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The Financial Crisis and Its Lessons

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We dedicate this book to the many public servants—of both parties and in both the legislative and executive branches—who worked closely with us in the fight against the global financial crisis. Special thanks are due to Presidents George W. Bush and Barack Obama for their leadership and to the staffs of the Federal Reserve, Treasury, the FDIC, and other agencies for their creativity and hard work in the service of our country.

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INTRODUCTION

EPIC FINANCIAL INFERNOS DON'T HAPPEN OFTEN. USUALLY,

turmoil in financial markets burns itself out. Markets adjust, firms fail, and life goes on. Sometimes, financial fires get so serious that policymakers need to help put them out. They make loans when firms need liquidity, or find a safe way to wind down a troubled firm, and life goes on. It's exceedingly rare that a fire rages out of control, threatening to consume the financial system and the rest of the economy, creating extreme disruption and deprivation. It happened in the United States during the Great Depression, and then it didn't happen again for seventy-five years.

But it happened again in 2008. The United States government—two successive presidents, Congress, the Federal Reserve, the Treasury Department, and thousands of public servants at a variety of agencies—had to confront the worst financial crisis in generations. And the three of us were in positions of responsibility—Ben S. Bernanke as chairman of the Federal Reserve; Henry M. Paulson, Jr., as secretary of the Treasury under President George W. Bush; Timothy F. Geithner as president of the Federal Reserve Bank of New York during the Bush years and then Treasury secretary under President Barack Obama. We helped shape the American and international response to a conflagration that choked off global credit, ravaged global finance, and plunged the

American economy into the most damaging recession since the breadlines and shantytowns of the 1930s.

Along with our colleagues at the Fed, Treasury, and other agencies, we fought the fire with an extraordinary barrage of emergency interventions, escalating from conventional and then unconventional loans to government rescues of major firms and government backstops for vital credit markets. When the fire kept raging, we persuaded Congress to give us even more powerful tools to fight it, including the authority to inject hundreds of billions of dollars of capital directly into private financial institutions. Working alongside an outstanding group of dedicated public officials in the United States and around the world, we eventually helped stabilize the financial system before frozen credit channels and collapsing asset values could drag the broader economy into a second Depression. Even so, the economy suffered a major downturn, and unprecedented monetary and fiscal stimulus would be needed to help jump-start the recovery.

This was a classic financial panic, reminiscent of runs and crises that have afflicted finance for hundreds of years. We know from that long experience that the damage inflicted by financial panics is never limited to the financial sector, even though the strategies for stopping them require support for the financial sector. Americans who aren't bankers or investors still rely on a functioning credit system to buy cars and homes, borrow for college, and grow their businesses. Financial crises that damage the credit system can create brutal recessions that hurt ordinary families as well as financial elites. Today, much of the American public remembers the government's interventions as a bailout for Wall Street, but our goal was always to protect Main Street from the fallout of a financial collapse. The only way to contain the economic damage of a financial fire is to put it out, even though it's almost impossible to do that without helping some of the people who caused it

Ten years later, we thought it would be useful to look back at how the crisis unfolded, and to consider the lessons that might help reduce the damage from future crises. All three of us have already written memoirs about our experiences, but we wanted to speak about what we did together and what we learned together, about the theory and practice of financial firefighting. We have very different backgrounds and very different personalities. We did not know one another well before the crisis. But we found ways to collaborate effectively as we worked to put out the fire, and we agree that some basic principles could apply to fighting any fire in the financial sector. Financial crises recur in part because memories fade. We're writing about this again to help convey some of the key lessons from our experience, in the hope that it will keep memories fresh and help firefighters of the future protect economies from the ravages of financial crises.

Why did this crisis happen, and why was it so damaging?

It was, again, a classic financial panic, a run on the financial system triggered by a crisis of confidence in mortgages. It was fueled, as crises usually are, by a credit boom, in which many families as well as financial institutions became dangerously overleveraged, financing themselves almost entirely with debt. The danger was heightened because so much risk had migrated to financial institutions that operated outside the constraints and protections of the traditional banking system, and because so much of the leverage was in the form of unstable short-term financing that could vanish at the first hint of trouble. These vulnerabilities were allowed to fester by America's balkanized financial regulatory bureaucracy, a hodgepodge of agencies and authorities and regulations that for decades had failed to keep pace with changing market realities and rapid financial innovations. And one of those innovations, securitization, the mechanism Wall Street used to slice and dice mortgages into complex financial products that

became ubiquitous in modern finance, helped transform panic about the risks embedded in underlying mortgages into panic about the stability of the entire system.

