A. Gary Shilling's INSIGHT

Economic Research and Investment Strategy   Volume XXVI, Number 11   November 2010

In This Issue

The Age of Deleveraging

Our new book, *The Age of Deleveraging: Investment strategies for a decade of slow growth and deflation*, will be published by John Wiley & Sons on November 15. In it, we make the case for slow economic growth and deflation for many years ahead as well as lay out the investment strategies that flow from this forecast—12 sectors to sell or avoid and 10 to buy. We hope you'll read our book and find it enlightening, provocative, instructive and, at times, amusing. This report describes the ongoing financial deleveraging process and then, in greatly condensed form, makes the case for slow economic growth that deleveraging and other important forces spawn.

2008 Disappointments

In 2008, almost all investment categories suffered huge losses as the global financial crisis and worldwide recession unfolded. Stocks in almost every market worldwide; corporate, municipal, and junk bonds; commodities; residential and commercial real estate; foreign currencies; emerging market stocks and bonds; private equity; and most hedge funds bit the dust. Indeed, in 2008, the only winners were the traditional safe havens—Treasurys, the dollar, and gold (*Chart 1, page 2*).

But in response to massive government bailouts of financial institutions here and abroad and huge worldwide fiscal stimuli, those many depressed investments revived vigorously, starting in early 2009 (*Chart 2, page 3*). So most investors believe that 2008 was simply a bad dream from which they've awoken. We're returning to the world they knew and loved, with free-spending consumers supporting rapid economic growth, fueled by ample credit and backstopped by governments, they think. After all, many reason, the recent experience proves not only that major financial institutions are too big to be allowed by governments to fail, but that the same is true for underwater homeowners. Monetary and fiscal largesse is so extensive, they believe, that economic overheating and serious inflation are the next major problems.

But the optimists don't seem to realize that the good life and rapid growth that started in the early 1980s was fueled by massive financial leveraging and excessive debt, first in the global financial sector, starting in the 1970s,

INSIGHT (ISSN 0899-6393) goes to press by the third business day of the month.

500 Morris Avenue, Springfield, NJ 07081-1020. Telephone: 973-467-0070. Fax: 973-467-1943. E-mail: *insight@agaryshilling.com*. Web: *www.agaryshilling.com*.

President: A. Gary Shilling. Editor: Fred T. Rossi. Research Associates: Colin Hatton and Jackson Fallon.

and later among U.S. consumers (*Chart 3, page 4*). That leverage propelled the dot-com stock bubble in the late 1990s and then the housing bubble. But now those two sectors are being forced to delever and, in the process, are transferring their debts to governments and central banks. The federal budget deficit leaped from $187 billion in the 12 months ending December 2007 to $1.3 trillion in the 12 months ending August 2010, but it had little net effect on the economy as private sector retrenchment more than offset the deficit jump (*Chart 4, page 4*). Federal borrowing relative to GDP leaped from 3.0% in the third quarter of 2007 to 10.7% in the second quarter of 2010, a 7.7-percentage point climb, but private borrowing fell from 15.2% to a negative 3.4%, a drop of 18.6 percentage points, or more than twice as much.

This deleveraging will probably take a decade or more to complete—and that's the good news. The ground to cover is so great that if it were traversed in a year or two, major economies would experience depressions worse than in the 1930s. This deleveraging and other forces will result in slow economic growth and probably deflation for many years. And as Japan has shown, these are difficult conditions to offset with monetary and fiscal policies.

CHART 1

2008 Investment Performance

30-year Treasury bonds	+42%
Global Corporate Bonds	-8%
Emerging market bonds	-10%
Junk bonds	-27%
Municipal bonds	-4%
Gold	+6%
Commodities—Reuters/Jefferies CRB Index	-37%
Crude oil	-54%
Copper	-54%
Corn	-11%
Hedge Funds—Barclay Index	-22%
Private Equity	-32%
Euro vs. dollar	-5%
British pound vs. dollar	-23%
Yen vs. dollar	+19%
Canadian dollar vs. dollar	-23%
Commercial real estate—MSCI U.S. REIT Index	-42%
House prices—Case-Shiller 20-city index	-19%
Art—Sotheby's sales	-11%
Christies' sales	-20%
Real Estate—direct ownership	-10%
Stocks—Dow Jones World Index	-43%
U.S.	-39%
Canada	-35%
U.K.	-31%
Germany	-40%
France	-43%
Italy	-50%
Ireland	-66%
Japan	-42%
Australia	-41%
New Zealand	-33%
China	-65%
India	-52%
South Korea	-41%
Mexico	-24%
Brazil	-41%
Argentina	-50%

Insidious

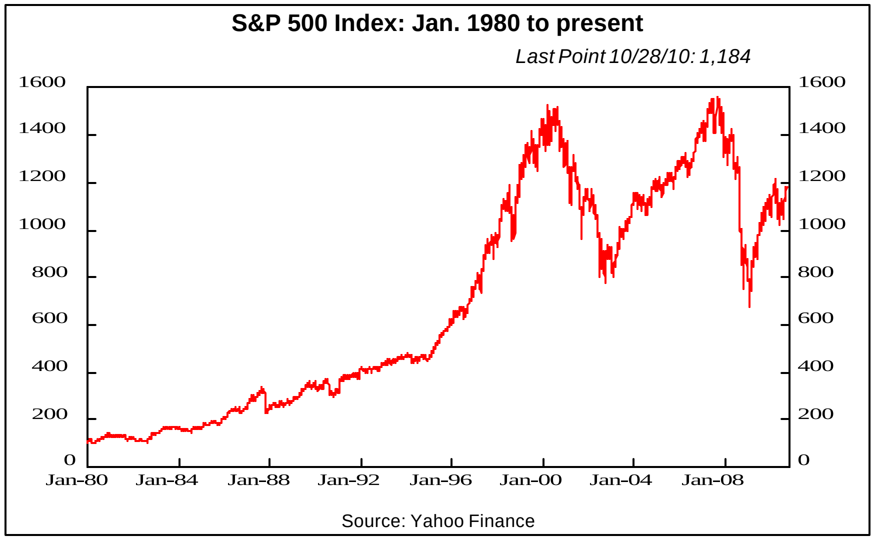
The insidious reality is that this deleveraging doesn't occur in a straight line, but is highlighted by a series of seemingly isolated events. After each, the feeling is that it's over, all may be well, but then follows the next crisis. When the subprime residential mortgage market started to collapse in February 2007 (*Chart 5, page 4*), most thought it was a small, isolated sector. After all, new subprime mortgages were only about 20% of total residential mortgages issued even at their peak in 2006, and those subprime loans were made to people that, luckily, we never have to meet. And at its top in fourth quarter of 2005, total residential construction was a mere 6.3% of GDP.

But then the "subprime slime," as we dubbed it, spread to Wall Street in June of that year with the implosion of two big Bear Stearns subprime-laden hedge funds. Most hoped the Fed actions that August had ended the crisis and, indeed, stocks reached their all-time highs in October 2007 (Chart 2). But as the financial woes spread, Bear Stearns was forced to sell for next to nothing to JP Morgan Chase bank (*Chart 6, page 5*), Merrill Lynch suffered a shotgun wedding with Bank of America, major banks like Citigroup and Bank of America itself were on government life support, and Lehman Bros. went bankrupt in September 2008.

Then the third phase struck as U.S. consumers stopped buying in the fall of 2008 (*Chart 7, page 5*) and the fourth, the global recession, coincided. Falling house prices and earlier home equity withdrawal wiped out the home equity that many had used to finance oversized consumer spending (*Chart 8, page 5*) and the availability of loans in general became as scarce as hens teeth amidst the financial panic.

The optimists hoped the $862 billion fiscal stimulus package in the U.S. and similar fiscal bailouts abroad would take care of all those problems, but were surprised by the eurozone crisis in late 2009 and early 2010 and the drop it sired in the euro against the greenback (*Chart 9, page 6*). Nevertheless, that's just the fifth step in global deleveraging. The combination of the Teutonic north and the Club Med south under the common euro currency only worked with strong global growth driven by the debt explosion—but now that's over.

Chart 2



More Trauamas Ahead

Further traumas on this deleveraging side of the long cycle lie ahead. Another sovereign debt crisis in Europe may be in the cards with Ireland replacing Greece as the focus. A further 20% drop in U.S. house prices due to huge excess inventories of over 2 million and foreclosure delays may push underwater homeowners from 23% of mortgagors to 40% and precipitate a self-feeding spiral of walkaway homeowners and nosedive in consumer spending. Other roadblocks on the deleveraging highway may include a crisis in U.S. commercial real estate (*Chart 10, page 6*) that could exceed the earlier one in housing. Then there's a possible hard landing in China that exceeds the 2008 weakness (*Chart 11, page 6*) as the government's measures to cool the red hot property market and economy in general take hold. A slow-motion train wreck in Japan will probably occur sooner or later as her all-important exports fall along with weakening U.S. consumer willingness to buy them, and as her already subdued domestic sector suffers from her rapidly aging population (*Chart 12, page 7*).

The Salad Days

From 1982 to 2000, the U.S. stock market was on a tear. The S&P 500 Index rose at a compound rate of 16.6%. Inflation withered so interest rates dropped (*Chart 13, page 7*), propelling the S&P 500 price/earnings (P/E) ratio from 8.9 in the third quarter of 1982 to 29.4 in the first quarter of 2000 at the end of the dot-com bubble. In those years, American business responded to excruciating foreign competition by restructuring with a vengeance. That boosted productivity and profits, which also benefited as declining inflation reduced taxable inventory profits and underdepreciation. And consumers went on a mad borrowing-and-spending binge.

The saving rate of American consumers fell from 12% in the early 1980s to 1% before the recent rebound (*Chart 14, page 7*). This meant that, on average, consumer spending annually rose about a half percentage point more than disposable, or after-tax, income for a quarter century. The trend continued for so long that many accepted it as a fact of nature, subconsciously believing it would last forever and not realizing that it was unsustainable.

The fact that Americans were saving less and less of their after-tax income was only half the profligate consumer story. The flip side was the upward

