to the government, a euphemism for taxpayers. This would not be all bad if taxpayers also benefited from bank profits on the upside. But they do not. Unless the government also owns the banks, profits accrue to the private shareholders. Thus, in most countries, we tend to socialize bank losses but privatize bank profits, a sure formula for continued disaster.

As much as it may be desirable to eliminate government protection almost entirely, it is unlikely to happen. Too many governments have found banks too useful in distributing political favors to their friends and in allocating credit in the pursuit of favored economic and noneconomic objectives to stop now. Because these activities are likely to be unprofitable in the long run and result in bank insolvencies, these governments

must continue to promise protection at least to depositors to avoid massive withdrawals, which would lead to closure. And once a government has a financial stake in its banks, it will regulate them to, among other things, reduce risks—other than those imposed by the government itself—that are no longer subject to full market discipline and that could generate significant losses. Indeed, governments claim that they need to regulate banks to avoid or minimize bank failures. Despite that, in most countries, including the United States, governments are often the major cause of the failures.

Given that governments are not going to exit quietly, what can we do to enhance stability in banking and international markets? We need both to redesign government regulation and protection (the safety net under banks and countries) to mimic market forces as much as possible and to supplement government regulation with market regulation, where the market has a comparative advantage.

## ARE BANKS FRAGILE?

BANKING CRISES HAVE GENERATED MUCH INTERNATIONAL concern in recent years both because they are believed to be contagious across national boundaries and because they are capable of igniting currency or exchange-rate crises. Indeed,

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many of the recent financial crises that we have seen in the Far East, Latin America, and even the transition economies of Eastern Europe were combined banking and currency crises. A recent study by economists at the Federal Reserve Board has documented that banking crises are a good predictor of currency crises. Not unexpectedly, the International Monetary Fund (IMF) has found that combined banking and currency crises are substantially more damaging to the economy in terms of gross domestic product (GDP) declines than either banking or currency crises alone.

**The Fear of Failures** Bank failures are more widely feared than the failure of most other firms, primarily because banks are perceived as more fragile and thus more easily subject to breakage and failure. Bank failures are also perceived as likely to spread quickly and far to other solvent banks and beyond banks to other financial institutions, the macroeconomy, and possibly even to other countries.

The perceived excessive fragility of banks arises from three balance-sheet ratios: (1) low cash-to-asset ratios, or fractional reserve banking; (2) low capital-to-asset ratios, or high leverage; and (3) high demand-to-total-deposits ratios, or strong potential for depositor runs. But fragility cannot be gauged accurately in isolation. It needs to be evaluated relative to the frequency and magnitude of expected shocks in each country. Moreover, even relative fragility does not automatically imply breakage. Rather, it implies “handle with care.” For example, fragile fine crystal and chinaware are generally handled carefully and tend to have a lower breakage rate than ordinary tableware. And it appears that was the case for banks in most countries before their governments stepped in to provide protection and thereby reduce the need for the private market to do so. That is not to say that private markets worked perfectly and prevented all failures. Even some of the best crystal breaks.

**Systematic Risk and Contagion** The three characteristics of bank balance sheets allegedly make banks susceptible to what are described as systemic risk and contagion, which underlie much of the reasoning for a safety net. The cry of systemic risk is a frightening event, much like the cry of fire in a crowded theater or conference hall. But unlike the term “fire,” the term “systemic risk” is not clearly defined and appears to mean different things to different people. Policymakers and others often use the term carelessly and cavalierly to get attention quickly and to justify particular actions.

Systemic risk exists because almost all parties in a modern economy are interconnected: what happens to one party may affect others either directly or indirectly, even across national borders. System risk appears to have at least three common definitions or usages. One definition focuses on the magnitude of the crisis. A systemic crisis is a “big” shock that affects many or all banks in the system, other financial institutions, and the macroeconomy as a whole. How the shock is transmitted through the economy and whether the shock is *random* and affects all banks or is *systematic* and affects only insolvent or weak banks are unclear.

