



Institute of
Business and
Economic Research

University of
California at
Berkeley

FISHER CENTER FOR REAL ESTATE AND URBAN ECONOMICS

WORKING PAPER SERIES

WORKING PAPER NO. 02-285

**Another Leg Down?: Risk Factors that Could
Push the Economy Back into a Full Blown Recession**

By

These papers are preliminary
in nature: their purpose is to
stimulate discussion and
comment. Therefore, they are not
to be cited or quoted in any
publication without the express
permission of the author.

**Kenneth T. Rosen
Amanda Bishop**

WALTER A. HAAS SCHOOL OF BUSINESS

**FISHER CENTER FOR REAL ESTATE AND URBAN ECONOMICS
UNIVERSITY OF CALIFORNIA AT BERKELEY**

**Kenneth T. Rosen, Chair
Robert H. Edelstein, Co-Chair
Dwight M. Jaffee, Co-Chair
Nancy E. Wallace, Co-Chair**

Established in 1950 to examine in depth a series of major changes and issues involving urban land and real estate markets, the Fisher Center for Real Estate and Urban Economics (FCREUE) continues to be one of the major university centers in the United States for research on real estate markets, financial institutions, the California economy, and other urban and regional economy topics. FCREUE supports an in-house research program, research by faculty associates, and dissertation research by doctoral students. Research findings are made available in the form of books, working papers, reprints from scholarly journals, monographs and a research newsletter.

INSTITUTE OF BUSINESS AND ECONOMIC RESEARCH

Carl Shapiro, Director

The Institute of Business and Economic Research is an organized research unit of the University of California at Berkeley. It exists to promote research in business and economics by University faculty. These working papers are issued to disseminate research results to other scholars. The authors welcome comments; inquiries may be directed to the author in care of the Center.

**Another Leg Down?: Risk Factors that Could Push the
Economy Back into a Full Blown Recession**

**Kenneth T. Rosen
Amanda Bishop**

**Working Paper 02-285
October 2002**

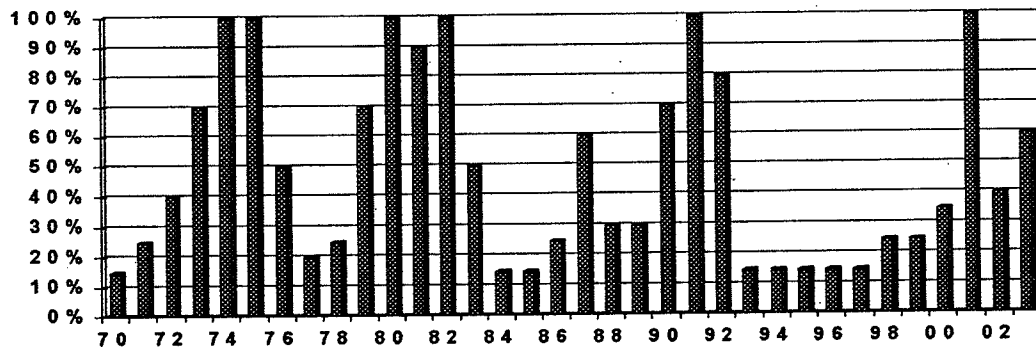
Introduction

Will the U.S. economy head back into a recession? Although some forecasters anticipate a continued recovery, we continue to believe there is a substantial chance that we may enter a full-blown recession in late 2002 and 2003. A number of trends cause reason for concern: 1.) the stock market correction 2.) a second round of layoffs in corporate America, 3.) depressed technology and telecom sectors, 4.) a high level of private sector debt, 5.) a potential corporate credit crunch 6.) geopolitical events, 7.) the high foreign trade deficit, and 8.) a continued capital spending slump. Some of these factors could

cause consumers to reduce their spending and the economy might enter a full blown recession, rather than the "recessionette" of 2001.

The graph below illustrates the many risk factors that the economy faces that could lead to a double-dip recession. The current economic environment has several characteristics of previous recessions. In addition, the economy has a number of other risk factors, including a volatile stock market, a badly bruised technology and telecom sectors and corporate accounting scandals and corporate fraud.