CHART 3

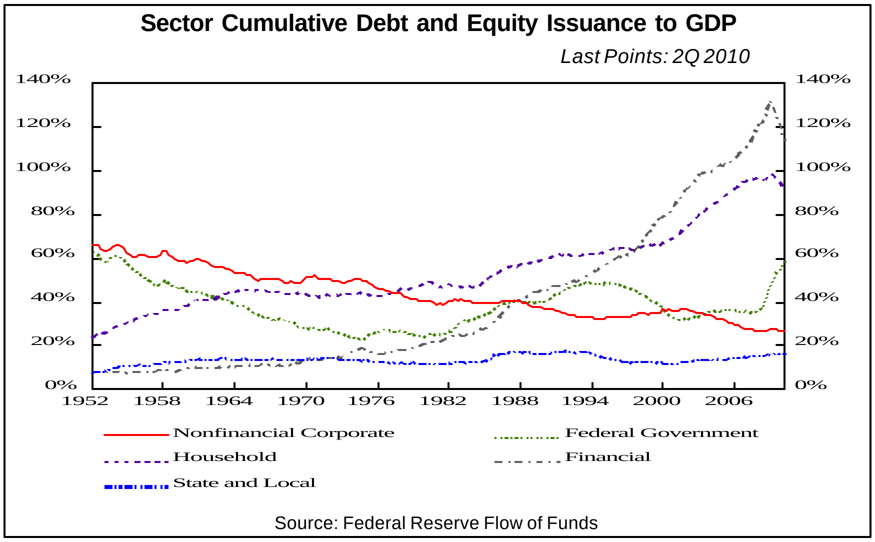


CHART 4

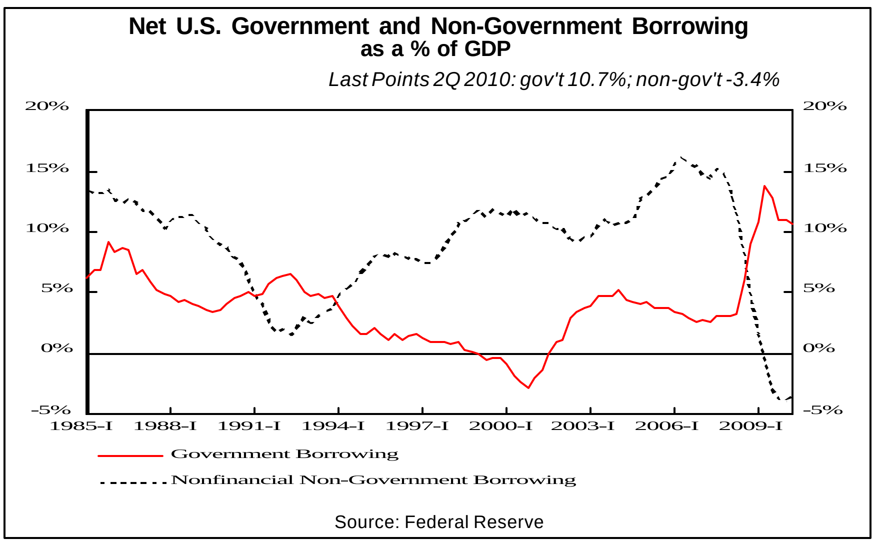
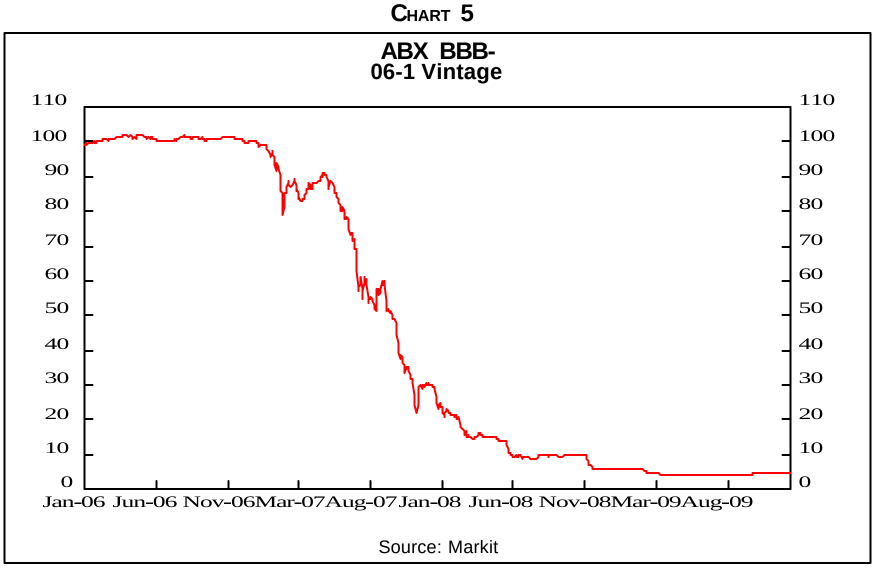


CHART 5



march in total consumer debt (mortgage, credit card, auto debt, etc.) in relation to disposable income (*Chart 15, page 8*) and relative to assets. Just like the falling saving rate, the rising debt and debt service rates couldn't continue forever.

First, Stocks

Not surprisingly, the advent of the declining saving rate coincided with the beginning of the great bull market in stocks in August 1982 (Chart 2). Rising stocks made people more optimistic, more willing to spend, and more inclined to save less and borrow more. The rally was so robust that by the late 1990s, many felt that stocks would appreciate at least 20% per year forever, as they did for five consecutive years, 1995–1999. So, they reasoned, saving anything from current income was unnecessary since never-ending equity appreciation would fund all their future saving needs.

Next, Housing

Then the housing bubble almost seamlessly took over when stock appreciation turned to depreciation. House prices departed from their normal close link to the consumer price index (CPI) in the mid-1990s and subsequently racked up huge appreciation for homeowners. From a fundamental standpoint, the economic growth spurt ended in 2000, as shown by basic measures of the economy's health. The stock market, that most fundamental measure of business fitness and sentiment, essentially reached its peak with the dot-com blow-off in 2000 (*Chart 16, page 8*). The same is true of employment (*Chart 17, page 8*), goods production and household net worth in relation to disposable (after-tax) income (*Chart 18, page 9*). Nevertheless, the gigantic policy ease in Washington in response to the stock

CHART 6

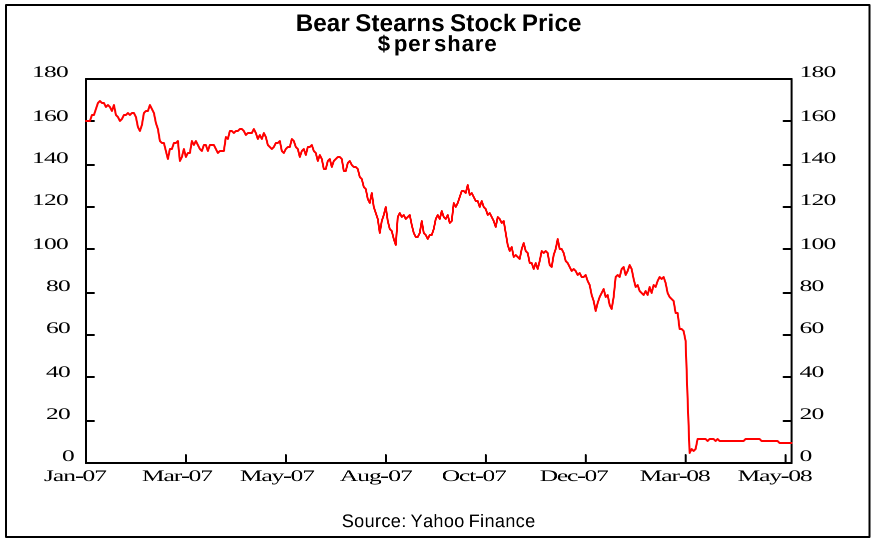


CHART 7

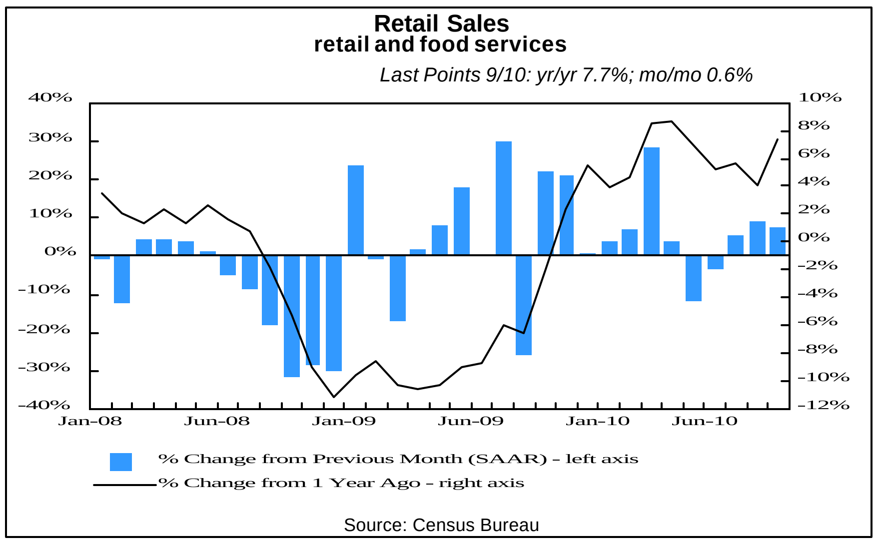
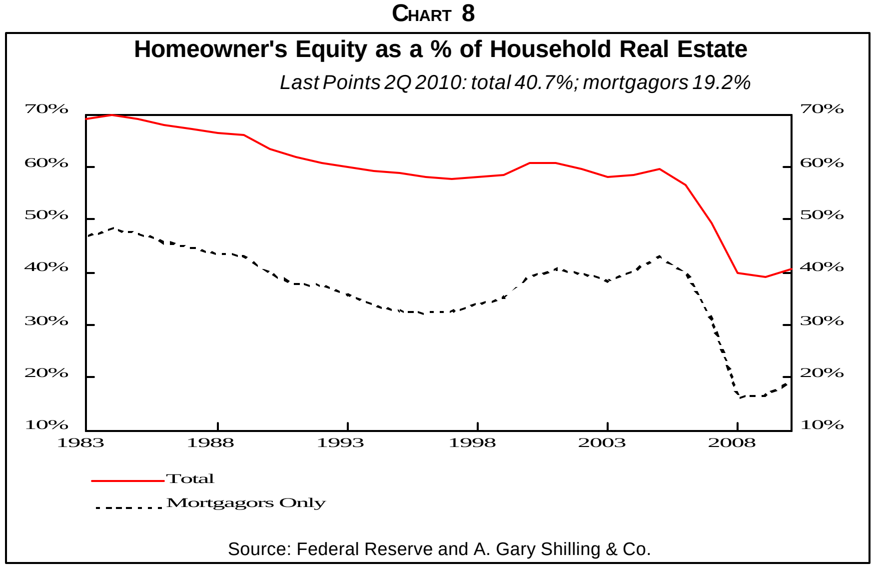


CHART 8



market collapse in 2000 and the terrorist attacks of 9/11 gave the illusion that all was well and that the growth trend had resumed.

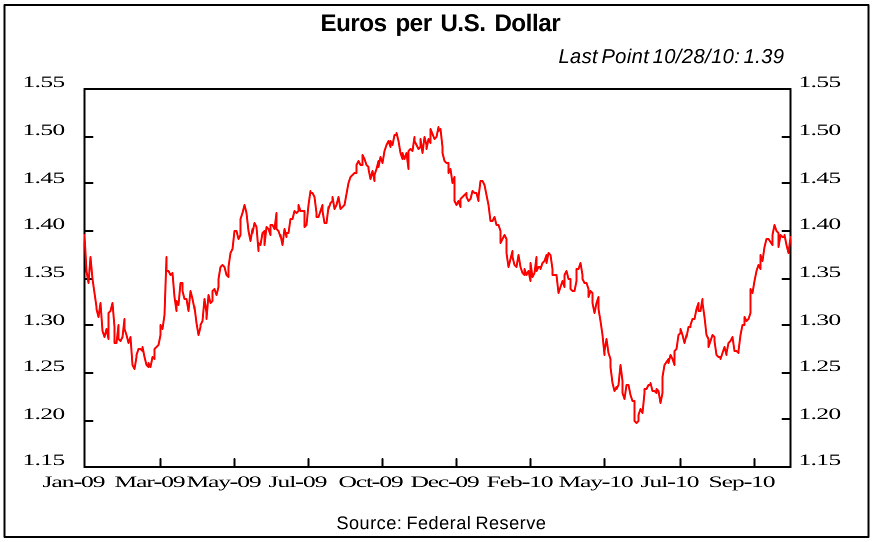
The Fed worried about a severe recession, financial crisis, deflation, and later a dire aftermath of 9/11. So the central bank eased massively, pushing its federal funds rate ultimately to 1% (*Chart 19, page 9*), a record low rate that rivaled the Bank of Japan's zero percent overnight rate. At the same time, federal tax rebates and cuts and spending on homeland security and military efforts in Afghanistan and Iraq pumped lots more money into the economy. As a result of all these stimuli, the 2001 recession was brief and shallow. Speculation survived and simply shifted from stocks to commodities, foreign currencies, emerging market equities and debt, hedge funds, private equity, Bernie Madoff—and to a rapidly expanding housing bubble.

Easy Money

All the house appreciation made it easy for homeowners to save less and spend more, and they needed to do so in order to maintain their consumption growth because real wages and salaries were flat in the 2000s. American business had more than met foreign and domestic competition in recent years by holding down labor costs and employment. Combined with robust sales and strong productivity growth (*Chart 20, page 9*), the result has been the explosive growth in corporate earnings, which pushed profits' share of National Income to a record high level. It fell sharply in the recession but has since rebounded (*Chart 21, page 10*).