These problems did not seem pressing during the boom, when the financial system appeared unusually stable, conventional wisdom held that home prices would continue to rise indefinitely, and many in Wall Street, Washington, and academia believed that serious financial crises were a thing of the past. But once the housing bubble popped, fear of losses created a financial stampede, as investors and creditors frantically reduced their exposure to anything and anyone associated with mortgage-backed securities, triggering fire sales (where cash-starved investors are forced to sell their assets at any price) and margin calls (where investors who bought assets on credit are forced to put up more cash) that in turn triggered more fire sales and margin calls. The financial panic paralyzed credit and shattered confidence in the broader economy, and the resulting job losses and foreclosures in turn created more panic in the financial system.

A decade later, that doom loop of financial fear and economic pain has begun to recede in the public memory. But it's hard to overstate just how chaotic and frightening it was. A one-month period starting in September 2008 included the sudden nationalization of the mortgage giants Fannie Mae and Freddie Mac, the largest and most surprising government intervention in financial markets since the Depression; the failure of the venerable investment bank Lehman Brothers, the largest bankruptcy in U.S. history; the collapse of the brokerage firm Merrill Lynch into the arms of Bank of America; an \$85 billion government rescue of the insurer AIG to prevent an even larger bankruptcy than Lehman's; the two largest failures of federally insured banks in U.S. history, those of Washington Mutual and Wachovia; the extinction of the investment bank model that had become synonymous with modern Wall Street; the first-ever government guarantees for more than \$3 trillion worth of money market funds; the backstopping

of a further \$1 trillion worth of commercial paper; and congressional approval, after an initial market-crushing rejection, of a \$700 billion arsenal of government support for the entire financial system. This all happened during the stretch run of a presidential campaign. Vladimir Lenin supposedly said that there are some decades when nothing happens, and some weeks when decades happen—that's what it felt like in the crisis.

The powers of the government's crisis managers initially proved insufficient to stop the panic, in part because so many of the problems began outside the Fed's principal jurisdiction of commercial banks. But we eventually persuaded Congress to give us the authority we needed to restore confidence in the system, and the stampeders eventually did stop stampeding. At a time of intense partisanship and pervasive skepticism about government, a Republican and then a Democratic administration worked together with nonpartisan public servants and (at times) bipartisan legislative leaders to defuse the most serious threat to capitalism in generations.

We are all believers in the power of free markets, and we were all reluctant to rescue reckless bankers and investors from their own mistakes. When possible, the U.S. government imposed tough terms on firms receiving aid; sometimes, the imperative to persuade stronger institutions as well as weaker ones to participate in efforts to strengthen the system and revive confidence limited how tough the terms of the programs could be. But we knew that stepping back and letting nature take its course was not a reasonable choice. The invisible hand of capitalism can't stop a full-blown financial collapse; only the visible hand of government can do that. And full-blown financial collapses create vicious recessions that kill businesses, limit opportunities, and frustrate dreams.

In fact, the financial shocks of 2008 were by many measures greater than the shocks before the Great Depression, and so was the initial economic impact. By year's end, even after a remarkably

aggressive series of financial interventions, the U.S. economy was hemorrhaging 750,000 jobs a month and shrinking at a depressionlevel 8 percent annual rate. But the economic contraction popularly known as the Great Recession was over by June 2009, and the ensuing recovery is now ten years old and counting—an impressive turnaround compared with previous crises or other developed nations after this crisis. The U.S. stock market, labor market, and housing market have all rebounded from their depths and ascended to new heights. Experts predicted that the strategy we adopted would end in hyperinflation, economic stagnation, and fiscal ruin, and that the government's efforts to rescue floundering banks and ultimately the entire financial system would cost taxpayers trillions of dollars without fixing the underlying problems. But we were able to get the economy growing and the financial sector working again relatively quickly, and the various financial programs ended up turning a sizable profit for the U.S. taxpayer. The crisis was devastating, inflicting deep and lasting scars on individual families, the broader economy, and the American political system. But the damage would have been far worse without the concerted and powerful rescue efforts that the United States was ultimately able to mobilize.

Are we safer now?

The United States and the world have enacted sweeping financial reforms, which should reduce the probability of another disaster in the near future. In part because of these reforms, financial institutions have more capital, less leverage, more liquidity, and less dependence on tenuous short-term financing. In short, our financial fire codes are stronger today. Unfortunately, prevention is never foolproof, just as no building is ever fireproof. And especially in the United States, where government interventions provoked such a strong public backlash, politicians have weakened the fire department's ability to respond to the next crisis, taking important powers away from crisis managers in the

hope of avoiding future bailouts. In reality, those limitations, however well intentioned, are likely to make the next crisis worse, and the resulting economic damage more severe. The belief that legislation that purports to ban bailouts will actually prevent them in all future scenarios is a powerful but dangerous illusion.

The backlash was inevitable, and understandable. The government's actions to stop the panic and fix the broken financial system, although ultimately successful, did not protect millions of people from the loss of a job or a home. They did, unavoidably, benefit many individuals who had participated in that broken system, and some who had helped set it ablaze. Still, the next time a financial fire breaks out, America may well wish it had a better-prepared firehouse with better-equipped firefighters. One reason the crisis was so damaging was that the government lacked the tools needed to attack it with overwhelming force from the start. We fear that unless Washington makes significant changes, the first responders of the future will start with even fewer and even weaker tools—and just as we did, they'll have to lobby politicians to upgrade the fire department while the fire is already burning.

