Understanding Central Banking

The New Era of Activism

David M. Jones

Understanding Central Banking

This page intentionally left blank

Understanding Central Banking

The New Era of Activism

David M. Jones

Routledge
Taylor & Francis Group
LONDON AND NEW YORK

First published 2014 by M.E. Sharpe

Published 2015 by Routledge
2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN
711 Third Avenue, New York, NY 10017, USA

Routledge is an imprint of the Taylor & Francis Group, an informa business

Library of Congress Cataloging-in-Publication Data

Jones, David M. (David Milton)
Understanding central banking : the new era of activism / by Dr. David M. Jones.
pages cm
Includes bibliographical references.
ISBN 978-0-7656-4250-9 (hardcover : alk. paper)—ISBN 978-0-7656-4251-6 (pbk. : alk. paper)
1. Banks and banking, Central—History. 2. Monetary policy. I. Title.

HG1811.J66 2014
332.1′1—dc23 2013028422

ISBN 13: 9780765642516 (pbk)
ISBN 13: 9780765642509 (hbk)

This book is dedicated to a person whom I greatly admire, Julia S. Hammond, CFA, Director, Conferences, CFA Institute, for her many years of loyal service in educating global financial market professionals, and who serves as the very best ambassador representing this organization around the world. Also, now and forever, the special women in my life: my wife, Becky; my daughter, Jennifer; and my granddaughter, Caitlin . . . while not forgetting the men and boys, David, Stephen, Todd, Dylan, and Josh.

This page intentionally left blank

Table of Contents

This page intentionally left blank

Preface

Central banks play a unique and powerful role in our modern advanced economies. Only central banks possess the power to expand aggregate liquidity in their respective financial systems. As a result, central bank leaders can play a crucial role in lessening the negative impact of unforeseen financial crises on economic activity. Alternatively, central bank officials may—unintentionally—worsen conditions leading up to a major financial and economic crisis, as was the case more than eight decades ago, just prior to the Great Depression. As brilliantly analyzed by Liaquat Ahamed, in his Pulitzer Prize–winning book *Lords of Finance: The Bankers Who Broke the World* (2009), central bank leaders, including our own Benjamin Strong of the New York Federal Reserve, Montagu Norman of the Bank of England, Hjalmar Schacht of the German Reichsbank, and Emile Moreau of the Bank of France, all flying blind and constrained by the gold standard, took actions that, with only some exceptions, made conditions worse rather than better in the period leading up to the Great Depression. (Ahamed also attributed a causal role to the imposition of harsh post–World War I reparations by the victorious Allies on defeated Germany that it could not afford to pay.)

In a debt crisis, governments essentially face two unappealing choices: Either they can do nothing and tolerate default, bankruptcy, bank failures, economic contractions, and deflation, or they can rely on their central banks to supply the new liquidity necessary to inflate their way out of the problem. To be sure, such central bank injections of liquidity, while reducing liquidity premiums and boosting market confidence, cannot substitute for more pressing fundamental adjustments in leverage, risk, credit worthiness, or solvency. Nevertheless, timely, large-scale central bank injections of liquidity can help in fighting major financial crises by calming frazzled investor nerves and buying time for necessary fundamental adjustments.

Today, central banks are engaged in a new era of activism, thrusting these powerful but secretive public institutions into the limelight as never before. Amazingly, in late 2012, we witnessed yet another wave of global central bank liquidity injections, this time initiated by the Bank of Japan. Since taking office in December 2012, the new Japanese prime minister, Shinzo Abe, has been on a mission to restore a strong Japanese economy. He gave the previously conservative Bank of Japan a prod, pledging aggressive monetary easing, together with a new dose of government spending on the fiscal side as well as promising much-needed structural reforms. In response to Abe's demands aimed at weakening the Japanese yen and aggressively fighting deflation, Masaaki Shirakawa, then head of the Bank of Japan, announced on December 20,