A second definition focuses on direct links among economic units, so an adverse shock to one party cascades down a transmission chain in domino fashion. Such direct causation contagion is perceived as particularly likely for banking because banks are inherently closely linked through interbank deposits, loans, and payment clearings.

The third definition also centers on contagion, but the process or linkage is less direct. Rather, an adverse shock to one party causes investors and other market participants to examine other parties for exposure to the same shock. The shock sends a “wake-up” call to market participants. But it takes time for the participants to react and respond. Accurate information is not freely or immediately available, nor is processing the information immediate when it does become available. During the sorting-out period, significant confusion is likely. Until the process has been completed, participants will likely run from all suspect parties when possible, as it is better to be safe than sorry. And it is now cheap and easy for many to do so and be safe. In this way, the effect of the shock is contagious and passes almost randomly from the initial party to other parties.

This herd behavior is likely to ignite a liquidity crisis in which both prices and quantities (flows) may overshoot their new equilibrium values and affect parties that later may be found “innocent,” as well as those found “guilty.” Although markets appear disorderly during the sorting-out process, the changes are based on rational behavior. In time, new equilibriums will be established in which parties subject to lasting adverse effects from the initial shock are distinguished from parties with little or no risk exposure to the shock. Although information-based and not random, such common shock contagion is scary and frequently solicits calls for public-policy responses. Unfortunately, attempts by governments to interfere with this sorting-out process and smooth out the bumps are as likely to distort prices and signals and delay necessary structural adjustment as to improve economic welfare in the longer term.

At least in banking, contagious systemic risk appears to be more like common shock contagion (the third definition) than direct causation contagion (the second definition). Although banks are closely interconnected, they can and, the evidence suggests—at least in most industrial countries—do protect themselves from most of the misadventures of institutions located earlier on the transmission chain through monitoring, setting exposure limits, and maintaining sufficient capital. Bank losses per se are not transmitted down the chain, but only the losses that exceed a bank’s capital. And banks understand this. When domino-like shocks of the second variety occur, they are primarily the doings of governments. Losses to other banks from the Herstatt Bank failure in 1974 were magnified because the German government intervened to close the bank after the end of the business day in Germany but before the end of the business day in the United States and before its payments to U.S. banks were made. This was primarily a government failure, not a market failure. At least in the United States, intraday interbank exposures from day-end netting and not settling immediately in good funds occur

primarily because of Federal Reserve guarantees and underpricing of daylight overdrafts. The Fed guarantees all interbank transfers on its Fedwire that connects all banks, whether or not the sender has sufficient funds in its account before the end of the business day, and charges below the market rate for any such overdrafts. Overnight or longer overdrafts are charged the discount rate, when permitted.

Although bank contagion appears to be primarily common shock contagion—at least in the United States—the evidence strongly suggests that it is neither widespread nor long lasting. At-risk depositors at the margin appear to be able to distinguish financially healthy (innocent) banks from financially sick (guilty) banks rather quickly. There is effectively no evidence of a depositor run driving an economically (market value) solvent bank into insolvency. More than 100 years ago, John Stuart Mill observed that “panics do not destroy capital; they merely reveal the extent to which it has been previously destroyed” (as quoted by Gerald Caprio, Jr., in “Banking on Crises: Expensive Lessons,” p. 4).

Almost all damaging runs were made on economically insolvent banks that were still open and operating. Even at the height of the banking panic in Chicago in June 1932 during the Great Depression, recent research has documented that depositors ran primarily on insolvent rather than solvent banks and that the runs did not produce failures of solvent banks. Likewise, in a 1938 study of national bank failures from 1870 through 1936, the comptroller of the currency found that runs were the primary cause of only a small fraction of failures.

