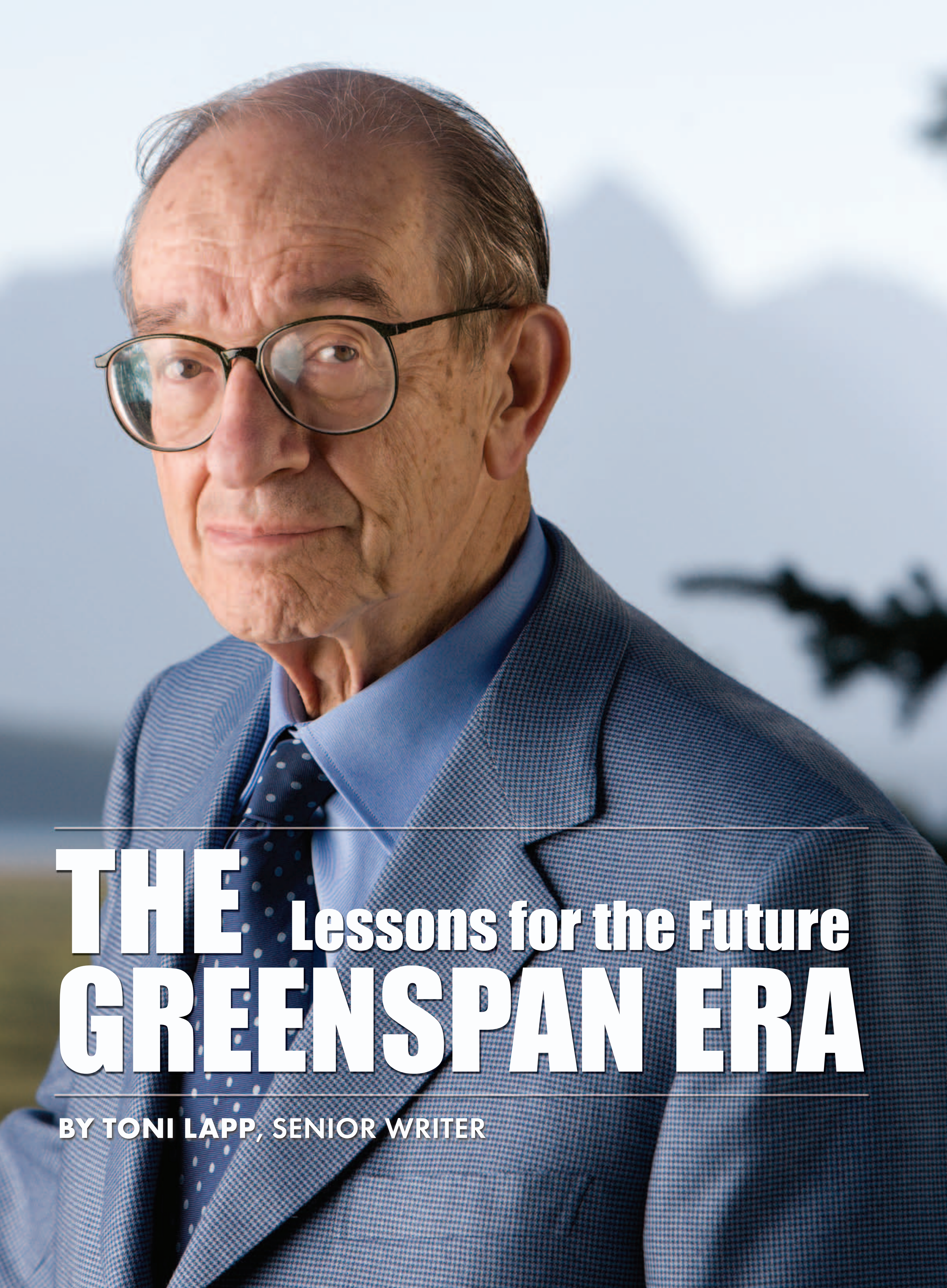

THE GREENSPAN ERA

Lessons for the Future

BY TONI LAPP, SENIOR WRITER

JACKSON HOLE, WYO.—

It was a defining event in the history of Alan Greenspan's years as Chairman of the Federal Reserve System, said his peer in the world of central banking.