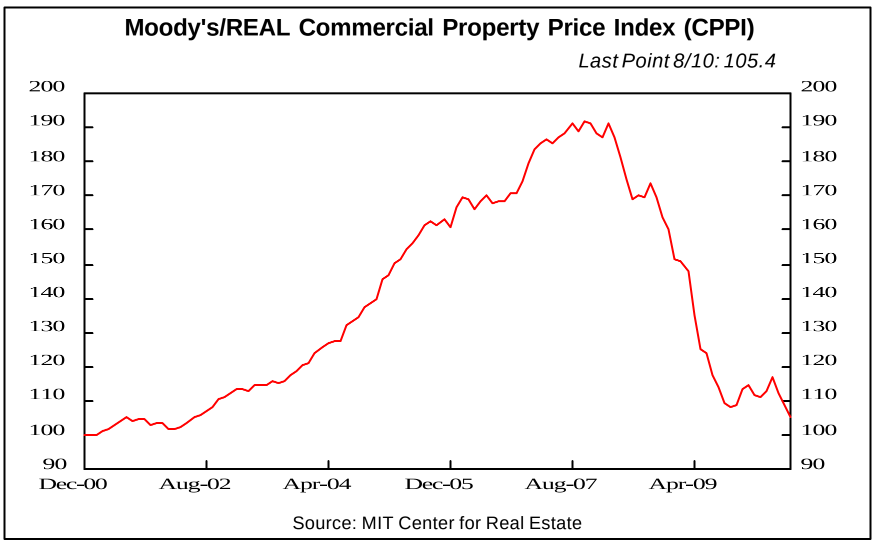
According to the Federal Reserve, Americans extracted $719 billion in cash from their houses in 2005 after a $633 billion withdrawal in 2004 and

CHART 9



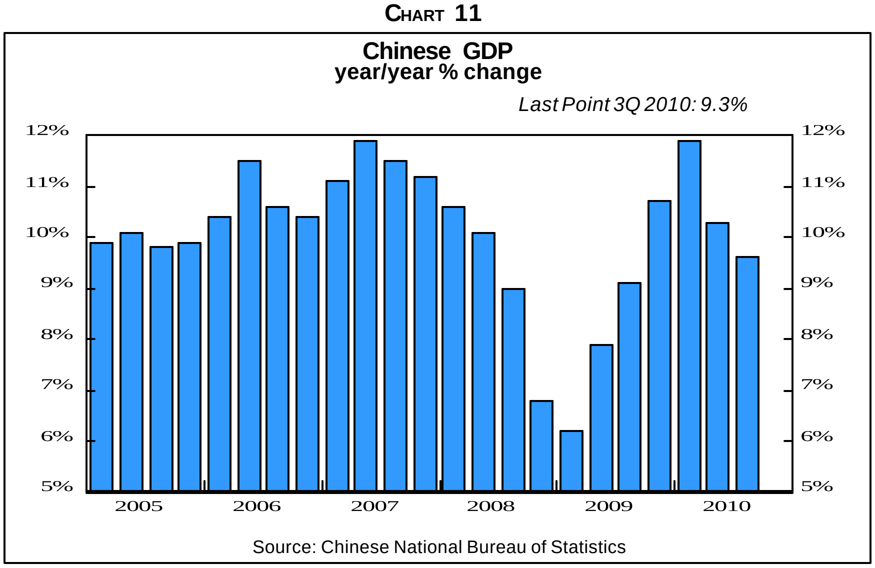
Source: Federal Reserve

CHART 10



Source: MIT Center for Real Estate

CHART 11



Source: Chinese National Bureau of Statistics

$439 billion in 2003. Back in the mid-1990s, it was less than $200 billion per year. This was easily accomplished with the help of accommodative lenders through refinancings and home equity loans. Other homeowners looked on their houses as golden geese that never stop laying, so they simply saved less and borrowed more on credit cards and other means to bridge the gap between their robust spending growth and meager income gains.

Make no mistake: House appreciation was extremely important to consumer spending by allowing Americans to cut saving and hike spending. And the widespread nature and relatively even distribution of home ownership compared to the upward skewing of stockholding meant that the median homeowner was financially better off during the housing bubble than in the dot-com stock bubble, even though stock prices were well below the 2000 peak.

Unsustainable as this spending binge was, we're convinced it would have continued as long as American consumers could fund it. A couple doesn't wake up one morning and say to each other, "Dear, we're borrowing too much, saving too little, and spending too much. We've *got* to cut back," and mean it. No, no. Americans have been trained—and we use that word deliberately—by retailers, the media, and even the government to keep spending regardless of their financial health as long as money is available. Achieve instant gratification by next-day delivery, and postpone the bill until later, maybe never, if it can be paid by extracting house appreciation.

But the forces that drove the 25-year consumer spending bubble couldn't continue forever and have been reversed. These include the decline in

Chart 12

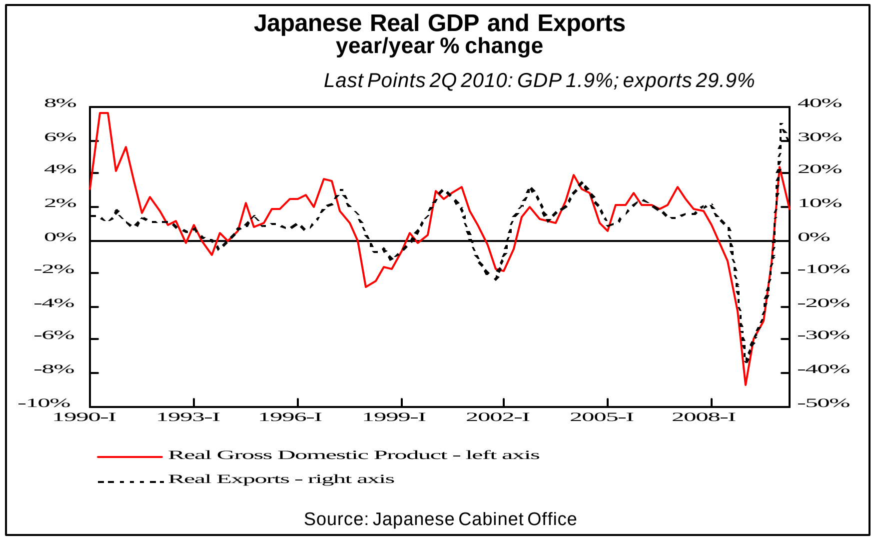


Chart 13

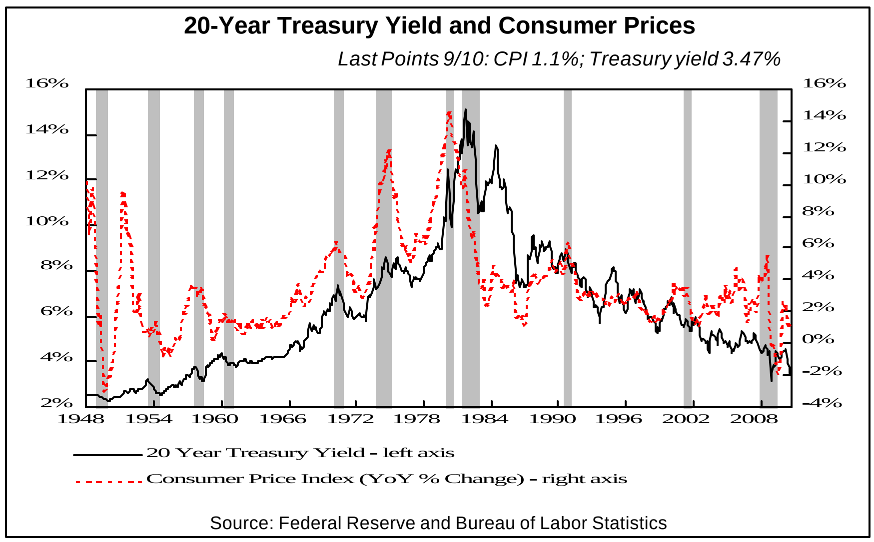
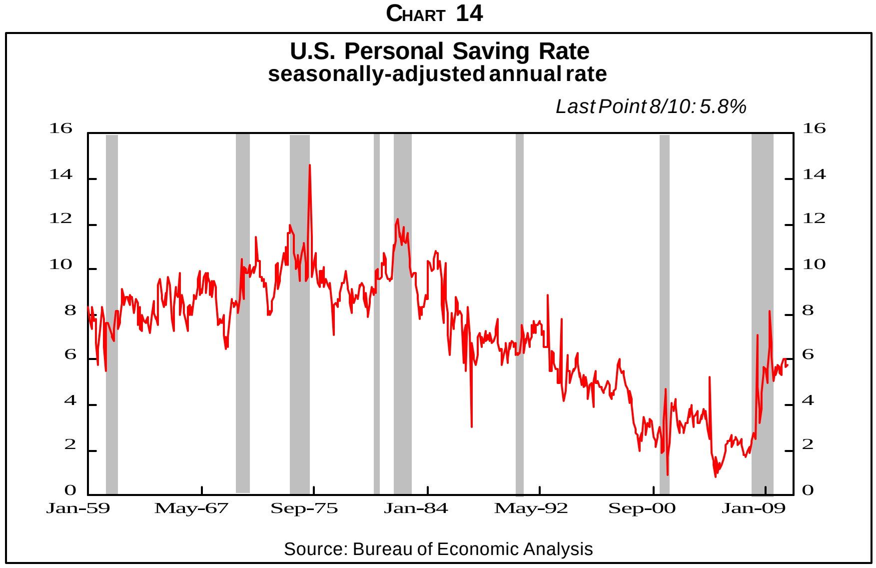


Chart 14



the consumer saving rate and the jump in household debt, the vast leveraging of the financial sector, increasingly free trade, the roaring stock market, soaring house prices, loose lending and lax financial regulation.

Individual investors no longer trust their stock portfolios to finance future financial needs, despite the strong rebound that started in March 2009 (Chart 2). They continue to yank money from U.S. stock mutual funds and put it into bond funds, including postwar babies who invest more cautiously as retirement nears. The fact that the S&P 500 index actually fell 3% in the 2000s decade has obviously demoralized shareholders and slashed their confidence in equities. And it will probably stay subdued if our forecast of limited stock returns in future years is valid.

House Appreciation Gone

With the plummet in house prices (*Chart 22, page 10*), that source of money to finance oversize consumer spending is largely exhausted. Those with mortgages had equity of almost 50% of the house's value on average in the early 1980s. As of the second quarter of 2010, it was down to only 19.2% (Chart 8). Furthermore, mortgage lending standards shifted from trivial to tight, making it difficult for those without considerable home equity and sterling credit to withdraw equity through cash-out refinancing, home equity loans, or otherwise.

So with investor uncertainty over their stock portfolios, home equity nearly exhausted, and high credit card delinquencies and charge-offs, American consumers have no choice but to curtail spending in order to save more and repay debt. The borrowing-and-spending binge of the past quarter century is being replaced by a saving spree. Note that as of the second