I offer my students a \$10 reward if they can find me evidence of an economically sound bank that was brought down by depositor runs. So far, no one has. Of course, it may be that they are not taking my challenge seriously or that the reward is not large enough. I am sure that there must be at least a few examples. But certainly not very many. Nevertheless, a line of depositors in front of a bank, as opposed to electronic or silent runs, is generally a visible and scary event. A recent issue of the *New Yorker* magazine featured a fine, although not completely factual, article on how J. P. Morgan almost single-handedly “rescued” the United States from a banking crisis in 1907. The article was accompanied by a photograph of a long line of people in front of a banklike building, captioned “desperate depositors lined up to get their money out of failing banks.” Out of curiosity, I took out my magnifying glass and discovered that the plaque over the entrance to the building was that of the building manager, not of a bank. Possibly, there was a bank around the corner.

Nor are runs limited to banks. In a recent issue of *Smithsonian* magazine, a wonderful article on the great American swindler of the early 1900s, Charles Ponzi, who lent his name to the term “Ponzi scheme,” contained a photograph of a long line of people reportedly in front of Ponzi’s office in Boston to redeem the funds they had invested with him in hopes of realizing unusually high returns. The truth about bank systemic risk and contagion is far less exciting and dangerous than is generally reported and described in the doomsday scenarios frequently sketched in popular

novels and movies and, unfortunately, by some bank regulators. It may be said that if patriotism is the last refuge of a scoundrel, then systemic risk is the last refuge of a scoundrel regulator.

**Bank Failure in the United States** The history of U.S. banking is informative about the existence of systemic risk and contagion because good historical data exist and because many U.S. banks were very fragile as a result of constraints on their ability to reduce their risk optimally through geographic and product diversification. Contrary to myth, the record was not half bad. (Indeed, an analysis of the history of bank failures is often an exercise in “myth busting”—there is far more fiction than fact in most people’s versions.) From 1870 (shortly after the end of the Civil War) to 1914 (when the first federal safety net was introduced in the form of the lender-of-last-resort facilities of the Federal Reserve), the annual average bank failure rate in the United States was slightly lower than for nonbanks. Moreover, losses to depositors at failed banks were proportionately smaller than losses to creditors at failed nonbanks. But the annual variability in bank failures was higher, so that the failures came in clusters. And clusters scare people, just as they do for airplane crashes, food poisonings, or fires. Combined with a poorer public understanding of how banks, which deal in intangibles, operate compared with firms that deal with tangibles, so that much of banking operation is shrouded in mystery, the fear led to public outcries for greater government intervention to increase safety. As is too often true in public policy, the perfect became the enemy of the good!

When the Federal Reserve failed to improve financial stability in the United States (the average annual number of bank failures increased from fewer than 100 before 1920 to about 600 in the 1920s—albeit almost all were very small unit banks located in small rural towns—and then jumped sharply to nearly 3,000 a year from 1929 through 1933), federal deposit insurance was introduced through the Federal Deposit Insurance Corporation (FDIC). That is, less than 20 years after being established to prevent widespread bank failures, the Fed failed to prevent the most serious bank crisis to that time. Shortly after the introduction of deposit insurance, bank failures declined to about 10 a year until the late 1970s. Then in the 1980s, the number of bank failures and, equally importantly, the number of savings and loan association failures increased dramatically. The resulting losses to the deposit insurance agencies standing in the shoes of the protected insured, and in many cases also the de jure uninsured depositors, whom they chose to protect, approximated the losses suffered by private depositors in the 1930s as a percentage of GDP—nearly 3 percent. Moreover, although fewer institutions failed, for the first time in U.S. history both large banks and small banks failed. The federal government safety net became an equal opportunity promoter of bank failures!

## RECOMMENDATIONS

HOW CAN WE REDUCE THE LIKELIHOOD OF SYSTEMIC RISK and contagion? We must emphasize market discipline and

attempt to replicate the market conditions that would exist in the absence of explicit or implicit government safety nets. We can start by requiring greater economic capital. Contrary to what is often heard on the street, there is insufficient, not too much, capital in the banking industry today. Almost all bank competitors that are not covered by safety nets (e.g., insurance companies and finance companies) have higher capital ratios than banks. Not only are current capital ratios too low relative to potential shocks to the banking system in industrial countries, but they are far too low in other countries. Banks need to create a stronger equity culture in which bank losses as well as bank profits are privatized, rather than socialized.