Mervyn King, governor of the Bank of England, had been invited to speak at the Federal Reserve Bank of Kansas City's annual economic symposium, a storied event among economists, academics and central bankers. The Bank's 29th annual symposium was unique in that it would be Greenspan's last at the helm of the Federal Reserve System. Speakers were asked to examine Greenspan's Chairmanship as a period of time, in a conference titled "The Greenspan Era: Lessons for the Future."

Of all the economic shocks that occurred on Greenspan's watch—the stock market collapse of 1987, international financial crises of the 1990s, the dot-com bubble that burst in 2000, the terror attacks of Sept. 11, 2001—one salient example of the Greenspan Fed's ability to steer the U.S. economy was much more subtle.

In the mid 1990s, the U.S. economy experienced a productivity acceleration. The trend wasn't proved by data until the late 1990s, but Greenspan was taking note of the changing conditions as early as 1995.

"Chairman Greenspan did not wait until 1998 to conclude that the underlying rate of productivity growth might be increasing," said King. "The key reason was that he talked with and listened to people who work in business."

Given the economic conditions of the day, conventional wisdom would have led any other economist to support belt-tightening in the form of higher interest rates, especially when the unemployment rate dipped, a risk factor for inflation. Greenspan had to convince the Federal Open Market Committee, which he chaired, not to raise rates.

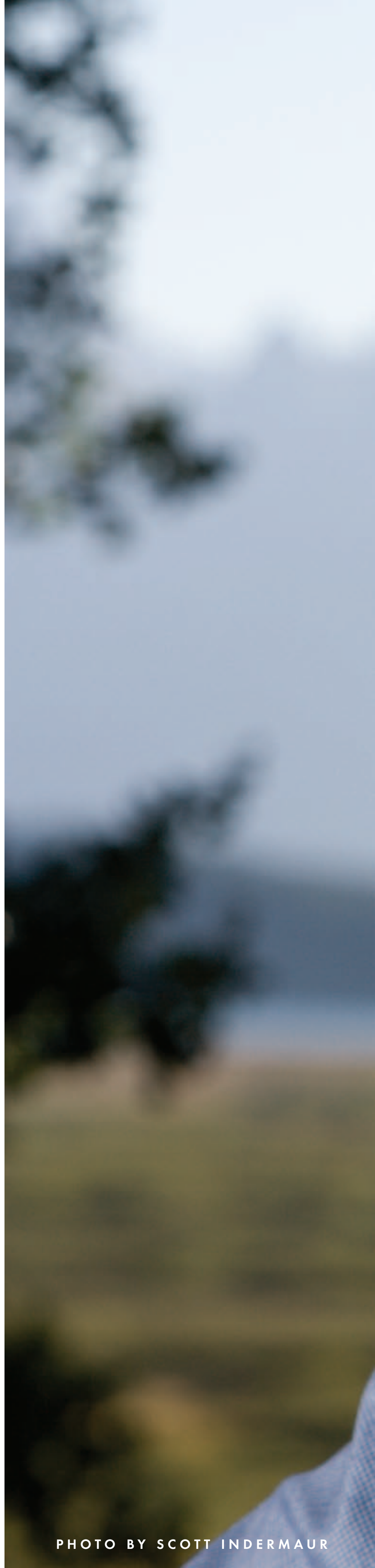

PHOTO BY SCOTT INDERMAUR

"If they had, we might not have gotten the growth that we got," noted Craig Hakkio, senior vice president and director of research for the Federal Reserve Bank of Kansas City.

The United States' underlying rate of productivity growth increased from about 1.5 percent to about 2.5 percent in the mid and late '90s. Such an increase in productivity growth means an increase in the growth rate of output per worker, thereby boosting a nation's standard of living.

Symposium

Each year, the Federal Reserve Bank of Kansas City invites a select group of experts from around the globe to discuss economic issues at its August symposium in the Grand Tetons. Topics are selected with an eye on relevance to current economic policy issues; discussions follow in a free-flowing exchange of ideas.

This year's symposium was marked by buzz that was beginning to build around who would succeed Greenspan as Chairman, and participants pondered his extraordinary career and what lessons could be learned from his tenure. Greenspan, the second-longest serving Federal Reserve Chairman, is due to step down at the end of January.