Lord Montagu Norman

Perhaps the most eccentric, colorful, and fascinating central banker of all time was Montagu Norman. As governor of the Bank of England from 1920 to 1944, Montagu Norman took an approach to central banking that stands in sharp contrast to the Bernanke Fed's emphasis on transparency, openness, and extensive communication with the public regarding Fed intentions and objectives. The contrasting motto of the Bank of England under Norman (1920–1944) was, essentially, "never explain, never excuse (or apologize)." In 1930, Norman reluctantly appeared before a select committee on the British banking system headed by the distinguished British Judge Lord Macmillan. In answer to a question posed by Judge Macmillan regarding reasons for a particular Bank of England policy decision under Norman's leadership, Norman answered: "Reasons, Mr. Chairman? I have no reasons. I have instincts."

Norman's eccentric nature was perhaps best described by Liaquat Ahamed in his book *Lords of Finance: The Bankers Who Broke the World* (2009). Ahamed observed that despite his strange and eccentric nature, Norman was lauded as a financial genius. Contrary to the usual image of a powerful policymaker, he was physically frail and often too ill to perform his duties. Moreover, Norman had a strange habit of traveling under an assumed name. Ironically, the newspapers of Norman's time portrayed him as a central banker of unusual creativity—one whose financial acumen was perhaps overshadowed by his distinctive wide-brimmed, "slouch" hats, his flamboyant style of dressing, and his seemingly nonbanking-related interests in art and Eastern philosophy. Amazingly, Norman's quirky and strange personality contributed to his public "image of austere power, half patrician, half priestly" (Ahamed 2009).

2012, that he would increase quantitative easing (QE)—a government policy that holds down the value of a currency while increasing its supply in the domestic economy and in global markets. The announced increase, totaling US$118 billion, brought the cumulative total for QE over the past decade to US$814 billion, and more is on the way. Because the Bank of Japan waited too long after its asset price bubble burst in 1989–1990, it was unsuccessful in its first attempt at using QE to fight deflation in the early 2000s.

At first glance, the new Abe government seems to offer a new beginning for Japan's long stagnant and deflationary economy, with refreshing optimism, determination, and forcefulness in promoting growth primarily through monetary stimulus and fiscal stimulus; there is, however, less room for fiscal stimulus in view of a gross national debt to gross domestic product (GDP) ratio approaching a lofty 245 percent, and even the net national debt to GDP ratio at a substantial 120 percent. The Abe government also has promised structural reforms to increase immigration, reform labor markets, cut corporate tax rates, and increase investment; and, to dismantle the overly protected and inefficient domestic business and agricultural sectors. Due to past political inertia, there is much market skepticism concerning the extent of these structural reforms. The watchwords for the new era of central bank activism were uttered by the new governor of the Bank of Japan, Haruhiko Kuroda, who declared in his initial remarks that he would "do whatever it takes" to defeat deflation. Accordingly, the power of Kuroda's April 4, 2013, announcement involving a "new phase of monetary easing" outdid even the Fed and the European Central Bank (ECB) on the easing scale, measured on a comparable basis, in relation to GDP. In the effort to defeat deflation, Kuroda declared he is seeking instead to achieve 2 percent inflation in two years, nicknamed the 2–2 policy (Associated Press 2013).

Also contributing to unusually high central bank visibility are recent developments regarding the Bank of England. Specifically, Mark Carney, the former head of the Bank of Canada, was chosen in late 2012, with considerable fanfare, to be the new head (governor) of the Bank of England (effective July 1, 2013). He is replacing Mervyn King, an academic traditionalist who adhered unswervingly to the official single inflation target. By way of contrast, Carney appears to favor more experimentation with forward guidance regarding the future trajectory of the official monetary policy rate, following in Fed chairman Ben Bernanke's footsteps. Carney also seems to favor greater flexibility in inflation targeting, which would mean that the Bank of England commits to price stability in the medium term while retaining the flexibility to counter cyclical fluctuations in output and employment. Early on in his new role as governor, Carney seemed content to keep the Bank of England's policy stance unchanged, with its official interest rate at 0.5 percent, as he worked to restore confidence among firms and households. Eventually, however, Carney may pursue pro-growth policies, possibly involving "unconventional" asset purchases other than gilts (UK government securities). Since 2008, in response to the credit crisis, the Bank of England under Carney's predecessor chalked up a cumulative quantitative easing total of £375 billion (GBP), consisting exclusively of purchases of gilts.