Chart 15

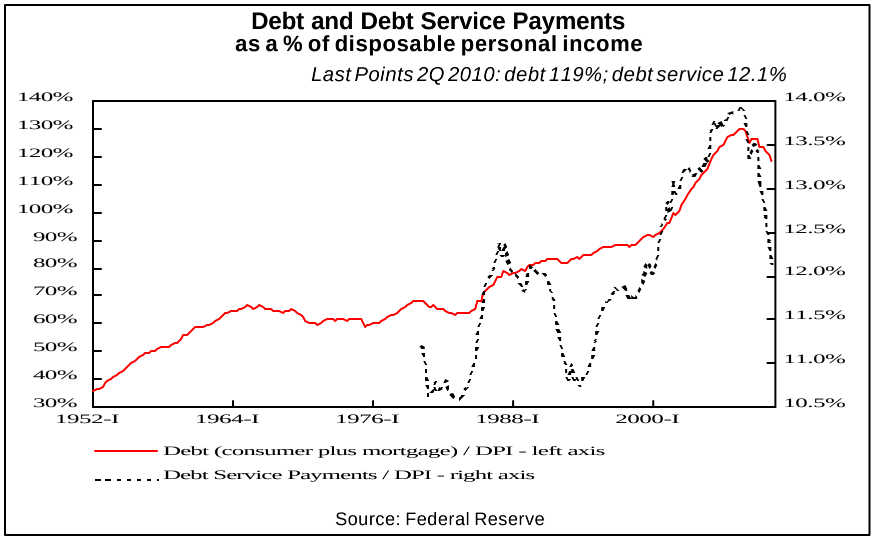


Chart 16

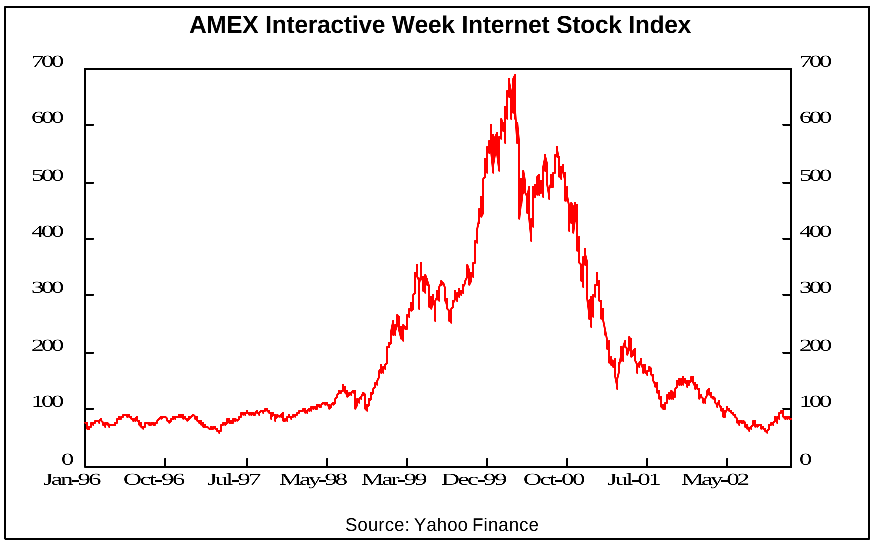
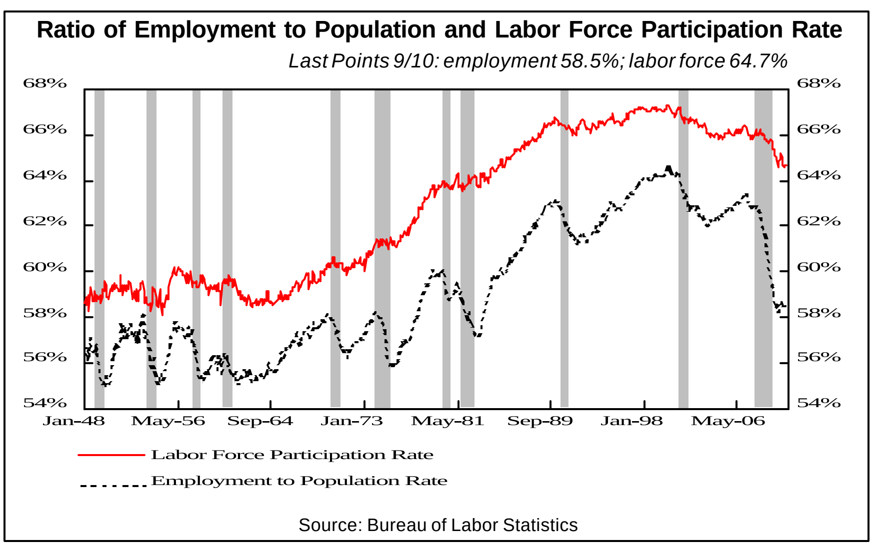


Chart 17



quarter of 2010, household net worth as a ratio to after-tax income was lower than in the 1950s and 1960s (Chart 18) when the saving rate was much higher (Chart 14) and living standards considerably lower.

Consumer retrenchment has continued despite repeated attempts by Washington to massively stimulate spending. From the recession's onset in December 2007 through August of this year, consumers received $928 billion in federal stimuli, $559 billion in increased transfers such as unemployment benefits and extra Social Security payments and $370 billion in lower taxes, mainly due to tax cuts (*Chart 23, page 10*). Still, of the $713 billion increase in after-tax income, consumers saved 59% and spent only 46%. The $330 billion spent was 36% of the $928 billion government largess. Score two for the Austrian School that believes deficit spending has little net effect and score one for the Keynesians who forecast a multiplier of well over one times the fiscal stimuli.

The Postwar Babies

A saving spree in the next decade will also be encouraged by postwar baby saving. Those 79 million born between 1946 and 1964, like most Americans, haven't saved much and they accounted for about half the total U.S. consumer spending in the 1990s. But they need to save as they look retirement in the teeth. Households with members age 50-plus had only $89,300 on average in retirement accounts on September 30, 2008, according to an AARP study, not enough to replace even one year of $95,000 in annual income for the typical household headed by someone age 50–59.

It's ironic that when the household saving rate was 12% in the early 1980s

Chart 18

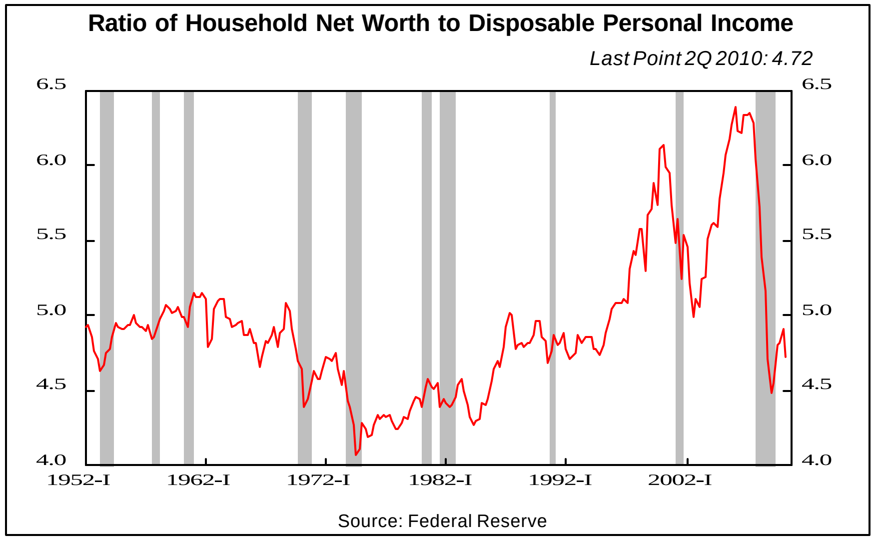


Chart 19

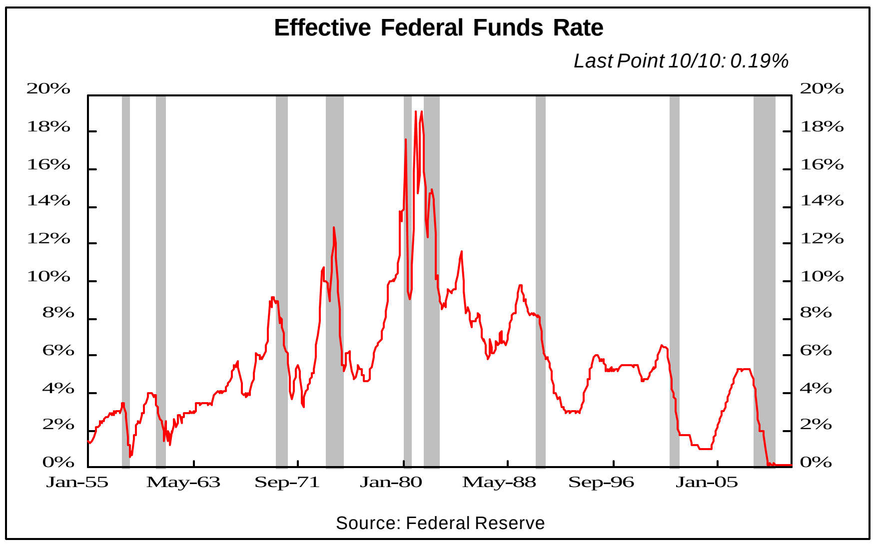


Chart 20

Productivity in the U.S. Nonfarm Business Sector
average annual growth rate by decade

	NBER	BLS
1901-1910	2.34%	NA
1911-1920	2.64%	NA
1921-1930	2.07%	NA
1931-1940	2.39%	NA
1941-1950	2.46%	NA
1951-1960	2.28%	2.14%
1961-1970	2.49%	2.71%
1971-1980	NA	1.45%
1981-1990	NA	1.61%
1991-2000	NA	2.18%
2001-2009	NA	2.36%

Source: National Bureau of Economic Research and Bureau of Labor Statistics

(Chart 14), the demographic forces were the worst for saving. The postwar babies were in their twenties and thirties, the weakest saving ages when people spend heavily on cars, appliances, baby equipment, and other outlays associated with establishing households and raising families (*Chart 24, opposite page*). In contrast, the big savers—those in their fifties and sixties—were the sparse Depression babies back then. Many of these postwar babies are now in their 50s, their career peak earning years, need to save for retirement, and can save because their kids' tuition payments are over and they are leaving home—well, some are today, although boomerang kids return home to mom and dad. And if their children are anything like our four offspring, they no longer have as many smashed-up cars to replace! Meanwhile, the big-spending younger folks are relatively few (Chart 24). Less spending and more saving will also be encouraged by the chronic deflation we'll discuss later, as consumers postpone purchases in anticipation of lower prices.

Chronic Unemployment

Chronic high unemployment is another important reason for a multiyear consumer saving spree. As we'll discuss later, unemployment rates may average not much below current levels over the next decade (*Chart 25, opposite page*), despite substantial government-sponsored job creation. This will encourage saving to prepare for potential joblessness and uncertain financial futures, especially as American businesses continue to cut costs by curtailing employment and promoting productivity (Chart 20) in response to fierce domestic and foreign competition.

In addition, competition will probably keep the time between jobs long. Until

Chart 21

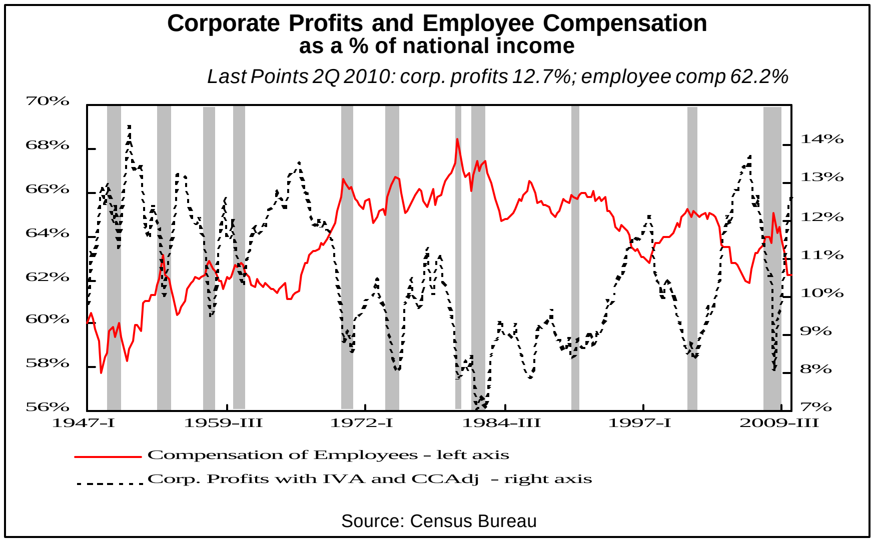


Chart 22

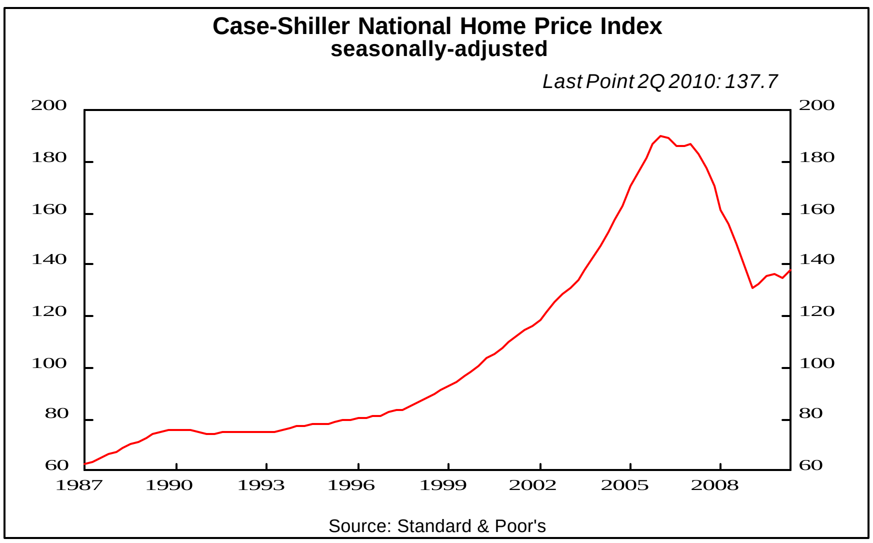


Chart 23

Federal Government Stimuli for Consumers
cumulative change: Dec. 2007 to Aug. 2010; $ billion

		Total Stimuli
Government Transfers	558.8	928.0
Personal Taxes	-369.5	
		Without Stimuli
Personal Income	343.8	-215.0
Disposable Personal Income	713.2	-215.0
		Shares of DPI Change
Saving	416.9	58.5%
Personal Consumption	330.0	46.3%
Current Transfer and Interest Payments	-33.7	-4.7%

Source: Bureau of Economic Analysis

recently, in the post–World War II years, the average number of weeks unemployed was about 15, but now it is almost 30. And when people lose jobs today, many who are lucky enough to find new positions are paid less. Declining union jobs (*Chart 26*) are a key reason that average real income has gone nowhere for a decade. So are two-tier wage systems. The 2007 auto industry labor agreements allow automakers to replace workers who leave or retire with new employees paid $14 per hour, about half the level of older employees. Unemployment woes are also augmented by underwater homeowners who can't easily sell their abodes in high jobless areas and move to where jobs are more plentiful. The tendency of both spouses to work is also limiting job mobility and, ironically, adding to unemployment woes.