Moreover, the capital I have in mind is economic capital or owners' funds at risk, not book-value capital (and certainly not without adjustment for connected loans or loans to the owners themselves). Furthermore, no distinctions should be made between tier 1 (basically equity) and tier 2 (basically debt) capital, as is currently done in the Basel standards (described later in this article). From where the government or public stands, capital is any security that is junior to the government in bank liquidation and can absorb losses before the government insurance agency. It should not matter whether the capital is common stock, preferred stock, or term subordinated debt. Indeed, a number of proposals are currently circulating that would require at least large banks to issue a minimum amount of term subordinated debt because of its desirable payoff and monitoring characteristics. Because these debt holders are junior to the government and have only limited upside potential but large downside risk, they will monitor their banks more carefully than equity holders and will provide a helpful supplement to regulatory discipline, which is also based on a creditor relationship.

I am also not a great fan of regulatory risk-based capital requirements. Not that I do not believe that the market requires a bank's capital to be scaled to its risk exposure, but I do not believe that regulators can or would mimic these requirements very closely. And if they do not, their lack of action will result in serious misallocation of resources and could provide inducements to excessive risk taking.

The simple Basel risk-based capital requirements currently in force—with higher capital requirements for assets viewed as riskier by the Basel Committee on Banking Supervision, which serves as an international large-bank regulatory agency—that were adopted in the late 1980s validate my fears. The risk weights assigned are way out of line with market weights, have led to serious misallocations of financial resources, and were often ineffective in achieving their prudential objectives. Neither am I very optimistic that the proposed revisions, although well intentioned, will be any more effective or efficient. Increased sophistication and complexity should not be equated with increased efficiency and effectiveness.

Among other changes, the world of finance and banking is becoming more complex daily. Almost by definition, advances will occur in the private sector, where the rewards are greater. Regulators will always be at least one step

behind, playing catch-up, and will most likely be outflanked. History provides no other ending. A simple capital leverage ratio test, possibly adjusted for off-balance sheet activities, is likely to be as, if not more, effective than more complex risk-adjusted tests.

The regulators are also recommending greater disclosure, transparency, and information availability. And rightfully so. The quality and quantity of available information on banks in most countries are well below that which the market would demand of other capital market participants. As a result, at crunch time, if the safety net is not fully credible, contagion is more likely and more serious, as it takes longer for market participants to sort out the innocent from the guilty. In the meantime, they are likely to run on all parties under even the slightest suspicion, be they banks or countries. But regulators must be careful not to require more data than the market would demand, so that the costs outweigh the benefits. Ironically, the need for regulators to pursue this issue today arises because of the regulatory safety net. The net has tended to make all covered banks more or less homogeneous to many depositors, who are protected from loss, and who thus demand less disclosure than they would otherwise. This is another example of the law of unintended consequences. Indeed, in the 1980s, the primary distinction depositors made among U.S. banks and thrifts was according to the rates paid on fully insured deposits. Depositors used this information to run on their institutions, not in the traditional direction from bad banks to good banks, but rather in the perverse direction from good banks to bad banks. Thus, today's regulators need to undo the unintentional damage their predecessors created. There is a need to return to the good old days when banks advertised their capital ratios on their windows, not their being insured by the government.

**Safety Net Needs Better Incentives** The bank safety net, or for that matter a broader across-country safety net, is not all bad. But it requires serious redesign. It is important to understand that government safety nets have both good and bad aspects. The good aspect for banks is that, if credible, safety nets prevent destructive runs on the banking system as a whole by reducing the need for runs. The bad aspect is that, compared with private insurers, governments tend to price the safety net, like many of their other services, poorly. If the protection is underpriced, it encourages banks to engage in excessively risky moral-hazard activities relative to what private insurers would permit. But equally, if not more importantly, a safety net encourages poor behavior by the regulatory agents.