Recession Risk



Source: RCG

1974 - 1975:

- 1.) high oil prices
- 2.) tight labor market
- 3.) over-valued stock market
- 4.) debt level spike
- 5.) tight monetary policy
- 6.) credit crunch

1980-1982:

- 1.) high oil prices
- 2.) tight labor market
- 3.) debt level spike
- 4.) very tight monetary policy
- 5.) credit crunch

1991:

- 1.) high oil prices
- 2.) tight labor market
- 3.) over-valued stock market
- 4.) debt level spike
- 5.) tight monetary policy

2001 - 2003

- 1.) volatile stock market
- 2.) another round of layoffs
- 3.) corporate accounting scandals
- 4.) depressed telecom and technology sectors
- 5.) debt level spike
- 6.) corporate credit crunch
- 7.) high oil prices and terrorist threats
- 8.) foreign trade deficit
- 9.) continued capital spending slump

I. Stock Market Volatility

(Impact: shakes consumer confidence)

Reacting to poor corporate earnings reports, accounting scandals and the fallout from the telecom and technology sectors, nervous investors have pushed the Dow, Nasdaq and the S & P 500 to the lowest levels in five years. As of September 16, The S & P was down 21.5 percent from the beginning of the year and 40 percent from its peak.

The Dow was down 15.2 percent from January and 28 percent from its peak. The Nasdaq experienced the most dramatic drop — a whopping 33.3 percent since January and 74.7 percent since its peak. The S & P 500 price/earnings ratio recently plummeted from a record, and overvalued 42, to a still somewhat overvalued 18.

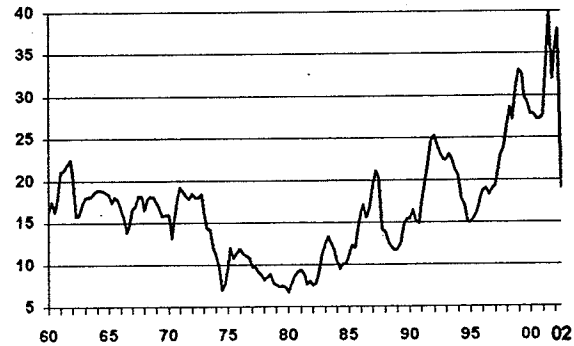
As the markets have adjusted downward, household net worth has begun to evaporate. After increasing by 4 trillion in 1999, it declined by 2.4 trillion in 2000, another 1 trillion in 2001 and may decline another 2 trillion to 3 trillion in 2002.

Negative economic news has dominated the pages of financial publications in the recent months. The Bureau of Economic Analysis recently revised its GDP numbers, revealing that the economy was, in fact, in a longer and deeper recession in 2001. Furthermore, new numbers revealed that the U.S. economy slowed in the second quarter. The gross domestic product, which measures goods and services produced in the United States, grew only 1.1 percent. This is a significant drop from the first quarter, when the economy had grown 5 percent.

The gloomy news coming out of government offices and Wall Street has rattled not just active investors, but also the general public. After several months of rosy predictions about the economy, consumers have voiced since July strong concerns about the economic outlook for the next six months. The consumer confidence index plunged 9.2 points from June to July and fell another 3.8 points from July to September. The index now stands at 93.3, its lowest level

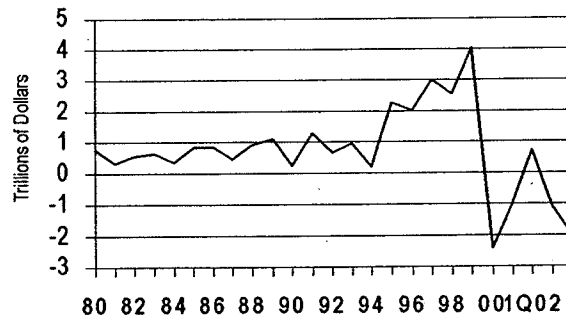
this year. More of those surveyed said business conditions were poor, jobs were hard to get and business conditions in the next six months were not likely to improve. If consumer confidence were to further erode, another recession is likely.