Saving will also be encouraged in future years since high joblessness will discourage the reinstatement of many employee perks that have been eliminated in recent years. These include stock options, paid family leave, education reimbursement, and adoption assistance. Also, many parents are unable financially to help their offspring buy houses when cautious lenders say no. Home ownership for people ages 25 to 29 fell from 42% in 2006 to 38% in 2009, and 22% of those ages 18 to 34 say they've been turned down for a mortgage. Some 21% have moved back home or doubled up with a friend or relative (*Chart 27, page 12*).

Many young people are also seeing their parents postpone retirement because of financial strains and are dropping out of college themselves because their family savings ran out. All these forces will no doubt encourage today's youths to save robustly for their future welfare and for that of their children.

Chart 24

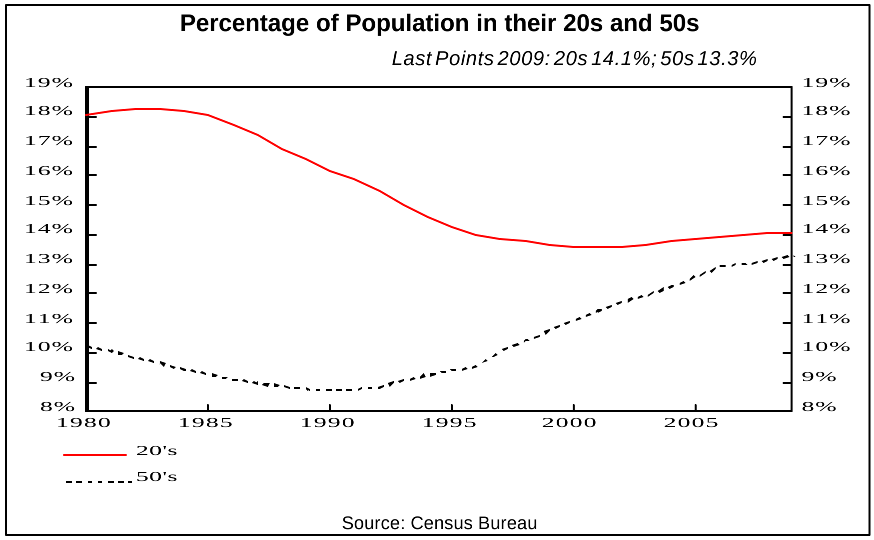


Chart 25

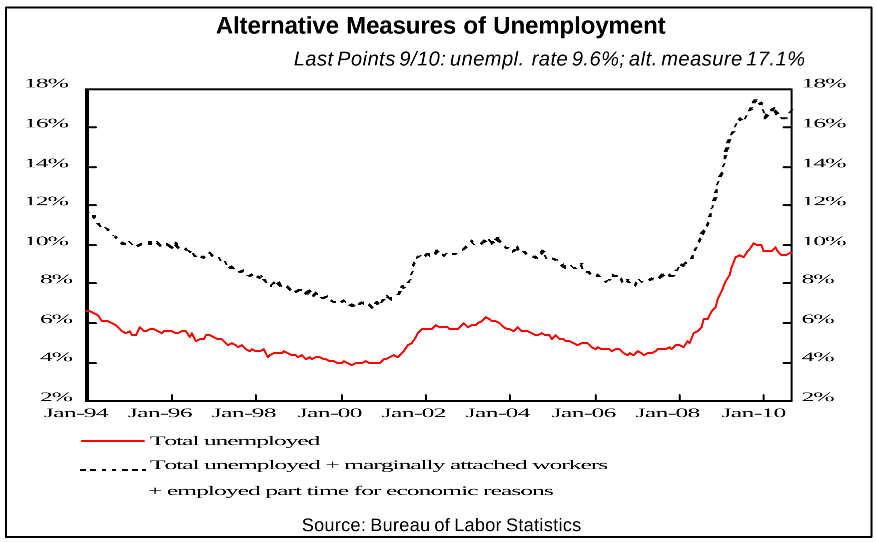
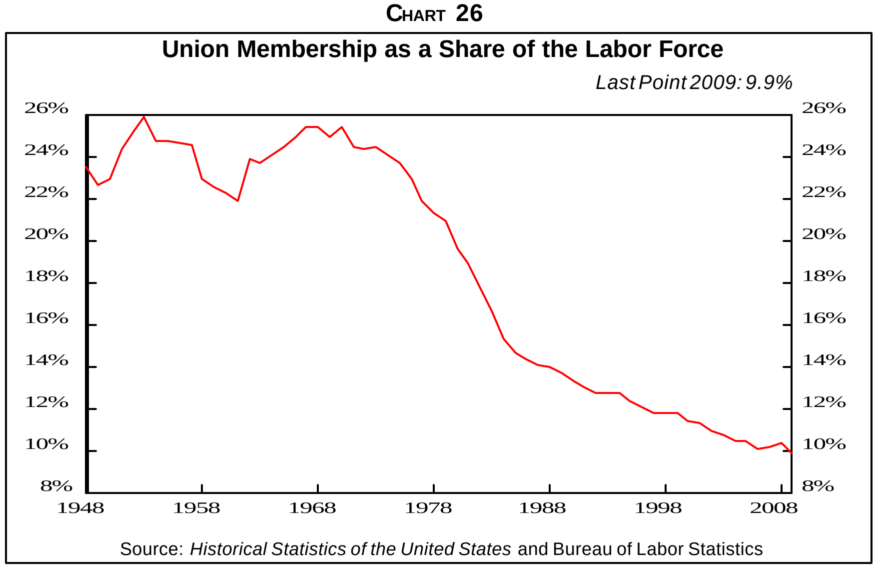


Chart 26



Saving Is In

Saving may become the in thing in future years as people make a virtue out of necessity. Consumers may be returning to the 1930s mantra, "Use it up, wear it out, make do, or do without." Conspicuous consumption and impulse buying seem to be giving way to more thoughtful purchases. Coupon-clipping has become a meaningful way to save money for many. Layaway financing was popular in the Great Depression as consumers made periodic payments and then picked up their Christmas gifts or other purchases after they were completely paid for. Credit cards, with their enjoy-it-now-pay-later appeal, almost ran layaways out of business.

But now they're reviving as credit card issuers tighten limits and consumers worry about crushing debt loads and job losses. And, of course, layaways are available to all, even those with bad credit. The popularity of debit cards in recent years may prove to have been a harbinger of a trend away from instant gratification through credit card financing.

Furthermore, lenders will probably remain cautious long after the current credit crisis is over, and it may take until the next generation of bankers before they again are willing to make risky loans. Lenders, especially banks, have shown tremendous herd-like instincts in the past, all rushing into questionable areas and then stampeding out after they suffer big losses, only to swear they'll never, ever take big risks again.

For the next decade, we're forecasting an average one percentage point increase in the saving rate annually, raising it to double digits in 10 years. It may exceed the 12% saving rate of the early 1980s (Chart 14) as the demographics for saving become very favorable. And even a decade of vigorous saving will probably not return household net worth even close to its former peaks (Chart 18) or eliminate completely the three decades of ever-increasing household financial leverage (Chart 3).

CHART 27

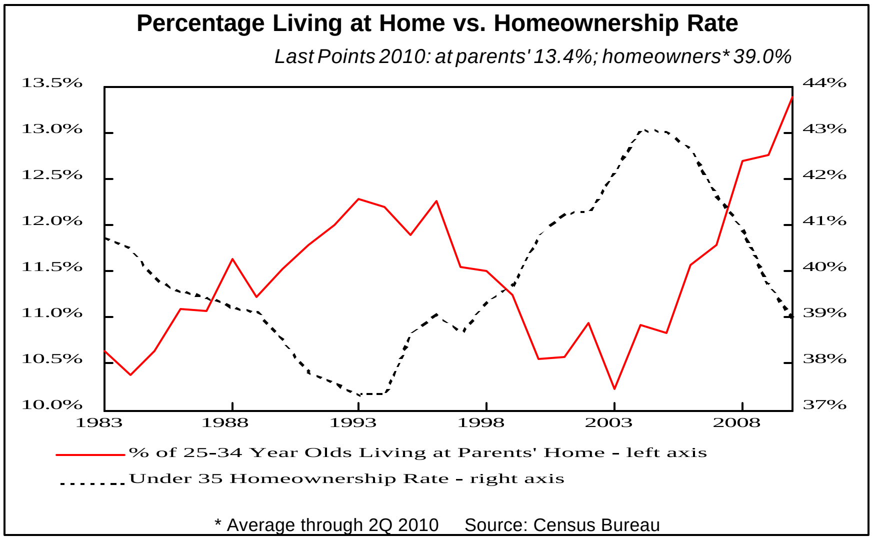
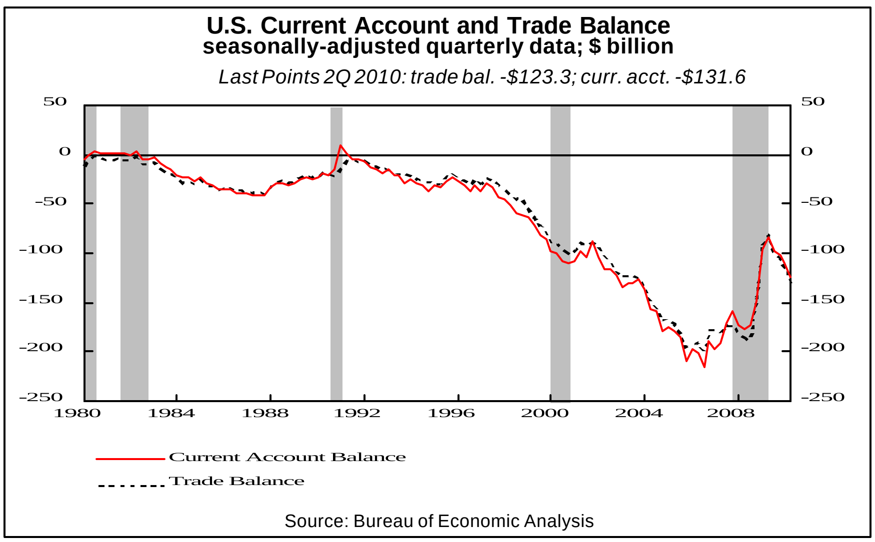


CHART 28



A Big Switch

For the past quarter-century, consumer spending has risen on average about a half-percent faster than after-tax income per year as the saving rate dropped from 12% to 1%, as noted earlier. As that spending has been magnified as it works its way through the economy, the total effect has been about 1.5 times as much. Since consumer spending has averaged about two-thirds of GDP over that period, the excess consumer outlays have added around 0.5 percentage points to real GDP growth. The extra consumer spending also spiked the trade and current account deficits (*Chart 28*), which were financed by growing foreign ownership of U.S. assets.

Chart 29

Nine Causes of Global Slow Growth in Future Years

1. U.S. consumers will shift from a 25-year borrowing-and-spending binge to a saving spree. This will spread abroad as American consumers curtail the imports of the goods and services many foreign nations depend on for economic growth.

2. Financial deleveraging will reverse the trend that financed much global growth in recent years.

3. Increased government regulation and involvement in major economies will stifle innovation and reduce efficiency.

4. Low commodity prices will limit spending by commodity-producing lands.

5. Developed countries are moving toward fiscal restraint.

6. Rising protectionism will slow, even eliminate global growth.

7. The housing market will be weak due to excess inventories and loss of investment appeal.

8. Deflation will curtail spending as buyers anticipate lower prices.

9. State and local governments will contract.

The chronic one-percentage point annual rise in the consumer saving rate for the next decade or so that we forecast, however, will knock approximately one percentage point off real GDP growth after its effects work their way through the economy. That's a big contrast with the earlier saving rate decline that added around 0.5 percentage points to growth. That total swing of 1.5 percentage points will reduce real GDP growth from 3.7% per year in the 1982–2000 salad days to 2.2%.