Because runs no longer endanger the solvency of banks to the same extent as before the safety net, regulators can delay corrective sanctions and even closures of troubled institutions. The timing of resolution shifts from the market to the regulators. By delaying and hiding or covering up the problems and even insolvencies, regulators may temporarily accommodate friendly pressure groups and avoid sully their reputations for preserving bank safety. But by permitting the institutions to continue to operate, regulators also permit



the problems to simmer and grow until they become too big to deny and to hide through fancy-footwork accounting and finally explode into public awareness. This explains the outrageously high resolution costs borne by taxpayers in many countries in the form of transfer payments to protected depositors and, at times, shareholders of failed banks. Since 1980, these costs have come to some 3 percent of GDP in the United States (not including as much as a possible additional \$50 billion from recent and pending court rulings that the U.S. government reneged on some of its fancy-footwork accounting agreements, termed supervisory goodwill, that permitted some insolvent savings and loans to temporarily continue in operation and others to expand before the government changed its mind); some 10 to 20 percent in Spain, Hungary, Argentina (the second time), Venezuela, and probably Japan; and over 40 percent in Argentina (the first time), Chile, and very likely Korea, Indonesia, Thailand, and Malaysia. Primarily because losses at insolvent institutions are permitted to accumulate before they are officially recognized, regulatory failures appear to occur less frequently than market failures, but are much larger when they do occur.

Unfortunately, the good effects of the safety net are generally visible first and the bad effects later, often many years later. Thus, the safety net is a classic example of time inconsistency in economics and of the damage that politicians, who thrive on short-run fixes, can do.

**Too Big to Fail** Almost all of the regulators' credibility and success will depend greatly on their handling of too big to fail (TBTF). This could be their "Achilles' heel." Too big to fail, at least in the United States, is not what it implies. Big banks fail, but if the bank's assets are insufficient to pay its depositors in full, the depositors are fully protected against loss by FDIC. This bailout defeats attempts to introduce market discipline and encourages regulators to engage in costly and destructive forbearance. Ironically, it is large depositors who are best prepared and best able to absorb losses and whose losses would have the most salient effects on the market. Large depositors tend to view their bank deposits like their other short-term investments on which they can and do periodically experience small losses without the world ending. If, as I will argue later, regulators intervene promptly to correct problems or resolve insolvencies, losses can be kept small (e.g., one or two cents on the dollar), and systemic risk will effectively be eliminated. Moreover, large banks will unlikely be liquidated. Instead, they will be sold or merged as single or multiple units, so that they will not disappear physically. Since the enactment of the Federal Deposit Insurance Corporation Improvement Act (FDICIA) in 1991, TBTF is difficult to invoke. When it is, any losses FDIC sustains in protecting the uninsured stakeholders must be paid for by the other banks. (See next section on FDICIA.) There is no provision for lasting government funding of such losses. Deposit insurance in the United States has effectively become a private system funded completely by the banks.

Nevertheless, the 1998 involvement of the Federal Reserve in Long-Term Capital Management's (LTCM's) financial prob-

lems troubles me greatly. Although informed parties can and do differ on the broader consequences of possibly forcing a more rapid liquidation of LTCM's complex and far-reaching derivative positions, particularly in a period of already substantial uncertainty in the financial markets, it is difficult for me to believe that the world would have ended if the Fed had stayed on the sidelines a while longer. In addition, the Fed's involvement gave rise to widespread accusations of crony capitalism in the United States and intensified the doubts of many that, despite FDICIA's strong language for banks, when push comes to shove, U.S. regulators will be unable to resist TBTF. And LTCM was not even a bank! This belief will only intensify moral-hazard behavior worldwide and set the stage for even costlier crises in the future as banks and other financial firms increase in size. Moreover, as has proven to be the case, the Fed's arguments for involvement, stressing the potential for a major financial meltdown, strengthened the case for those wanting to regulate hedge funds as well as banks. Even if this were desirable or possible, it would serve only to further reduce market discipline in financial markets. The banks that lent carelessly to LTCM should have been forced to take possible losses. Letting Warren Buffet's LTCM bid simmer a while longer to let market forces work would have been a risk that I believe was worth taking on the basis of a benefit-cost evaluation.