In the United States, the Federal Reserve attracted unwanted publicity as a political lightening rod in the November 2012 presidential election. One unsuccessful presidential candidate, Congressman Ron Paul (R-Texas) actually called for the abolishment of the Federal Reserve on the grounds that Fed actions are potentially inflationary and, contrary to conventional wisdom, destabilizing to our economy. In a similar vein, the losing Republican candidate Mitt Romney declared that he would not reappoint Federal Reserve chairman Ben Bernanke when his second four-year term expires in February 2014. In any case, the Fed's unconventional large-scale asset purchases have been massive and unprecedented in U.S. monetary history, involving QE1 ($1.725 trillion [initiated in December 2008 and March 2009]), QE2 ($600 billion [initiated in November 2010]), and open-ended QE3 (beginning September 2012), the latter amounting to $1.020 trillion in additional liquidity if continued for a year. This would work out to a total of $3.345 trillion in Fed unconventional large-scale asset purchases (quantitative easing) to fight the credit crisis and lend support to the fragile U.S. economic recovery. Clearly, the Fed took the lead in launching the new era of central bank activism, only to be eclipsed in scale (relative to GDP) by the newly activist Bank of Japan.

Likewise, in Europe, the new head of the ECB, Mario Draghi, has used his "magic skills of verbal intervention," to quote Carsten Brzeski, an economist at ING Group in Brussels (in Brockett and Riecher 2013), plus a dose of liquidity to come to the rescue of the 17-country eurozone, which seemed ready to fragment under the unrelenting pressure of the sovereign debt and banking crisis. Draghi unexpectedly declared in a speech in London on July 26, 2012, that he would, in those same words, "do whatever it takes" to preserve the euro. Even more impressive was the way the ECB president backed up these powerful words with potential action by proposing in early September 2012 a new ECB program—called Outright Monetary Transactions (OMT)—to purchase the sovereign debt of distressed eurozone countries with a view to lowering the prohibitively high cost of distressed country borrowing. Previously, Draghi had injected roughly €1 trillion (EUR) in added liquidity through two rounds of long-term refinancing operations (LTRO) in December 2011 and February 2012. More recently, however, Draghi has lost some momentum in his efforts to preserve the euro, as the eurozone has been mired in recession in 2013, and the ECB head has inexplicably become embroiled in the misguided Cyprus deposit "bail in" rescue plan, though the fallout from this mistake was not widespread.

To sum up, major central banks have launched a new era of activism, largely in response to the Great Credit Crisis of 2007–2009, as they have sought to break the bonds of orthodoxy to pull advanced economies back from the brink of complete collapse and set the stage for recovery. Central bank leaders, including Fed chair Ben Bernanke and ECB head Mario Draghi, have been a positive force in rebuilding investor confidence and injecting large doses of liquidity in order to buy time for necessary fundamental adjustments. Similarly, incoming central bank heads Kuroda (Bank of Japan) and Carney (Bank of England) appear likely to do everything in their power to achieve their respective aims of defeating deflation and boosting subpar growth. In contrast, more than eight decades ago, as persuasively argued by Ahamed in Lords of Finance (2009), central bank leaders were for the most part a negative force leading up to the Great Depression, impaled on the orthodoxy of the gold standard. Thus, the once secretive, even mystical, central bank deserves a new look and up-to-date analysis. My intent is to pull back the curtain of secrecy and improve our understanding of the vital role that the central bank can play in keeping our modern advanced economies on a stable and sustainable growth path that creates jobs and prosperity.