PHOTO BY MARK WILSON/GETTY IMAGES

AS FEDERAL RESERVE CHAIRMAN, Alan Greenspan attends Group of Seven, or G7, meetings along with other world financial leaders, including European Central Bank President Jean-Claude Trichet (left) and Bank of England Governor Mervyn King (right). Both men attended the economic symposium in Jackson Hole, Wyo., where lessons from Greenspan's tenure was the theme of the conference.

Perhaps the guest list this year reflected the sense of history surrounding the event. In addition to King, participants included Xiaochuan Zhou, governor of China's central bank, attending for the first time; Jean-Claude Trichet, president of the European Central Bank, who recalled his experiences with Greenspan at G7 meetings; and Robert Rubin, former Treasury secretary, who discussed his interactions with the Chairman, particularly during the global financial crises that marked the 1990s.

Greenspan's remarks at the meeting were general; he recalled his 18 years at the Federal Reserve, and discussed various indicators used to guide monetary policy. The discussion led to his philosophy of risk management—that is, assessing the many risks to the economy and the consequences of each and then taking precautions against those most likely to create significant damage.

Participants discussed the ramifications of this policy, including the Federal Reserve's move in 2003 to cut the federal funds rate to 1 percent—a historically low level—to prevent the unlikely but potentially dangerous risk of deflation.

Eyes on the price

Alluding to the housing boom, Greenspan commented on the recent rise in asset prices and cautioned that many investors had grown complacent in their expectations of continued price appreciation and in requiring less compensation for taking on risk: "History has not dealt kindly with the aftermath of protracted periods of low risk premiums," he warned.

It was an innocuous comment in context, but one that was seized on by media and repeated ominously on news programs, some of which were broadcasting from the hotel's lawn. The Federal Reserve, after all, has traditionally focused on growth, inflation and employment numbers. Speculation that the central bank productivity growth well before the data proved it.

'Irrational exuberance'

Symposium participants noted that one of the biggest financial shocks of contemporary times—the stock market bubble of the late 1990s—occurred during Greenspan's watch. Remember the "irrational exuberance" speech?

This leads to a discussion of one of Greenspan's philosophies—that it is easier to "mop up" after bubbles than it is to try to prevent them from forming in the first place. Some would have suggested the Federal Reserve should have raised interest rates to cool down the economy as asset prices escalated, particularly during the stock market boom of the late 1990s. Instead Greenspan adopted a policy of cutting interest rates in the aftermath.

Presumably, this philosophy holds, whether the asset in question is stocks or housing.

Which leads to another lesson that King says can be learned from Greenspan. That is, a consistent policy framework will sustain a market economy over the long term.

His counterpart from the European Central Bank agreed.

"A well-designed institutional framework, which undisputedly assigns the central bank the primary objective of price stability, and the adoption of a clear monetary policy strategy, which quantitatively defines price stability and does not pretend to fine-tune directly the business cycle, can make the latter type of policy activism unnecessary in many circumstances," said European Central Bank President, Jean-Claude Trichet, echoing that ever-important concept of price stability.

What constitutes price stability? Former Chairman Paul Volcker defined, and Greenspan embraced, price stability as an environment in which inflation is so low and stable over time that it does not materially enter into the decisions of households and firms.

In other words, a healthy economic environment is one in which inflation is such a non-issue that people don't talk about it, said King. Perhaps this can be applied to a number of issues—taxes or property rights for instance, he said.

Future challenges

Whoever becomes the next Chairman of the Federal Reserve System will have to deal with many issues—the effects and risks posed by technological innovation, and the aging of the U.S. workforce, to name a couple.

PHOTO BY KARIN COOPER/GETTY IMAGES

FEDERAL RESERVE CHAIRMAN Alan Greenspan regularly testifies before lawmakers on the state of the economy. Here, he presents a July 1998 midyear report on monetary policy to the Senate Committee on Banking, Housing and Urban Affairs.

But perhaps the repercussions of the trade imbalance loom largest. Never before has a country of the United States' size and advancement run such a large current account deficit—the difference between what a country spends on imports and what it spends on exports. The U.S. current account has moved from being nearly balanced in the early 1990s to posting a record deficit of over $600 billion in early 2005.