#### FDICIA: A TEMPLATE FOR INTERNATIONAL ACTION

MUCH OF WHAT INTERNATIONAL REGULATORS ARE PROPOSING is similar to the prudential provisions of FDICIA in the United States, which was enacted as reform legislation in response to the banking and thrift institution crises of the 1980s. The act reduces the ability of bank regulators to refrain from imposing sanctions on troubled institutions by requiring that some of the sanctions be mandatory. The attempt to build on these provisions for other countries is in sharp contrast to the unkind words that regulators threw at the act—both while it was working its way through Congress and in its first years of operation—to derail and weaken it. Today's regulators appear to appreciate the fact that the mandatory provisions of the act supplement and often strengthen their discretionary actions. As is now understood, FDICIA's provisions attempt to have regulatory discipline mimic the market discipline that would exist in the absence of a safety net.

What is less well understood is that FDICIA effectively puts the losses from bank failure under the control of the regulators by requiring resolution before, not after, a bank's net worth turns negative. If realized losses are large, then the regulators did not carry out their responsibilities appropriately and had not resolved the bank in a timely fashion. Regulators should fear not doing so more than doing so. As noted earlier, resolution of insolvent institutions does not create losses. They exist already. Resolution only grants losses official recognition and forces someone other than healthy banks or the taxpayer to pay them. In addition, because systemic risk contagion can occur only if losses at every bank on the transmission chain are sufficiently large to wipe out

their capital, if losses are eliminated or, at worst, kept small, then such contagion is effectively eliminated. Indeed, except for major fraud and extraordinarily abrupt declines in all asset values, the provisions in FDICIA, if implemented correctly, effectively make deposit insurance redundant. Losses are confined to the bank's shareholders.

International safety nets under countries rather than banks are far more difficult to design and achieve, but they are as likely to cause similar unintended consequences. IMF cannot print money; therefore, it cannot be a true lender of last resort or a riskless insurer. That is good. But IMF can provide assistance to nations whose currencies (exchange rates) are temporarily out of adjustment. However, differentiating "temporarily" out of line from "permanently" is likely to be as difficult and tricky in practice as differentiating "liquidity" from "solvency" problems for banks. Any international assistance programs should learn from the unfortunate experiences of domestic bank safety nets and introduce substantial market discipline to keep regulatory discipline in line by reducing the accompanying moral-hazard and principal-agent problems. The private sector should be "bailed in." International investors, be they in banks or others, must be permitted to suffer losses if the market value of their investments does. The world did not collapse when international investors suffered losses before World War I and is unlikely to do so now. There is little evidence of "innocent" countries being forced to default on their foreign currency denominated debt. No official international institution's funds should be used to make any foreign currency investor whole if, in the absence of such funding, market value losses would have accrued. Designing an efficient and effective safety net for currency crises is considerably more difficult than designing one for banking. In addition, the evidence is less clear whether contagious systemic risk for currency crises across countries is direct causation, common shock, or both. Recent events suggest that, as for banks, it is heavily common shock.

It is important to note that there is little evidence to suggest that either banking or currency crises ignite downturns in macroeconomic activity. Rather, strong evidence exists to the contrary. Macroeconomic instability, frequently resulting from the bursting of asset price bubbles, ignites banking and currency problems. These problems are, of course, likely to feed back and exacerbate the macroeconomic problems. Even appropriately designed safety nets are no substitutes for appropriate macroeconomic stabilization policies for achieving lasting banking and exchange-rate stability.

## CONCLUSION

Financial regulators have their work cut out for them to offset the undesirable and unintended side effects of their earlier interventions that reduced market discipline. They need to learn from their mistakes and avoid those areas that are better left to the market. A little pain now for market participants is likely to prevent greater pain later. We need not only the economic understanding to build a better system, but the political will to carry it out. That will has often failed us, leaving us with the costly consequences that we now observe.

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