ACKNOWLEDGMENTS

I owe a debt of gratitude to many people who have contributed to this project in one way or another. In the beginning, my undergraduate professor of economics, the late Jack Nichols, sparked my interest in finance and economics; in graduate school, my Wharton professor of finance, the late Ray Whittlesey, directed my attention to the important role of central banks in the functioning of modern advanced economies. Subsequently, as I developed the art of Fed watching, my personal conversations with Paul Volcker and Alan Greenspan have been invaluable. Also, my knowledge of monetary policy has been greatly enhanced by discussions with Donald Kohn, former Fed Board vice chair, Michael Prell, former director of Research, and Fed spokesperson David Skidmore, who explains recent Fed actions better than anyone, all at the Federal Reserve Board of Governors. In addition, former Fed governors J. Dewey Daane and Laurence Meyer have added to my understanding of monetary policy decisions, both past and present. Also helpful have been former Federal Reserve bank presidents, including the late Frank Morris of the Boston Fed, Al Broaddus of the Richmond Fed, and Mike Moskow of the Chicago Fed.

To those providing a broadcast medium for opinion and discussion, I also express my thanks to former hosts Robin MacNeil and Jim Lehrer of the *PBS NewsHour*; Susie Gharib of the PBS Nightly Business Report; Lou Dobbs and Stuart Varney, formerly of CNN and currently with Fox Business News; Kathleen Hays of Bloomberg News; and Martin Crutsinger of the Associated Press. On the editorial side, M.E. Sharpe's George Lobell, Irene Bunnell, and Stacey Victor played an invaluable role in the preparation of this book, as did my extremely able and invaluable assistants Patty Bremmer and Karen Volpe. Also special thanks are due my daughter Jennifer Jones, Esq., who has been my agent and senior vice president and general counsel for DMJ Advisors, LLC.

This page intentionally left blank

Introduction

Just for a moment, put yourself in Federal Reserve chairman Ben Bernanke's shoes. You are a relatively new chair of the Federal Reserve, the second most powerful government official next to the president of our nation. You took the helm in February 2006 from Alan Greenspan, an authoritarian Fed chairman (too much so in your opinion) but highly popular and dubbed a "rock star" upon his retirement by then U.S. president George W. Bush. The economy appeared to be in good shape when you took over, with solid growth, impressive productivity gains, low inflation, low unemployment, and high asset values (stocks, real estate).

You come from humble beginnings in South Carolina, but your razor sharp intellect has enabled you to climb to the pinnacle of the academic world. As a highly respected professor and chair of the Economics Department at one of our nation's most prestigious universities, you are considered an expert in the study of the Great Depression and the related topic of the damage done to an economy by the bursting of asset price bubbles. Someone once asked you why you studied the grim subject of the Great Depression; you answered that you did it for the same reason that geologists study earthquakes.

Some might feel that you have it pretty good as the leader of the most important policymaking body in the world. The problem is that you are presently faced with the worst credit crisis in modern history. This credit crisis has, in turn, brought the economy to its knees.

You are also challenged by more than two decades of deregulation, globalization, and rapid financial product innovation (securitization, derivatives, etc.), which have facilitated huge global financial capital flows triggered by global portfolio managers urgently searching for maximum returns worldwide. These huge financial capital flows have tended to diminish individual central bank effectiveness, especially in dealing with financial crises.

As Fed chairman, you have tried to depersonalize your role and give fellow policymakers a greater say in policy deliberations. Rather than having the financial markets hang on your every word, as in the case of your predecessor, your aim is to place greater emphasis on the Fed as an institution.

Your nagging concern is that your future as Fed leader likely hinges on how well you deal with the worst credit crisis since the Great Depression. You are haunted by the prospect, however remote, that if you can't return the financial markets to normal within a reasonable period of time, you could be a one-term (four-year) Fed chair—a far cry from your predecessor's more than 18 years at the helm of the Fed.

Arguably, in 2007, you and your fellow policymakers were behind the curve in dealing with the mounting credit crisis. You underestimated both the magnitude of the credit crisis and its potential impact on the economy. Your effort to depersonalize the chairman's role, however praiseworthy, detracted from the need for strong leadership to deal with the credit crisis. Fortunately, you finally reasserted forceful leadership in late November 2007 and early January 2008, contending that financial upheaval was continuing, credit market conditions were further tightening, the housing contraction was persisting, and economic conditions were deteriorating.