S&P 500 Valuation P/E Ratio (Trailing Year)



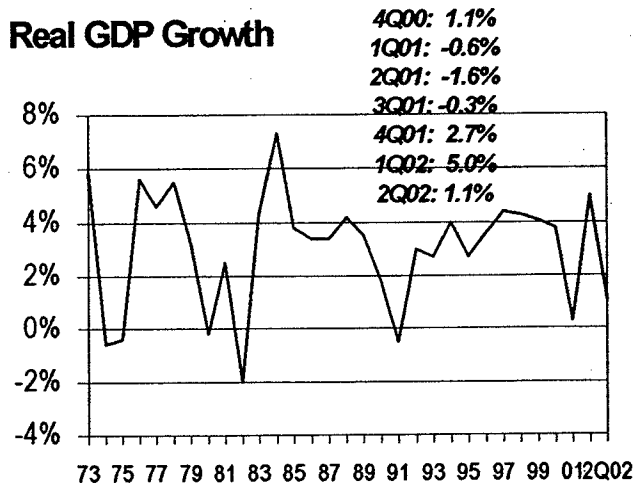
Source: Standard & Poor's, Bloomberg, RCG

Change in Household Net Worth



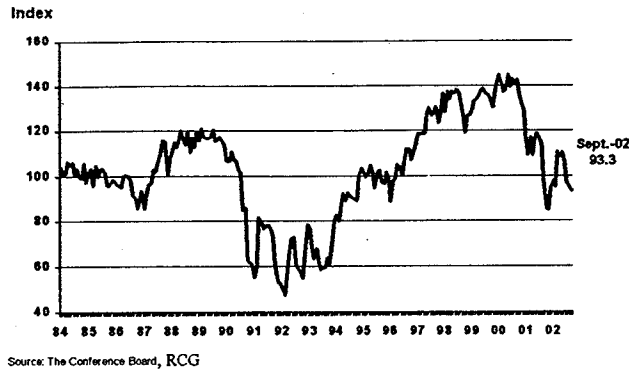
Source: Federal Reserve, Flow of Funds, RCG

Real GDP Growth



Source: Bureau of Economic Analysis, RCG

Consumer Confidence Conference Board Survey



II. Layoffs

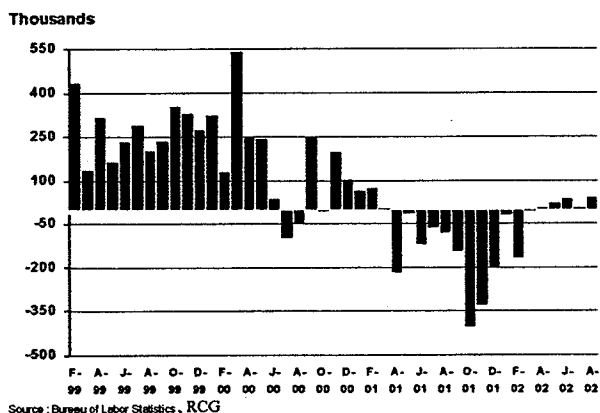
(Impact: shake confidence, slow growth)

Web-firm failures and cost cutting at companies across the nation led to close to 1.7 million jobs lost in 2001. Although job loss through August of this year had stopped at least temporarily, a new round of layoffs may be coming.

Recent job gains also have less impact on the economy because many were in the public sector. Manufacturers and retailers as a group cut jobs. Although mass layoffs have become less frequent than last year, job creation is virtually nonexistent. Just 2,000 private sector jobs were created nationwide in August. Even profitable companies are instituting hiring freezes, preferring to have existing employees work longer hours than taking on new employees.

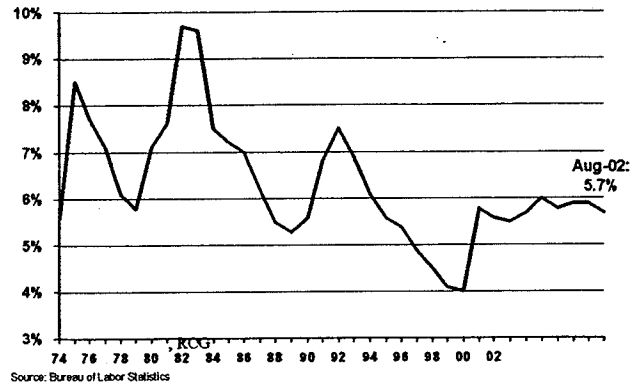
National accounting scandals, which have resulted in downsizing and closures, are also increasing the number of jobless. The national

Employment Growth U.S.



unemployment rate was 5.7 percent in August, up from 4 percent in 2000. In a full-blown recession, it could rise to the 7 to 8 percent range.

U.S. Unemployment Rate



III. Corporate accounting scandals and fraud

(Impact: erodes consumer and investor confidence, adds to stock market volatility)

Also contributing to negative market psychology are the recent corporate accounting scandals touched off by the Enron and WorldCom debacles. Dozens of executives at these and other formerly well-respected corporations have been accused of inflating earnings and padding their own pocketbooks. These revelations have eroded investor confidence about the quality of corporate America's earnings and threaten to shake the foundations of the U.S. corporate structure.