Financial Deleveraging

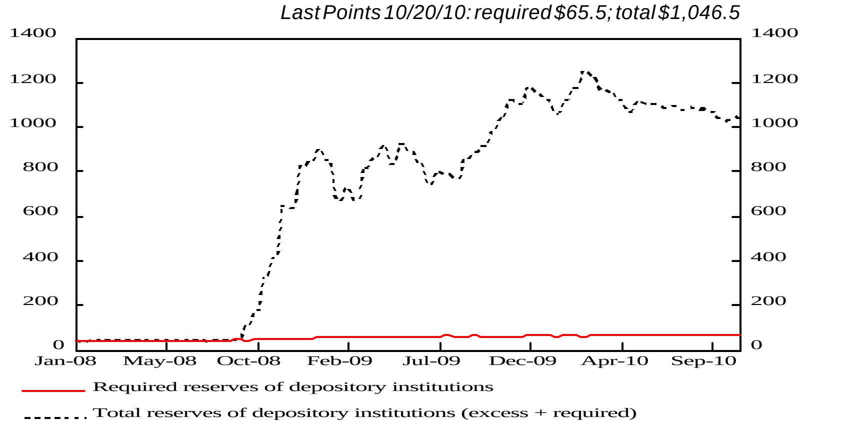
Beyond the U.S. consumer saving spree, there are eight other forces that will slow global growth in the years ahead (*Chart 29*). None of them can be quantified easily, but all are important retarders.

Financial deleveraging is our second reason for reduced long-term economic growth. As discussed earlier, the 2007-2009 recession really started in early 2007 in the financial arena with the collapse of subprime residential mortgages. Then it spread to Wall Street in mid-2007 with the complete mistrust among financial

Chart 30

Required and Total Reserves of Depository Institutions
$ billion; seasonally-adjusted

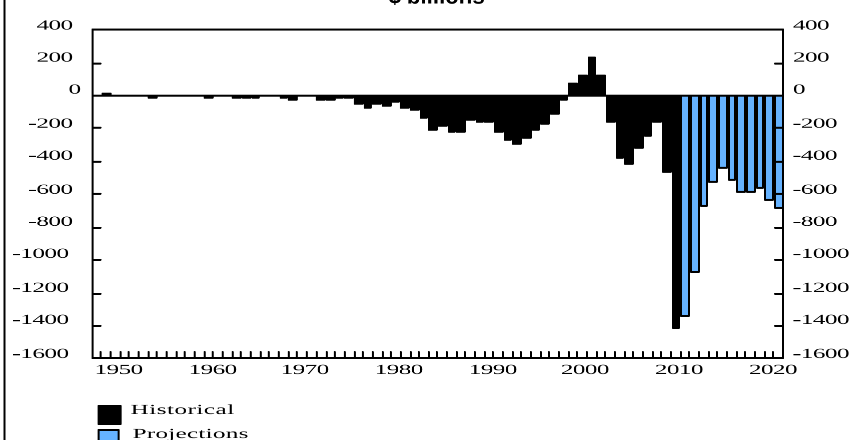
Last Points 10/20/10: required $65.5; total $1,046.5



Source: Federal Reserve

Chart 31

Federal Budget Balance
$ billions



Source: Congressional Budget Office

institutions and their assets, too many of which were linked to troubled mortgages. That panicked Washington into opening the money floodgates. The Fed started its interest rate–cutting campaign in August 2007 that ultimately drove its federal funds rate target to the zero to 0.25% range (Chart 19).

But the central bank soon found that banks were too scared to lend and creditworthy borrowers didn't want to borrow when Bear Stearns and Lehman Bros. collapsed and other large banks and Wall Street houses were on the brink. So the Fed embarked on quantitative easing that exploded its balance sheet (*Chart 30, page 13*). Meanwhile, Congress and the administration joined in with the $700 billion Troubled Asset Relief Program (TARP), the $862 billion fiscal bailout, and many other programs, as witnessed by the rapidly increasing federal deficit (*Chart 31, page 13*).

Central banks and governments replaced financing by private institutions and bailed them out as they pressured them to delever. A number of medium-size and smaller banks are still in dire straits. Many own troubled loans that finance commercial real estate projects that they'll probably eventually write off as delinquencies mount. These medium and smaller banks are not too big to fail—that is, they are too small to rescue and lack easy access to private capital.

Ironically, while many of us have been concerned about banks being too big to fail, the financial crisis has resulted in mergers and a further concentration among big banks. At the end of 2009, the world's 10 largest banks accounted for 70% of global banking assets, up from 59% three years earlier. In the U.S., banks with over $10 billion in assets had $11.87 trillion in assets, or 80% of total bank assets, on September 30, 2009, compared with $5.74 trillion, or 67% of the total, 10 years earlier.

Like households, the financial sector spiked its borrowing and equity issues for three decades (Chart 3). Now its embarrassed leaders, pressured by regulators and everyone else here and abroad, will no doubt pursue the deleveraging process for years to come. Securitization, off-balance sheet financing, derivatives, and other shadow bank-system vehicles that both stimulated and distorted economic activity are disappearing.

Less Profitable

Chastened lenders will probably be overly cautious for years as they eschew all those fancy financing vehicles and move back toward banking 101, spread lending in which banks take deposits and then lend them at market-determined spreads. It's human nature to move from one extreme to the other, and overly conservative lending will probably prevent many reasonable risk takers from being financed for years to come. And, of course, the financial sector will be much less profitable as the lucrative fees and spreads from securitization, high leverage, and so forth are absent.

Deleveraging of the financial sector will obviously have negative ramifications for the real economy it finances. We've already seen plenty of effects among small businesses, homeowners, and consumers. The credit crisis revealed the extent to which consumers and businesses depend on borrowed money and lack equity and reserves to finance even normal operations. We're now fully aware that many larger businesses depend on commercial paper to finance inventories and buy supplies while small businesses rely on bank loans and owners' personal credit cards to meet payrolls. Consumers depended on home equity withdrawals to fund day-to-day spending and used their credit cards like ATMs. More reliance on equity and less on borrowing is quite probable in future years and will no doubt curtail economic growth.

Cautious institutional and individual investors will no doubt limit the funds flowing into venture capital firms in the years ahead at the same time that slower economic growth will impede the businesses that many of them finance. And muted equity markets are likely to limit investors' appetite for initial public offerings, the normal exit strategy for venture capitalists. As banks avoid leveraged loans and investors are wary about junk bonds, private equity leveraged buyouts are likely to be muted for years.

More Government Regulation

U.S. consumer retrenchment and global financial deleveraging will keep worldwide economic growth subdued for many years. So, too, will our third reason, vastly increased regulation here and abroad, the normal reaction to financial and economic crises. *When a lot of people lose a lot of money, there is a cosmic need for scapegoats and increased regulation.* Sure, many embarrassed financial wizards have sworn off their wayward ways and will be cautious for years, probably the balance of their careers. But that won't stop witch hunts.

Regulation and more government involvement in the economy are the normal reactions to big problems. Historically, it was during wars that governments assumed bigger, often dominant roles but afterward withdrew to let the economy pretty much run itself. The Civil War brought immense economic involvement by the governments on both sides, but until the end of the 19th century, wildcat banking, private expansion of the Western frontier, and buccaneer capitalism had fairly free reign.

In contrast, most of the 20th century was one of increasing government involvement, not surprising since it was dominated by two world wars, the Cold War, and the Great Depression. The Depression ushered in a whole new role for government, the welfare state as some would call it. Economic collapse that didn't seem to be curing itself quickly sired the New Deal programs, Social Security, and the widespread conviction that not only was the federal government responsible for ensuring full employment and decent livings for everyone, but also was able to deliver on that responsibility.

In the 1930s, the economic collapse was widely blamed on the laissez-faire financial sector. So the reaction was the Securities and Exchange Act; the Glass-Steagall Act that separated banks, brokers, and insurers; and the FDIC and the SEC. The Fed had been created earlier in 1913 in reaction to the Panic of 1907.

After The Fact

A consistent characteristic of regulation, however, is that it comes after the fact, in reaction to abuses and problems. By the time regulation of Wall Street was enacted in the 1930s, investors were so disillusioned with stocks that they had no interest in them—or in giving anyone the opportunity for new equity-related abuses—for almost two decades. In fact, it can be argued that well-intentioned regulators often do harm by inhibiting constructive changes. Glass-Steagall, which was gradually eroded but officially on the books until 1999, was considered a case in point by many—at least until the recent financial crisis.

The government involvement in the U.S. economy that started in 1933 got so overdone that by the 1970s, voters reacted. That revolt was first manifested with the passage of Proposition 13 in California in 1978, which limited property taxes, and it culminated with the 1980 election of Ronald Reagan, who said that "government is not the solution to our problems; government is the problem." As a result, deregulation and a shrinking role for government were prevalent in the 1980s and 1990s in financial services, retail trade, telecommunications, transportation, and many other areas.

In the late 1970s, that rebellion against government convinced us that the then-frighteningly high inflation would fade, since in our view excess government spending is the root of inflation, as we'll discuss later. So we wrote our first book in the early 1980s, *Is Inflation Ending? Are You Ready?* (McGraw-Hill) that correctly forecast the ensuing chronic fall in inflation rates and the salutary effects on both stock (Chart 2) and bond prices (Chart 13), even before the end of the Cold War was in sight.

But the dot-com bubble's break in 2000 and the 9/11 terrorist attacks in 2001 reversed the tide and the blame game moved into high gear. Wall Street firms and their analysts, like Jack Grubman, who promoted stocks they really believed to be garbage, made themselves readily available. That spawned the billion-dollar fines on Wall Street firms and the ridiculous directive to brokers to buy and promote the research of outside "independent" analysts. The corporate accounting scandals early in the 2000s that sunk Enron andWorldCom led to the Sarbanes-Oxley law, which added immensely to corporate accounting costs. Later, "late trading" abuses among mutual funds led to more fines and more regulation, but again, well after the fact.

An Invitation for More

With the subprime mortgage collapse in 2007 and the financial crisis it spawned, government involvement leaped further. In 2008 at a mortgage security bailout congressional hearing, then-Treasury Secretary Henry Paulson said, "I have never been a proponent of intervention, and I just think we have an unprecedented situation here and it calls for unprecedented action. There's no way to stabilize the markets other than through government intervention." His original proposal would give him czar-like control of the $700 billion bailout fund.

So Paulson the free-market devotee became Paulson the activist. In March 2008, he proposed a sensible overhaul of the current hodgepodge of financial market regulations, which would give the Fed oversight of risk throughout the financial system. Still, we have to ask, is overlapping and sometimes contradictory regulation by the Fed, the SEC, the Office of the Comptroller of the Currency, the Office of Federal Housing Enterprise Oversight, the National Credit Union Administration, the FDIC, and the Commodity Futures Trading Commission worse than that of one overall regulation czar that may be very efficient and precise, but could inflict terrible damage if it makes a mistake?

The role of the Fed expanded greatly, starting in the summer of 2008 when financial markets came close to freezing up. After the central bank realized that its cuts in the discount and fed funds rates (Chart 19) were doing little to ease the crisis, it embarked on a series of measures to make funds available to banks that couldn't borrow from other banks since they were too wary to lend. Later, that list was expanded to include opening the discount window to investment banks to insure that the run on the bank that sunk Bear Stearns wouldn't recur. After Lehman Bros. went bankrupt, Merrill Lynch agreed to merge with Bank of America in September 2008, and the two remaining large investment banks, Morgan Stanley and Goldman Sachs, became bank holding companies. So they're now formally regulated by the Fed. Obviously, as bank holding companies, their leverage ratios were cut drastically over the two years of transition, and their investments and trading activity much more closely scrutinized, all to the detriment of their earning power.

Furthermore, although the Fed traditionally leaves responsibility for the dollar's value against foreign currencies to the Treasury, Chairman Bernanke in June 2008 when the buck was quite weak made an extraordinary comment. He said that the buck's steep fall had contributed to an "unwelcome rise in import prices and consumer price inflation." Sure, inflation is the Fed concern, and so must its causes be as well. Still, the Fed Chairman expanded the central bank's sphere of influence into the currency market.