This topic received much discussion at the economic symposium. In the view of many

GREENSPAN TIMELINE

Key events during the Chairman's tenure

AUGUST 1987

Greenspan sworn in as Chairman of Federal Reserve System. Dow Industrials at a record: 2,747.

OCTOBER 1987

Black Monday stock market crash—22.6 percent loss is the steepest dive ever in percentage terms.

1989

Savings and Loan crisis of 1980s culminated in cleanup plan by government estimated to have cost from $500 billion to $1 trillion.

JULY 1990 - MARCH 1991—RECESSION

1995

Productivity boom. Greenspan identified this phenomenon, even though most economists, basing their assessments strictly on statistical data, disagreed.

1994-95

Mexican peso crisis. The Fed, under Greenspan's direction, provided standby liquidity and encouraged corrective action on part of others.

DECEMBER 1996

Greenspan speech questions whether "irrational exuberance" has unduly escalated asset values.

1997-98

Asian and Brazilian financial crises; Greenspan's Fed increased liquidity.

1998

Russia defaults on debt. Fed lowers rates.

MARCH 1999

Dow Industrials reaches 10,000 milestone.

JANUARY 2000

Dow Industrials peaks at all-time high: 11,722.

FEBRUARY 2000

U.S. expansion reaches 107th month—the longest on record.

SPRING 2000

Dot-com bubble bursts.

MARCH - NOVEMBER 2001—RECESSION

2001

Terrorism attacks; Fed provided liquidity, guaranteed discount window would be open.

JUNE 2003

Fed funds rate cut to 1 percent in response to deflation risk.

SEPTEMBER 2005

FOMC raises Fed funds rate to 3.75 percent with an 11th consecutive quarter-point increase.

his seat behind the Chairman's desk and opens the top drawer in search of Alan Greenspan's magic formula, he will be sorely disappointed," said Alan Blinder, who was appointed by President Bill Clinton to serve as Federal Reserve Vice Chairman under Greenspan in the 1990s and is now an economics professor at Princeton University.

Nevertheless, King, governor of the Bank of England, cited three lessons he learned from his counterpart:

"The key is to recognize that economics tells you how to think, not what to think," he began.

Accordingly, policymakers should be skeptical that any economic model accurately describes how the economy responds to policy. Many observers say Greenspan's ability to not be constrained by specific models or theories made his term successful.

"Monetary policy under Greenspan has been remarkably flexible and adaptable to changing circumstances—a point he has frequently emphasized," said Blinder.

Responding to the 1998 world financial crisis by cutting interest rates three times "was not in the books," Blinder said.

"That was very much ad hoc. One could argue that it was not appropriate for the U.S. (to cut interest rates). This could never have been prescribed by a rule," said Blinder, noting that members of the FOMC were urging Greenspan to tighten.

The next lesson that King cited related to Greenspan's information gathering. While many economists are content to rely on econometric models and official data, it is important to use information from a range of sources. Tapping business leaders for their observations is essential, said King, referring to Greenspan's ability to detect the upturn in trend would target asset prices was enough to momentarily move markets.

Why should the central bank concern itself with asset prices?

Because the phenomenon of a bubble forming and then bursting creates and destroys wealth, distorting resource allocation. In essence, this affects the Federal Reserve's target variables—inflation and output. The Federal Reserve is interested in asset prices in that they are another piece of information that indicates the health of the economy, measured by growth and inflation.

Greenspan alluded to as much at the symposium.

"The configuration of asset prices is already an integral part of our evaluation of the large array of forces that influence financial stability and economic growth," he said.

However, this does not mean the Federal Reserve will attempt to pre-empt unsustainable increases in asset prices, largely because it is difficult to discern a bubble until the bubble has burst.

Not yet, anyway.

"I certainly do not rule out that future work could improve our understanding of asset price behavior, and with it, the conduct of monetary policy," said Greenspan.

Data, details and discretion

Greenspan, a former jazz musician, was a known quantity when President Ronald Reagan appointed him Chairman of the Federal Reserve in 1987. He had previously served as Chairman of the Council of Economic Advisers for the Ford administration and had demonstrated a mastery of data and numbers.

Some have likened leading the Federal Reserve to driving a car. The governing body makes decisions regarding inflation and the federal funds rate target and exerts control to speed up or slow down the economy as appropriate.