Subsequently, in 2008, there were some initial indications that you may have overcompensated. You may have gone from easing too little to easing too much. You may have overshot the mark with your eye-opening interest rate cuts during the January-March period, doing damage to an already weak dollar and triggering wild speculation in crude oil and other commodities viewed as an inflation hedge against the eroding value of the dollar.

After what seemed like a final rate cut in April 2008, you and your fellow policymakers hinted that no more cuts would be forthcoming, at least for the time being. This stabilized the dollar and caused, with the help of demand destruction, prices of crude oil and other commodities to plummet in the second half of 2008. While this provided some consolation, you and your colleagues still faced a dangerous and worsening credit crisis. More fundamentally, you were achieving neither objective of your dual mandate from Congress: Specifically, growth at that time was too low (bordering on, if not already, recessionary) and inflation risk was increasing, at least through mid-2008. (As it turns out, the Great Credit Crisis will last from the summer of 2007 to the spring of 2009.)

This none-too-fanciful tale with a possible unhappy ending (see Chapter 10 for how it actually turned out) underscores that more than ever, our American central bank, headed by relative newcomer Ben Bernanke, is central to our own lives. The Federal Reserve must be there to tame financial crises, help sustain growth in output and jobs, contain inflation, and protect your wealth.

The Fed's true power lies in something that only it, as a central bank, can do—namely, create money out of thin air through its purchase of U.S. Treasury securities or other assets. Needless to say, it must create new money and credit judiciously if it wants to avoid overheating the economy and stoking inflation. But the Fed's power to supply as much emergency liquidity as needed to meet the increase in the public's crisis-related demand is crucial at this juncture. As the ultimate "lender of last resort," the Fed can be thought of as our bankers' bank.

Under Fed chairman Bernanke's rehabilitated and appropriately unorthodox leadership, the Fed not only has eased its policy stance aggressively on one track but on the other has supplied emergency liquidity to those financial institutions, securities dealers, and sectors of the credit markets needing it, mainly through innovative collateralized discount window lending facilities. It is appropriate to keep these two tracks separate, at least to the extent possible. For example, the Fed can stop easing its stance, as it did in April 2008, at least for a few months, while continuing to supply emergency liquidity to help primary securities dealers get funding and improve the market's functioning. The Fed's collateralized emergency lending facilities were about to get the ultimate test on September 15, 2008, in the wake of the stunning Lehman Brothers bankruptcy.

In seeking to rebuild market confidence, the Bernanke Fed subsequently focused on its supervisory and regulatory roles. In March and April 2009, the Fed, assisted by the Treasury's Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC), conducted stress tests on 19 major banks in what was labeled the Supervisory Capital Assessment Program (SCAP). The surprisingly favorable results of these stress tests were announced on May 7, 2009, and brought a major improvement in investor confidence to the banking system.

An early turning point in the credit crisis came on Sunday, March 16, 2008, when our credit markets were on the verge of a complete meltdown. On this day, in connection with the government-assisted sale of financially troubled Bear Stearns to JPMorgan Chase, the Fed cut its discount rate from 3.50 percent to 3.25 percent and, even more important, dusted off a Depression-era regulation (Section 13.3 of the Federal Reserve Act) that eases credit standards in "unusual and exigent" circumstances and expands eligibility to borrow at its discount window to both bank and nonbank primary dealers. Called the Primary Dealer Credit Facility (PDCF), it operated until February 1, 2010. The direct government assistance consisted of a $30 billion nonrecourse loan by the New York Fed to JPMorgan Chase, collateralized by Bear Stearns' risky mortgage-related assets. Former Fed chairman Paul Volcker was critical of this bold Fed move, arguing that it threatened to "extend the very edge of the Fed's lawful and implied power, transcending certain long embedded central bank principles and practices." As a rule, the more orthodox Volcker views the primary role of a central bank as that of maintaining the value of its currency, period.