The Fed's involvement in financial institutions was also enhanced by its initial $85 billion loan to bail out AIG on top of its guarantee of $29 billion in Bear Stearns securities to facilitate its takeover in March 2008 by JPMorgan Chase. The government's direct involvement with financial institutions also includes the warrants the government now holds in Fannie Mae and Freddie Mac and AIG, and the other financial institutions into which it pumped money.

Crisis Inquiry Commission

In reaction to the financial crisis, the Congressional Financial Crisis Inquiry Commission was established, started hearings in January 2010, and must deliver a final report by December. Its chairman, Rep. Phil Angelides, was California's treasurer for eight years and is well known for tenaciously attacking executive pay, promoting human rights, and pushing corporations toward greater social responsibility. He apparently wants his commission to compile the complete chronology of the financial crisis, as did the 9/11 Commission. He's also studied the Pecora Commission that pilloried Wall Street in the wake of the 1929 Crash. He said at the first hearing that the commission would become "a proxy for the American people—their eyes, their ears, and possibly also their voice . . . if we ignore history, we're doomed to bail it out again."

The culmination of the push for more financial regulation was the Dodd-Frank bill, enacted earlier this year. Many of the detailed regulations that will implement this law are yet to be worked out, but a key provision is the Volcker Rule, proposed by former Fed Chairman Paul Volcker, it severely limits proprietary trading by banks. The goal is to prevent those that are too big to fail from failing by taking huge risks, even though proprietary trading losses did not contribute meaningfully to the recent financial crisis.

The financial reform bill also allows regulators to seize and break up troubled financial institutions that threaten the system, requires routine derivatives to be traded on exchanges and routed through a clearinghouse, creates the Consumer Financial Protection Bureau within the Federal Reserve, requires mortgage lenders to verify borrower income and credit history, requires banks to keep 5% of credit risks on their balance sheets, tightens regulation of credit rating firms and gives shareholders nonbonding votes on executive compensation.

Central Bank Independence

Congressional attempts to cut the Fed's independence are to be expected after the central bank moved far beyond traditional monetary policy with the initial direct loan to AIG of $85 billion and Quantitative Easing, which is quasi fiscal stimulus. In the first round, it bought $1.7 trillion in mortgage and Treasury securities and likely will buy much more in QE2, likely to commence this month. If housing collapses again in the future, will the Fed be expected to support it? Chairman Bernanke admits that the Fed did not curb the excessive risks of the banks it regulates, but will that force the central bank to be excessively vigilant in the future? The New York Fed decided to make those who bought credit default swaps (CDSs) from AIG whole, in effect paying them with government money pumped into that troubled insurer. And it told AIG not to disclose key elements of the agreement. What precedent does this set?

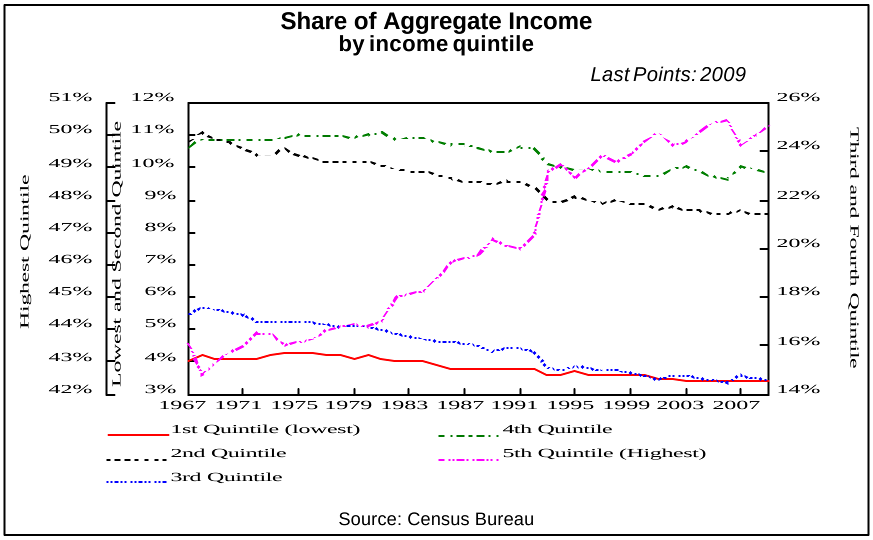
The SEC, accused of being asleep at the switch while the excesses that led to the financial crisis ran rampant, subsequently flexed its muscles and extended its reach. It belatedly studied the now thoroughly discredited credit rating firms and concluded, lo and behold, that they put profits ahead of quality controls as they struggled to keep up with the explosive growth in mortgage-related debt vehicles during the boom years. The report found that the analysts involved in the ratings were well aware of the fees involved.

Many Examples

Other examples of growing government regulation and involvement in the economy are rampant. The Environmental Protection Agency in January 2010 proposed tightening smog-reduction measures, which it estimates will cost between $19 billion and $90 billion annually, by forcing refineries, gas stations, power plants, and other businesses to reduce emissions of chemicals they contribute to smog. The medical bill enacted by Congress in March 2010 under gigantic administration pressure is really a health insurance, not a health care, law. It increases hugely the federal government involvement in the economy by forcing health insurers to take all applicants and forcing businesses and individuals to carry medical insurance or pay the equivalent in fines. The Department of Energy plans to give or lend over $40 billion to businesses developing clean technology like electric cars, better batteries, wind turbines, and solar panels. That increases the likelihood that the government, not the market, will decide which are the most promising. He who pays the piper calls the tune.

The administration is also interested in higher taxes to reduce the huge federal deficit and has appointed a commission to recommend possible actions. The nonpartisan Tax Policy Center estimates that in a worst-case scenario it would take a half a trillion dollars per year in revenue increases and/or spending cuts to reduce the deficit from 10% of GDP in 2009 to 3%. Since about half of households pay no income tax, higher income taxes to reduce the deficit to 3% of

CHART 32



GDP would fall on upper-income families, and would push the top two brackets from 33% and 35% to 72.4% and 76.8%, the Tax Policy Center estimates. Since those taxpayers account for a big chunk of consumer spending, tax hikes of that magnitude would drive the currently weak economy into a major depression.

Massive tax increases on high earners are unlikely, however. True, the President has advocated letting the Bush-era tax cuts expire at the end of 2010 for high-income taxpayers, pushing the top two brackets to 36% and 39.6%. The share of total income going to the top 20% has been rising for decades and seems likely to be reduced by tax increases or other means in future years (*Chart 32*). The high level of corporate profits, especially in relation to labor compensation, is also vulnerable (Chart 21).

Still, continuing high unemployment and a lethargic economy may encourage Congress to keep current tax rates in place, at least for several years, especially with likely big wins by Republicans in the congressional elections this month.

Fannie and Freddie

The American Dream of home ownership is very powerful politically. So the collapse in house prices (Chart 22) almost guaranteed increased and chronic government support for homeowners. If house prices fall another 20%, as we forecast, about 40% of those with mortgages will be underwater, compared with 23% at present, and the gap between their mortgage debt and house values will total about $800 billion. The government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac as well as the Federal Housing Administration, which is part of the Department of Housing and Urban Development, are the entities through which the government is supporting housing. Indeed, these three now fund or guarantee 99% of new mortgages, up from 55% in the housing boom days when private lenders with low underwriting standards were robust.

Washington regarded Freddie and Fannie as part of the government. But since the two technically remain private corporations, their finances remain off the federal budget and their huge prospective losses from sour mortgages don't need to be counted in the federal deficit. It's ironic that the government is using Fannie and Freddie as the biggest off-balance-sheet financing vehicles in the economy at the same time it's blasting banks for using off-balance-sheet entities in earlier years.

Also, by using these GSEs to support housing, with an open credit line to the Treasury, the administration doesn't have to approach Congress continually for funding. The Treasury simply injects enough money, quarter by quarter, to cover their losses. Fannie and Freddie have drawn $148 billion from the Treasury so far and their regulator, the Federal Housing Finance Agency, estimates they may have take down as much as $215 billion more.

Attractive To Politicians

This policy of supporting housing through Fannie and Freddie by recognizing their bad mortgages only slowly is attractive to politicians who love anything they can get credit for now, with the bill postponed until after the next election or, better still, until after they retire.

It's a very different approach from the lessons of the Resolution Trust Corp. bailout of the failed S&Ls in the early 1990s, as outlined by then-director L.William Seidman. Assets in government hands lose value since there's no private owner to enhance their worth, so sell them quickly. Holding large inventories of distressed assets overhangs the market and depresses prices, another reason to sell them to private buyers soon. To rejuvenate markets, initial sales at low prices are needed to attract buyers and lead to higher prices.

Nevertheless, Treasury Secretary Timothy Geithner in March 2010 said, "There is a quite strong economic case, quite strong public policy case for preserving, designing some form of guarantee by the government to help facilitate a stable housing finance market," even after Fannie and Freddie are restructured or unwound. Furthermore, the administration doesn't seem to realize that the earlier attempts to make housing affordable only fueled the bubble and were self-defeating. Cheap and readily available mortgage money spurred housing demand, pushed up prices, and, therefore, required even more subsidies for those who basically should have been renters, not homeowners.

Fraught with Problems

Increased regulation may be the natural reaction to recent financial and economic woes, but it is fraught with problems. It's a reaction to past crises and, therefore, comes too late to prevent them. And it often amounts to fighting the last war since the next set of problems will be outside the purview of these new regulations. That's almost guaranteed to be the case since fixed rules only invite all those well-paid bright guys and gals on Wall Street and elsewhere to figure ways around them. A million-dollar-a-year Wall Street lawyer will beat a regulator with a $100,000 annual salary on most days.

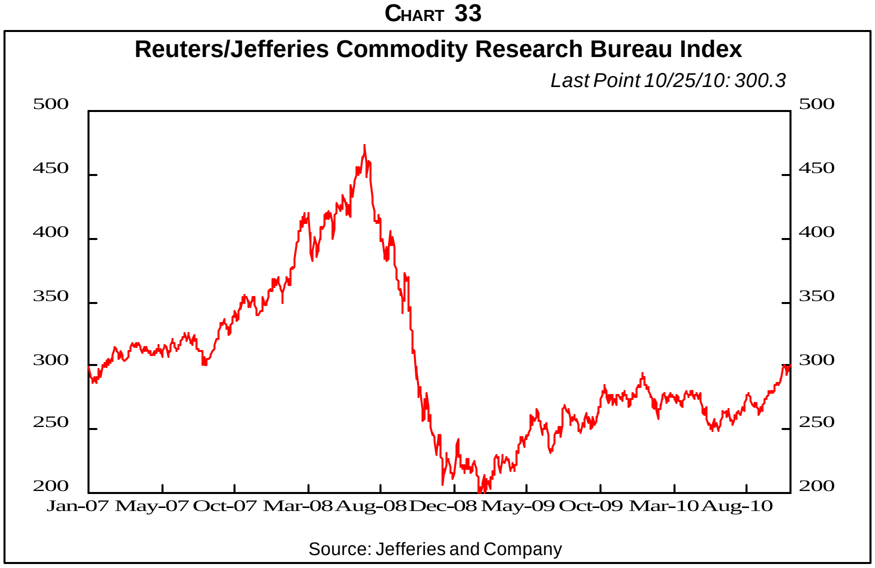
Also, government regulations are seldom removed even after they become irrelevant. Traffic lights and stop signs are installed after accidents occur. Did you ever see one removed, even if traffic dwindled to nothing?

Catching Big Crooks

Furthermore, government regulators have never, as far as we know, stopped big bubbles or caught big crooks. Consider the dot-com and then the housing blow-offs, both of which occurred while the SEC, the Fed, other regulators, Congress, and so on, sat on their hands. Think about Penn Square Bank, Beneficial Life, Enron,WorldCom, and Bernie Madoff, all of whom went on their merry ways until they self-destructed or whistle-blowers intervened, completely free of regulatory interference.

The SEC's own inspector general acknowledged that it repeatedly failed to investigate Madoff's Ponzi scheme or respond to the damning analysis presented to it by Harry Markopoulos.

CHART 33



The SEC neglected investigation of the Ponzi scheme in favor of a minor part of Madoff 's operation because, in the words of a senior examiner, "that's where my area, my team's area of expertise led."

Most importantly, government regulation and involvement in the economy is almost certain to prove inefficient. Risk taking has been excessive, but government bureaucrats are likely to eliminate much of it, to the detriment of entrepreneurial activity, financial innovation, and economic growth, while government-imposed procedures spawn waste and inefficiency. We think of government efficiency in the same league as congressional ethics, airline food, postal service, military intelligence, the usual suspects, wild game management, beloved mothers-in-law, vegetarian vampires, jumbo shrimp, tax simplification, nutritional fast food, working vacations, and other oxymora.