We want America to be ready for the fire next time, to borrow a phrase from James Baldwin, because eventually the fire will come. That's why we think it's so important to try to understand the last crisis—how it started, how it spread, why it burned so hot, how we and our colleagues struggled to fight it, what worked, and what didn't. We're afraid a nation that doesn't understand the lessons of this meltdown might be doomed to endure something even worse.

Some of those lessons are about prediction and prevention, because the best way to minimize the damage from a financial crisis is not to have one. Most crises do follow a similar pattern, so it's possible to try to identify warning signs, like excessive leverage in the financial system, especially when it's too dependent on short-term financing, particularly in corners of the system with weak fire codes and limited access to the firehouse. But it's also

important to have humility about the ability of human beings to anticipate panics, because doing so requires them to anticipate the behavior of other human beings interacting in complex systems. Financial systems are inherently fragile, and financial risk tends to migrate around regulatory obstacles, like a river flowing around rocks. There's no sure way to avoid a panic, because there's no sure way to avoid overconfidence or confusion. Human beings are human, which is why we think it makes sense to think about crises the way Buddhists think about death: with uncertainty about the timing and circumstances, but certainty that it will happen eventually.

The crisis also gave us a lot of experience in the art and science of crisis response. As hard as it is to predict crises in advance, it's also hard to know early in a crisis whether it's just a brush fire or the start of a five-alarm conflagration. It's usually healthy to allow failing firms to fail, and policymakers shouldn't overreact to every air pocket in the market or setback for a big bank as if it's the precursor to a catastrophe. Responding too quickly can encourage risk takers to believe they'll never face consequences for their bad bets, creating "moral hazard" that can promote even more irresponsible speculation and set the stage for future crises. But once it's clear that a crisis is truly systemic, underreacting is much more dangerous than overreacting, too late creates more problems than too early, and half measures can just pour gasoline on the flames. The top priority in an epic crisis should always be to end it, even though that will likely create some moral hazard; the downsides of encouraging undisciplined risk taking in the future, while real, pale in comparison to the downsides of allowing a systemic collapse in the present. When panic strikes, policymakers need to do everything in their power to quell it, regardless of the political ramifications, regardless of their ideological convictions, regardless of what they've said or promised in the past. The politics of financial rescues are terrible, but economic depressions are worse.

We have no easy solutions for improving the politics of crisis response, but we do hope that we can help provide some context for the choices we made and update the playbook for first responders in future crises. We'll try to address some of the lingering questions about our decisions, such as why the government couldn't rescue Lehman Brothers when it did rescue AIG, and why we didn't try to break up the Wall Street megabanks after the crisis ended. We'll also discuss some other lessons of the crisis. including the importance of pairing efforts to stabilize the financial system with stimulus programs that stabilize the broader economy, and the need for government regulation of financial firms that aren't traditional commercial banks but can pose similar risks to the system. We'll talk about the challenges of decision making in the fog of a financial war, and about how important it is to have teams of experienced and dedicated professionals in the Treasury, the Fed, the Federal Deposit Insurance Corporation, and other agencies who are willing to work cooperatively rather than competitively. We'll discuss the power and the limits of the post-crisis reforms, and how we believe they could be improved. And even though none of us is a politician, we have some things to say about the political process, which we often found depressing and frustrating, but sometimes quite inspiring.

The tone for the political process is set at the top. At an extraordinarily dangerous moment in our history, Presidents Bush and Obama both had the political courage to support tremendously unpopular but critical interventions in the financial system. And while we had our share of complaints about Congress, Republican and Democratic legislative leaders came together when it counted to back the politically toxic efforts to nationalize Fannie Mae and Freddie Mac and then rescue the entire financial system, which turned out to be the last two major pieces of American legislation to pass with significant bipartisan support. The 2008 crisis and the painful recession that followed heavily damaged trust in public institutions, but we believe America's response to the crisis

demonstrated what's possible when public officials at all levels of government work together under intense stress for the public good.

We understand why many Americans don't see the government's response to the crisis as successful or even legitimate. It looked messy and inconsistent, because it often was; we were feeling our way in the dark, trying to navigate the here-be-dragons section of the financial map. We initially followed a traditional playbook, but the modern financial system is far more complex than it used to be, so we had to do a lot of experimentation and escalation. We struggled to fight the fire with tools we didn't consider sufficient for the job, and then we struggled to persuade politicians to give us more powerful tools. And while there were no magic words we could have said to persuade the public to embrace bank bailouts or other controversial policies, we constantly struggled to communicate what we were doing and why.

We hope we can do a better job of that now. The story of the crisis is a painful story, but it is in some ways a hopeful story. We believe it can also be a helpful story.