My view is that regardless of moral hazard, the Fed had to take these bold and extreme measures to head off a complete credit market meltdown. Underscoring the rapid credit market deterioration, there were three additional unusual U.S. Treasury announcements that occurred on Sundays in the summer of 2008: one on July 13, another on September 7, and yet another on September 14. The first two lent U.S. Treasury support to financially weakened Fannie Mae and Freddie Mac, government-sponsored enterprises (GSEs) that were seen as crucial to recovery in the housing market. On September 7, the Treasury announced that in cooperation with the Federal Housing Finance Agency (FHFA)—the new regulator of these GSEs—it was taking over Fannie Mae and Freddie Mac in the form of a conservatorship with a goal of increasing the availability of mortgage credit.

The Fed's seemingly innocent September 14 announcement—that it was expanding collateral eligible to pledge for PDCF—actually proved ominous, as it paved the way for the shocking bankruptcy of Lehman Brothers the next day. Clearly, the Lehman Brothers bankruptcy was a game changer. It came in the wake of a weekend of urgent high-level meetings between Wall Street leaders and government officials at the New York Fed. The fascinating story is recounted with intrigue, drama, and suspense by Andrew Ross Sorkin in *Too Big to Fail* (2009) and in a subsequent riveting first-person account by former U.S. Treasury secretary Henry

Paulson in his *On the Brink: Inside the Race to Stop the Collapse of the Global Financial System* (2010).

During that remarkable weekend, a handful of sleep-deprived government officials and Wall Street leaders seemed to hold the fate of our nation in their hands. Their main task in those critical days involved the sale of two financially weakened major investment banks, Merrill Lynch and Lehman Brothers. The goal was to sell each one to stronger financial institutions: Almost in a knee-jerk reaction, Merrill Lynch went to Bank of America; however, faltering Lehman Brothers was a different story altogether.

Lehman Brothers was the poster child for excessively leveraged, lavishly rewarded investment banks motivated largely by greed to take excessive risks in the housing credit bubble. As the credit crisis worsened, Lehman Brothers, burdened with an overpriced book of illiquid and complex mortgage-related assets, lost even its secured funding and was on the brink of bankruptcy, as evidenced by the beating its stock was taking at the hands of relentless short sellers moving in for the kill. Lehman Brothers' hopes were briefly lifted when the British bank Barclays appeared to be a potential buyer. Hopes were dashed, though, when necessary government assistance was not forthcoming. Especially critical was British government assistance. Then Treasury secretary Paulson, who was still smarting from criticism of U.S. government assistance in the Bear Stearns–JPMorgan Chase deal in March 2008, was counting on the British government to come through with assistance, despite reservations expressed by Alistair Darling, Britain's chancellor of the exchequer. As matters turned out, the British government stood fast and withheld aid. Lehman Brothers had no choice but to declare bankruptcy. The exhausted, extremely disappointed U.S. Treasury secretary exclaimed: "The British screwed us" (Paulson 2010).

The ill-advised Lehman Brothers bankruptcy, representing a major mistake by both the United States and the United Kingdom, led to a near-complete collapse in credit market confidence. Many sectors of the credit market seized up completely, reducing the flow of credit to a trickle and causing a shocking collapse in spending, output, and employment. Especially hard hit was the commercial paper market, which threatened to dry up entirely, severely curtailing businesses' access to short-term working capital funding. The Fed's rapid, innovative, and unorthodox response to the seizing up of the commercial paper market, to the concurrent panicky investor run on money market mutual funds, and to the moribund asset-backed securities market perhaps represented our central bank's finest hour. Without the monetary authorities' targeted, prompt, and large-scale collateralized lending actions, the financial markets would almost certainly have spiraled into a complete state of collapse.

Subsequently, on September 16, the Fed, with Treasury approval, made a massive emergency loan amounting to $85 billion to AIG, a huge global insurance company that was flirting with bankruptcy. The AIG government aid package was eventually restructured and increased to $174 billion, and then raised further to a stunning $182 billion.