During the Greenspan era, the nation experienced only two mild recessions. It's been a relatively smooth ride; during his tenure, inflation fell gradually from roughly 4 percent to 2 percent—achieving the Federal Reserve's mission of price stability.

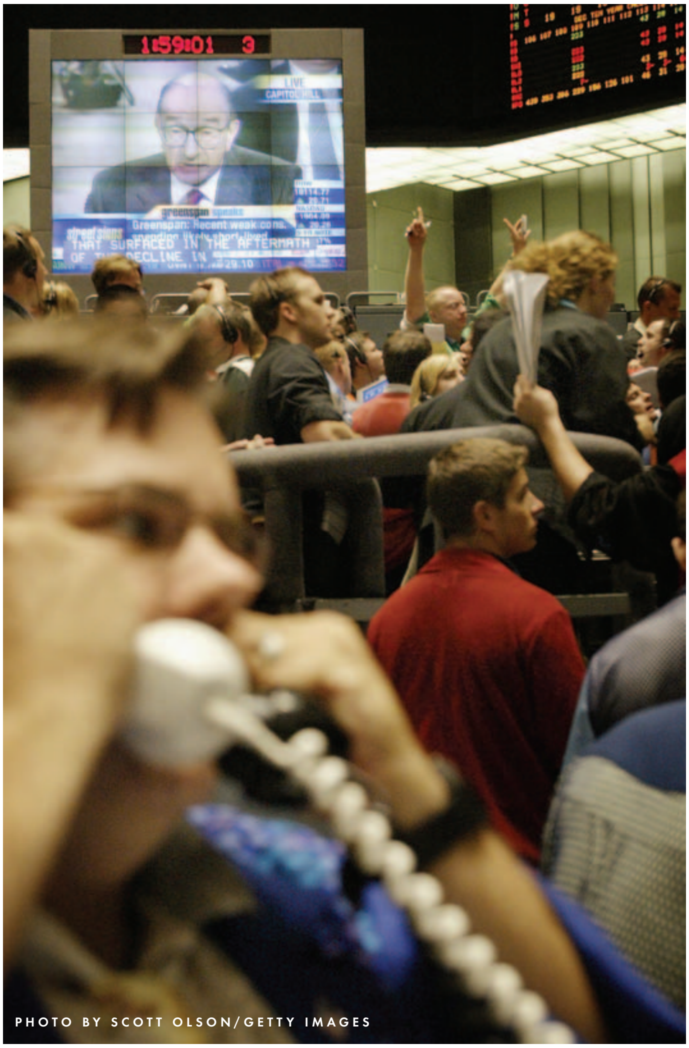

PHOTO BY SCOTT OLSON/GETTY IMAGES

FINANCIAL MARKETS MOVE in response to events of the day, prompting traders such as these in Chicago to listen to Federal Reserve Chairman Alan Greenspan for any hint that the central bank may raise interest rates.

To accomplish this, he watched an array of economic statistics such as employment, inventories, orders and shipments.

Given the weighty challenges the next Chairman will face, there is keen interest in learning the keys to the Greenspan Fed's success.

Monetary Policy 101

Is monetary policy a strategy involving statistics and analysis, or intuition and human instinct? Or both?

"When the next leader of the Fed takes

Toward a more transparent Federal Reserve

BY TONI LAPP, SENIOR WRITER

One significant change to come out of Alan Greenspan's Federal Reserve was a movement to a more open organization.

During Greenspan's tenure, the Federal Open Market Committee—or FOMC—began releasing interest-rate decisions immediately following its meetings. The first such communication was to announce a rate hike in February 1994. Concerned that the increase—the first such hike in 17 months—would shake up markets, Greenspan told the FOMC they needed to "make certain that there is no ambiguity about our move."

Before then, such decisions weren't announced for at least six weeks. Fed watchers on Wall Street had to study measures of the money supply to determine if any tightening or easing had occurred as a result of the meetings.

Greenspan acknowledged the changing approach in communications at the symposium.

"We have moved toward greater transparency at a measured pace, in part because we were concerned about potential feedback on the policy process and about being misinterpreted, as indeed we were from time to time," he said.

The movement toward greater transparency continued in May 1999, when the Federal Reserve began to issue a statement after every FOMC meeting whether or not the funds rate had been changed.