Not only are investors suspicious of the veracity of companies' earnings reports, but they are also distrustful of analysts whom they formerly looked to for market guidance. Many stock analysts, either due to conflict of interest or ineptitude, rated companies currently headed into bankruptcy as buys even when their balance sheets revealed questionable transactions.

Although the United States Congress has passed legislation to toughen penalties for those trying to skirt the system, the behavior of investors indicates they are still concerned that corporate fraud will occur in the future.

IV. Fragile telecom and technology sectors

(Impact: Job loss, high corporate debt)

The slowdown of the Internet buildup and subsequent economic slowdown has severely impacted blue-chip technology firms as evidenced by the continued weakness in Nasdaq. Numerous technology giants have adjusted their earnings projections downward in recent months due to soft demand for personal computers and related products. The telecom industry invested \$70 billion in infrastructure for anticipated demand that never materialized. These investments created a heavy debt burden for this sector, which is now facing declining revenues and is slashing jobs to cut costs.

Fierce competition engendered by excess and the fallout from the WorldCom bankruptcy is also clouding the telecom outlook.

V. Private sector debt

(Impact: slows consumer spending)

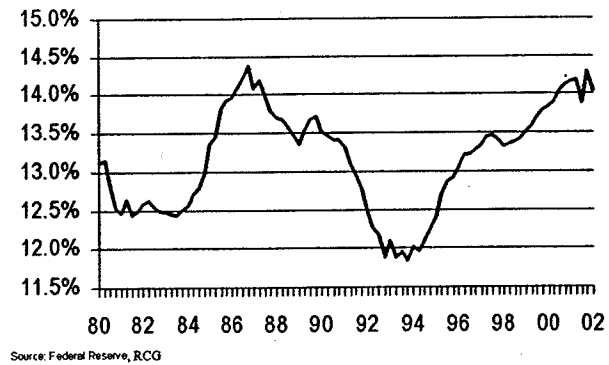
Encouraged by historically low interest rates, consumers are purchasing large ticket items and taking on increasingly more debt. Home and auto sales continue to be brisk across the country.

Competition and strong demand for loans has spurred lenders to ease standards, increasing the risk of an abundance of defaults in the future if a full-blown recession occurs. Household debt service, the ratio of debt payments to disposable personal income, has been on the rise since the mid-90s and is currently at about 14 percent. This trend shows no sign of reversing.

During the boom, investors saw their assets skyrocketing and thus borrowed against these assets. As a result, private sector debt as a ratio to GDP is at an all-time high of 1.4. The last time debt accumulation reached these levels was in the late 1980s. Excessive private debt makes the economy vulnerable to a deeper recession because consumers laden with debt are likely to reduce spending.

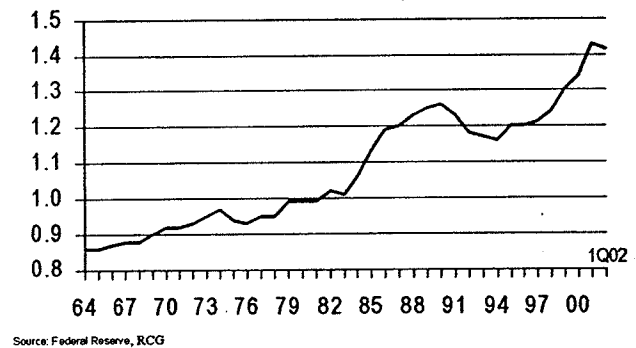
Household Debt Service

As a Percentage of Disposable Income



Private Sector Debt Ratio to GDP

Private sector debt is at an all-time record relative to the size of the economy.



VI. Corporate Credit Crunch

(Impact: curtails business expansion plans)

Even well known corporations are facing a credit crunch, a condition that was a factor in the recessions of the mid-1970s and early 1980s. Many corporations have had difficulties getting access to commercial paper.

All loans are becoming harder to get as banks, faced with bad debts and worried about company balance sheets due to the recent accounting scandals, are raising rates and asking for more collateral.

Without access to credit, businesses may not have the capital needed to expand and push the economy forward.