On September 19, 2008, Treasury secretary Paulson announced a last-ditch rescue plan, setting up a huge $700 billion fund to purchase illiquid mortgage-related assets from solvent financial institutions with three goals in mind: (1) achieving price discovery; (2) getting the toxic securities off the banks' balance sheets; and (3) once and for all determining their balance sheet capacity and new capital needs in an effort to unclog the flow of credit to households and businesses. But given the urgency of the situation, the Treasury secretary abruptly changed the purpose of the plan, using half of the $700 billion in Troubled Asset Relief Program (TARP) funds to immediately buy equity stakes in selected financial institutions in the form of nonvoting preferred shares. This rescue plan, called the Emergency Economic Stabilization Act (EESA), passed the U.S. Senate and U.S. House of Representatives (on a second vote) in early October. Underscoring the lingering financial damage, on March 23, 2009, the U.S. Treasury was forced to take further steps, announcing yet another plan to get the toxic assets off the books of banks. The legacy securities public-private investment program, or PPIP, encouraged private partners to put up—capital to be matched by government capital and FDIC–guaranteed debt—to buy toxic securities from banks; however, this too proved inadequate.

Taking a longer perspective, the effectiveness of the Fed's countercyclical monetary policy generally improved in the post–World War II period compared with the pre–World War II period, with cyclical expansions getting longer and cyclical contractions shorter (with some exceptions). Also, the Fed should be given the lion's share of the credit for the Great Moderation from 1984 to 2007, which was evidenced by a significant decline in the volatility of both real GDP growth and inflation. In addition, recessions became infrequent and short-lived. The pleasantly surprising Great Moderation, however, caused investors to become complacent and overconfident, prompting financial institutions to undervalue risk while relying too much on leverage (debt) and making them vulnerable to the perfect storm that was gathering force.

The Fed's post–World War II countercyclical effectiveness hinged importantly on the Treasury–Federal Reserve Accord of 1951 (see Chapter 9). It granted the monetary authorities sufficient independence and discretion to successfully pursue the Fed's dual mandate from Congress of maximum employment and stable prices.

The seeds of this dual mandate were planted in the Employment Act of 1946, which empowered the federal government "to use all practical means" to foster "maximum employment, production and purchasing power." Subsequently, the U.S. government's responsibility for macroeconomic policy was codified in the Humphrey-Hawkins Full Employment and Balanced Growth Act of 1978, which promoted the twin goals of "maximum employment" and "stable prices," and these policy objectives were incorporated in a 1978 amendment to the Federal Reserve Act of 1913. This congressional mandate set the stage for the largely successful performance of contemporary post-Accord monetary policy.

It is my intention that this book, *Understanding Central Banking: The New Era of Activism*, should serve as a standard reference source on central banking and be adopted for courses in Money and Banking. It offers an up-to-date analysis of Fed actions and so replaces textbooks rendered obsolete by recent developments. This book was originally conceived as a supplemental reference for graduate MBA students in my Money and Capital Markets course (using various editions of Frederic S. Mishkin's *The Economics of Money, Banking, and Financial Markets* as the primary text) at

Florida Gulf Coast University, and for professional students pursuing, for example, the highly respected Chartered Financial Analyst degree (CFA).

Understanding Central Banking examines the role of central banks in general in a new era of activism—particularly, major Fed personalities; monetary policy objectives, policy instruments, and actions; and how monetary authorities have been forced to innovate and virtually "make it up" as they go along in the face of new challenges posed by the worst financial crisis since the Great Depression. The theme of the book is that, when it comes to dealing with a major debt crisis, central bank liquidity trumps all. But in order to rebuild market confidence and set the stage for recovery, such liquidity must be provided artfully, imaginatively, and in timely delivered, shockingly large doses, breaking the bonds of orthodoxy, as most recently demonstrated by the Bank of Japan. Of course, the cost of success, as Fed chairman Ben Bernanke (and his successor, Janet Yellen*) is destined to discover, is a grossly expanded and potentially inflationary central bank balance sheet that will be extremely difficult to normalize in size and composition without considerable financial market instability.

* On October 9, 2013, President Obama nominated Fed vice chair Janet Yellen to be Fed chair, and if confirmed by the U.S. Senate, as expected, will assume command of U.S. monetary policy on February 1, 2014.