In 2003, the Fed ventured further. In May, the FOMC became concerned about the potential risk of deflation, and the committee's postmeeting press release began to include statements about this outlook. In June the FOMC lowered the funds rate to a decades-low 1 percent and by August it began to make statements about the future funds rate operating target. This was a significant change; the Federal Reserve went from making forward-looking statements about economic outlook to making forward-looking statements about possible future policy actions.

Some economists at the symposium suggested the Federal Reserve should consider further steps toward openness.

Michael Woodford, professor of economics at Columbia University, presented a paper titled "Central Bank Communication and Policy Effectiveness," at the symposium. He says that what the FOMC has done to date is not enough.

"The public's understanding, not only of what the central bank is currently doing, but of what it can be expected to do in the future, is critical for the effectiveness of policy," he said.

There appeared to be momentum to the idea of more open communication. Other speakers also voiced support for the idea.

"Long-term interest rates matter more than the federal funds rate, and expectations are better managed if the market can better anticipate what the central bank will do in the future," said Alan Blinder, former vice chairman.

Woodford suggested that having inflation targets would enable central banks to better explain interest rate decisions, he said.

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>
> **—Michael Woodford**

While a number of countries' central banks set inflation targets, the United States' Federal Reserve has stopped short of announcing an explicit numerical inflation objective.

However, a future chairman may believe that publicizing inflation targets could be a useful communication tool and policy strategy.

What does Greenspan think of such an approach? He touched on the topic at the symposium.

"To date, we have chosen not to formulate explicit inflation targets, in part, out of concern that they could inhibit effective pursuit of our goal." T participants, erasing the trade deficit will be painful. Large current account deficits are financed through the inflow of capital from foreign investors purchasing U.S. securities. If the flow of capital were to stop suddenly, the dollar could depreciate and inflationary pressures might build. This could lead the Federal Reserve to raise short-term interest rates which, in turn, could slow economic growth in the United States and possibly the rest of the world.

While there are no modern historical precedents for a country as large as the United States running very large and persistent current account deficits, there are numerous examples of current account reversals among smaller countries in both the industrial and developing world. And the experience of these countries does not bode well for the United States. Previous episodes of current account rebalancing in both industrial and developing countries have been associated with a depreciation of the exchange rate and a temporary reduction in real GDP growth. Effects on inflation and interest rates vary depending on the size of the country and whether it is industrialized, noted Sebastian Edwards, professor at the University of California-Los Angeles.

A reduction in the trade deficit will include simultaneous adjustments in savings and investment in the United States and the rest of the world, along with changes in exchange rates. In addition, to ensure that the adjustment is gradual, most participants felt that policymakers should resist protectionist trade measures and work toward further trade liberalization.

Greenspan himself had some thoughts about the current account deficit, and noted that the correlation between increases in home equity extraction and the current account deficit suggests that the end of the housing boom "could induce a significant rise in the personal saving rate, a decline in imports, and a corresponding improvement in the current account deficit."

Whether the decline will be orderly or abrupt will depend on maintaining, if not increasing, the flexibility of economic institutions in the United States and abroad, he said.

"Monetary policy under Greenspan has been remarkably flexible and adaptable to changing circumstances."

Farewell, Chairman

About 150 participants attended the 2005 symposium, and while some proclaimed the guest of honor to be possibly the greatest central banker ever, others stopped short of such heroic terms. In the end, only the passing of years will determine Greenspan's legacy.

Over the course of two days, Greenspan sat near the back of the conference hall and took it all in. Although he might have raised his profile by injecting himself into the discussions that followed the presentations, he quietly observed.

Except for the occasional autograph seeker hanging around outside the meeting hall, he attended the symposium with little fanfare, addressing the participants at the beginning and then at the end. His concluding remarks were met with a standing ovation, as close as you get to hero worship in a crowd of economists, academics and central bankers.

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FURTHER RESOURCES

THE GREENSPAN ERA: LESSONS FOR THE FUTURE
Papers presented during the Federal Reserve Bank of Kansas City's annual economic symposium in Jackson Hole, Wyo.

www.KansasCityFed.org/TEN

COMMENTS/QUESTIONS are welcome and should be sent to teneditors@kc.frb.org.