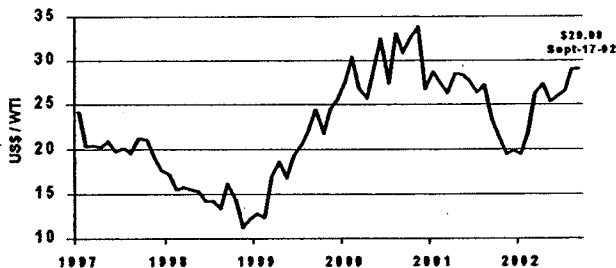
VII. Geopolitical climate

(Impact: shakes confidence, reduces spending)

The events of September 11th and subsequent terrorist warnings have spooked investors. Another terrorist incident could have a major impact on shareholder confidence and could shock the already fragile capital markets. Likewise, the threat of a U.S. attack on Iraq could create market turmoil.

A spike in oil prices also has the potential to push the U.S. economy into a deeper recession. Oil price spikes contributed to the recessions of the 1970s, 1980s and early 1990s. As of Sept. 17, Oil was selling for \$29.08 a barrel, up from \$19.48 at the beginning of the year, although below the peak of \$33.82 in 2000. High oil prices are the equivalent of a tax increase on the American public and could slow consumer spending. A spike to the \$35 to \$40 range because of events in the Middle East could tip the U.S. back into a deep recession.

Oil Prices



Source: Bloomberg, RCG

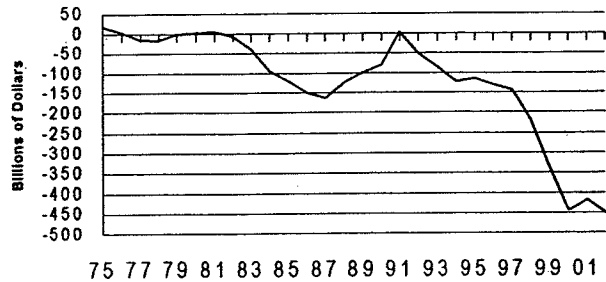
VIII. Foreign Trade Deficit

(Impact: weakens dollar)

Also a risk factor for reentering a recession is the foreign trade deficit, which is a record \$450 billion. A huge trade deficit impacts the strength of the dollar and reduces the flow of foreign capital to the United States, further weakening U.S. stock and bond prices. The dollar continues to be weak compared to the Japanese yen and is now trading close to one-to-one with the Euro. A weak dollar adds to U.S. inflation pressures. On the positive side, a weak dollar makes U.S. exports more competitive and

therefore it could stimulate the economy.

Current Account Balance of Payments Basis



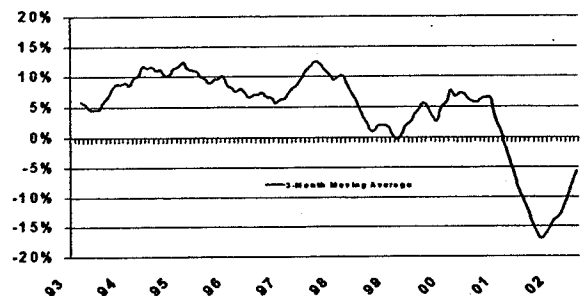
Source: Bureau of Economic Analysis, RCG

IX. Capital spending slump

(Impact: slows growth)

Capital expenditures by all companies are also down dramatically, showing that businesses are not investing in equipment and manpower for expansion. Non-defense capital good shipments have declined since 2001 and dropped 5.7 percent in the most recent three-month period. This indicates that most companies are pessimistic about demand for their products and services in the immediate future. Also, with capacity utilization rates at only 76 percent, there is little impetus for new investment. However, on a positive note, the rate of the slowdown is declining.

Capital Spending Slump Non-defense Capital Good Shipments



Source: US Census, RCG

Forces stimulating the economy

If the U.S. economy has a saving grace at the moment, it is extremely low interest rates. This has stimulated huge demand for owner-occupied housing, mortgage market refinancings and car and truck purchases. These forces, combined with a surge in defense spending and

year-over-year uptick in industrial production, is buoying the economy and keep it from slipping into a deep recession.

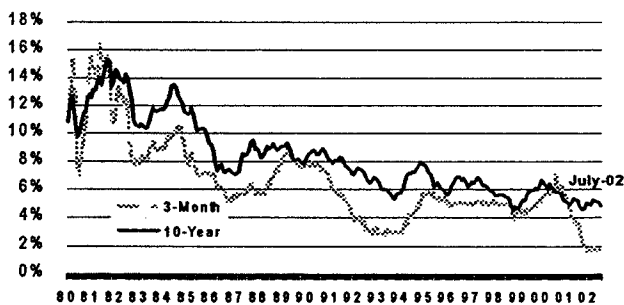
I. Low interest rates

(Impact: increase consumer spending)

The Fed's aggressive rate cuts have resulted in a surge in consumer spending. Home and car sales continue at high levels as Americans take advantage of low cost loans. Fixed mortgage rates are in the 5.5- to 6.- percent range, a low not seen for 30 years. New home sales were at a 1 million annual rate in July, 15.4 percent more than in July 2001, according to the Census Bureau. The National Association of Realtors reports home sales in the 5.5 to 5.7 million range in the first half of 2002, up from the 2001 record of 5.3 million.

Zero financing has also caused auto and truck sales to skyrocket. Through August 2002, 11.5 million cars and light trucks were sold, down just 1.3 percent from 2001, according to Wall Street Journal research. The National Auto Dealers Association estimates that 15.9 million car and light truck sales will take place in 2002, down slightly from 17.1 million in 2001.

3-Month T-Bill vs. 10-Year T-Bond



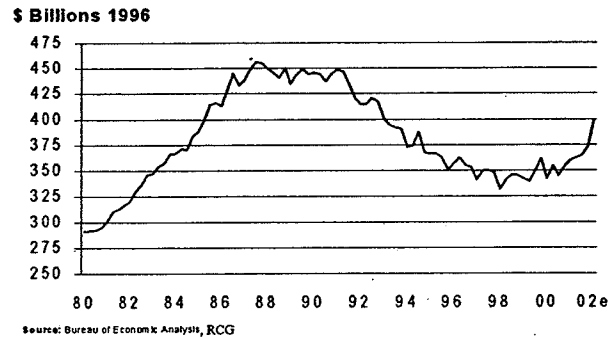
II. Defense spending

(Impact: increase industrial output, job creation)

Aided by the war on terrorism, defense spending, which accounted for 3.2 percent of the GDP in 1999, is on the rise. Spending to protect

American soil and interests is likely to reach \$400 billion this year, about \$17 billion more than in 2001 and about \$50 billion more than in 2000. Such increases in spending are positive for industrial output and job creation.

Defense Spending

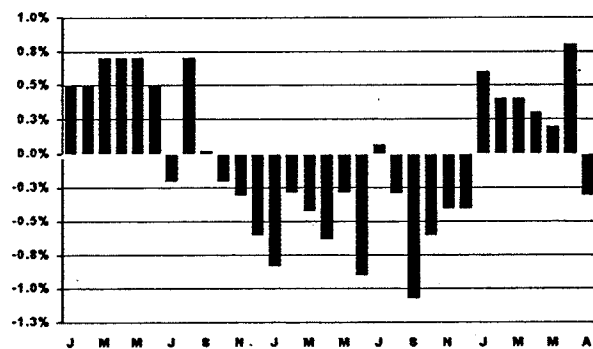


III. Manufacturing growth

(Impact: job growth, increased industrial output)

After declining all but one month of 2001, industrial production was positive for the first seven months of 2002, indicating strong consumer demand and fueling hope for job creation. However, industrial production dropped 0.3 percent from July to August. The decline was mainly due to lower utility output. Manufacturing of consumer products was down just 0.1 percent. If consumer spending drops, industrial output could be further impacted.

Industrial Production 2000 - 2002



Conclusion

There are many troubling signs that the economy could fall into a full blown recession. Reacting to the technology and telecom collapse

and corporate accounting scandals, investors have pushed the S & P and Nasdaq to lows not seen in more than five years. The technology and telecom sectors have been severely hit, and job decline across all sectors has been significant. Reflecting the current economic pessimism, companies are no longer in expansion mode and capital expenditures are likely to remain weak. Consumers are also increasingly more pessimistic about the economy. Although consumer spending has remained strong, Americans are also taking on more debt, in essence borrowing from future sales. The possible war with Iraq, potential terrorist incidents, an oil price spike and a weakening dollar also hover over the market. These factors put the economy at a 60 percent risk of reentering a full-blown recession like ones experienced in the 1970s, 1980s and early 1990s. However, if the consumer keeps spending, it is possible that a slow recovery will continue. Although consumer confidence has dropped, low interest rates are pushing consumers to spend and make significant investments in homes and cars. The war on terrorism is spurring job creation and industrial output for defense. The odds of a slow recovery continuing are 40 percent.