Uncertainty

There's a final way government intervention and increased involvement in financial markets and the economy slow economic growth: With shifting financial regulation and political blow-ups like the flap over AIG and Wall Street bonuses, confusion and uncertainty have leaped in the private sector, to the detriment of financing, spending and investment. The uncertainty and potential costs of carbon emission taxes, increased health care for employees, renewed antitrust activity and control over executive pay have a similar impact. Some academics believe that the Great Depression was prolonged because the New Deal measures were so disruptive that banks and other financial firms as well as individual investors, consumers, and businessmen were too scared to do anything. Today's parallels are unnerving.

In January 2010, President Obama declared he would not let firms that had "soaring profits and obscene bonuses" curtail his financial reforms. "If these folks want a fight, it's a fight I'm ready to have." This sounds like President Roosevelt in his 1936 reelection campaign when he talked about the problems of "business and financial monopoly, speculation, reckless banking." He noted that Wall Street and business hated him and said, "I welcome their hatred." Then, warming to the topic, he continued, "I should like to have it said of my first administration that in it the forces of selfishness and the lust for power met their match. I should like to have it said of my second administration that in it these forces met their master."

The New Deal resulted in huge increases in government regulation and involvement in the economy. Included were the 1933 "bank holiday" to halt bank runs, the National Recovery Administration with minimum wages and limits on hours, the replacement of a flat tax on corporate income with a graduated rate, a 1936 undistributed profits tax, the 1935 Wagner Act that instituted the closed labor shop, vigorous antitrust policies, and the 1935 Public Utilities Holding Company Act that made it tough for private utilities to raise equity capital. Today's regulatory initiatives may be similar in immense magnitude and impact on the economy and financial markets.

Commodity Crisis

The earlier collapse of the commodity bubble (*Chart 33, opposite page*) and likely weaker prices in future years will also subdue global economic growth in future years, our fourth reason. Sure, commodity consumers benefit from lower prices by the same amount by which producers lose. But while the share of total spending on commodity imports by consumers, especially in developed lands, is tiny, commodities account for the bulk of exports for producers, many of them developing countries such as Middle East oil producers. Forget those office towers in Persian Gulf sheikdoms that were planned to reach even further into the sky.

Producers and exporters of industrial materials such as Australia, South Africa, and Canada will experience slower economic growth due to subdued global demand and weak prices; ditto for many Latin American commodity exporters. Demand from China for imports of industrial materials to fuel stockpiling and economic stimulus-inspired usage should be noticeably curtailed as she moves from an export-driven economy to being domestically-led, accompanied by the related slowing of her overall growth

Furthermore, security losses in 2008 devastated sovereign wealth funds, many of them in oil-rich countries, as well as Asian exporters. In 2008, they were estimated to hold \$3 trillion in assets, on their way to \$10 trillion. A year later, the estimate was \$1.8 trillion and optimistically forecast to rise to only \$5 to \$6 trillion by 2012. Lower oil prices have a lot to do with the downward revisions.

Fiscal Policy Reversal

The mid-2010 shift toward fiscal restraint in advanced lands is our fifth reason for slow economic growth in the years ahead. Only a few months ago, developed countries were all pumping fiscal stimuli into their economies to revive them from the worst recession since the 1930s.

Those stimuli and the related government borrowing have basically been offsetting the deleveraging and retrenchment of their private sectors, as is clearly the case in the U.S. (Chart 4). But before their economies proved able to live without government life support, developed country leaders in Europe and even Japan, with the exception of President Obama, decided to start withdrawing that immense government aid. What happened to cause this dramatic reversal? Did they decide that the stimuli weren't working? The bang per buck has been poor, but as that old history professor of ours used to say, "There are no 'ifs' in history." You'll never know what would have happened without the immense and global government aid. Maybe the world economy would have entered a depression. Besides, lack of success has not deterred politicians facing unemployed voters in the past from redoubling their efforts to stimulate.

More likely, this new zeal to limit government deficits, which started in Europe, was exactly what we foresaw way back in our December 1998 *Insight*, written just as the euro was about to be launched at the beginning of 1999. We stated that with a common currency and a one-size-fits-all monetary policy, individual countries would be forced to rely on fiscal policy to deal with local economic conditions and:

"the limit on fiscal stimulus will be default risks. Government bond investors and rating agencies will become the policemen and will blow the whistle. . . . It's even possible that economic differentials among countries may be so great that the common currency doesn't hold together, especially in the next European recession when unemployment leaps. . . ."

Well, the "next European recession" arrived, in 2008, and "the economy differentials among countries" may prove to "be so great that the common currency doesn't hold together."

Greek Junk

With the rating downgrades of Greek sovereign debt to junk quality and the rating cuts for Ireland, Portugal and Spain, other developed country governments such as Britain worry that they may be next. Indeed, rating agencies have raised red flags for the U.K. as well as the U.S. of eventual trouble if debt and deficit explosions are not contained.

Nevertheless, attempts to reduce fiscal stimuli to cut deficits may not work. The European Commission forecasts Spanish GDP to fall 0.4% this year. In cutting Spain's credit rating, S&P forecast only 0.7% average annual growth until 2016. Growth that slow will retard tax revenues and increase spending on unemployment and other benefits to the extent that deficit reduction will be very hard to achieve.

This problem exists in other European countries. Furthermore, unless GDP in a country grows faster than its deficit-to-GDP ratio, it's mathematically impossible for the government debt-to-GDP ratio to decline. With GDP growth in the years ahead likely to be below 3% in every European land, it will take draconian deficit cuts, that would almost certainly further depress GDP growth, to reduce the deficit-to-GDP ratios from their present levels to below those low economic growth rates.

Despite the sluggish economy, even U.S. voters are up in arms over the mushrooming federal deficit. A mid-2010 *Wall Street Journal* poll asked them about the attributes of a congressional candidate that would excite them, and cutting federal spending was in first place, the choice of 34%. And Congress is listening to the voters.

No doubt the basic reason for the difference between the U.S. and the other developed countries on the question of when to withdraw fiscal stimulus is that America has the globe's reserve currency, the dollar, and Treasurys that the world lusts after while the rest fret about sovereign downgrades. The possibility of the euro as a reserve currency is destroyed, at least for now. Sterling as a reserve currency is ancient history and the Japanese don't want the yen to become one. So the buck reigns supreme, with no feasible alternative. The Swiss franc is a safe haven but too small a market to be a meaningful alternative. The recent rush to gold may reflect a disdain for all fiat currencies, but it too is a small market.

America's unique ownership of the greenback and Treasurys gives her the luxury of being fiscally profligate—at least until an alternative arises. That could be China in a decade or two, but only after the yuan becomes freely convertible, and establishes a history of freedom from the government control that Beijing cherishes.

Our judgment is that meaningful withdrawal of fiscal stimuli in major countries in the near future will enhance the chances of another global recession. The bulk of the restraints, such as public sector pay freezes, constraints on unemployment benefits and tax increases, will fall on consumers who are already subdued spenders in developed countries. And then there is the high likelihood that fiscal restraint won't reduce government deficits in weak countries sufficiently to satisfy markets. Even though some like Greece are small economies, the intertwining of finance would then spread the woes throughout the eurozone and, indeed, the world.

The U.K.

Leading the charge for fiscal austerity is the new U.K. coalition government. It is deeply concerned over possible downgrades from triple-A for its sovereign debt after seeing the contagion from the Greek debt crisis spread among bond investors and rating agencies. With an 11.5% deficit-to-GDP ratio in 2009, it has genuine cause to be worried.

The newly-established Office of Budget Responsibility slashed the previous government's forecast of economic growth to 1.2% this year, 2.6% in 2011, 2.8% in 2012 and 2013 and 2.6% in 2014. Nevertheless, the government believes that spending cuts and tax increases equal to 6% of GDP over the next five years are necessary to avoid long-run trouble, even at the expense of considerable short-run pain and risk to the fledgling economic recovery. The government is obviously bracing for fights with labor unions and government employees in a country where about half the jobs depend directly or indirectly on the government. Still, the aim is to eliminate the structural deficit, the red ink even under normal economic conditions, by 2015. The IMF believes the fiscal restraint equal to 6% of GDP will reduce it by about 3%.

The U.K. government plans to chop the budget deficit of £115 billion in five years through £113 billion in fiscal restraint, including £83 billion in spending cuts. The hope is that slashing public spending while providing tax incentives to the private sector will invigorate the economy. Average government department budgets will be slashed by 19% over the next four years and 490,000 public sector jobs will be lost by 2015, or about 8% of the total. Child benefits for 1 million upper-income households will be eliminated. A rise in the value added tax will be effective next year.

Rising Protectionism

Without question, rising protectionism will slow or even eliminate global economic growth, our sixth reason for expecting slower economic gains in future years. Protectionism is aimed at sustaining, even increasing, domestic wages and prices. But as retaliation takes place, trade suffers. Recessions spawn economic nationalism and protectionism, and the deeper the slump, the stronger are those tendencies. It's ever so easy to blame foreigners for domestic woes and take actions to protect the home turf while repelling the offshore invaders. The beneficial effects of free trade are considerable but diffuse while the loss of one's job to imports is very specific. And politicians find protectionism to be a convenient vote-getter since foreigners don't vote in domestic elections.

Classically, protectionism takes the form of promoting domestic production by encouraging exports of goods and services while discouraging imports. Despite its lack of success, it's been tried often, going back to European mercantilism in the eighteenth century, Smoot-Hawley protectionism of the 1930s, and Japanese and Chinese mercantilism more recently.

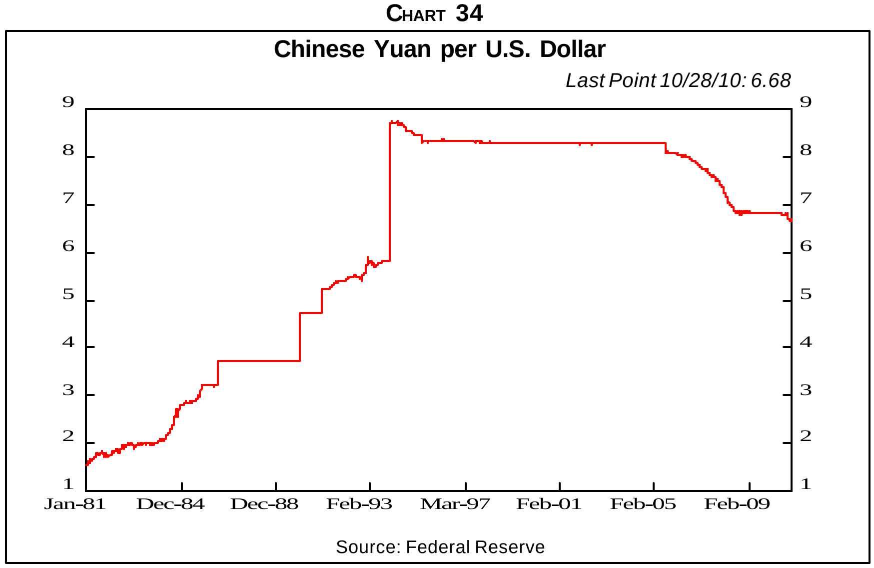
As discussed earlier, the recession started in the financial arena in early 2007 and as the crises spread, bank depositors got nervous. Ireland was already in recession by mid-2007 and, to preempt bank runs, the Irish government at the end of September guaranteed bank debt as well as deposits without limit in its six major financial institutions. That put the heat on other eurozone countries that feared that with the Internet and a few keystrokes, depositors in their banks would transfer their funds to the unlimited safety of Irish banks. So other countries followed quickly.

Protectionism Spreads

Countries were competing to see which could provide the best

(continued on page 24)

CHART 34



INVESTMENT THEMES

Our Investment Themes section reflects the positions that are in or being considered for our managed portfolios. Our rationale for each is explained in our January 2010 *Insight.* We may add or delete portfolio positions in the course of the month, but those changes will not be shown in *Insight* until the following month's report.

Treasury bonds (favorable) Treasurys should continue to rally as a safe haven in a sea of trouble, slowing growth and looming deflation despite the recent volatility caused by uncertainty over Fed policy. These are available through security brokers, banks and www.treasurydirect.gov as well as via ETFs and futures contracts.

The dollar vs. the euro. Also the **Dollar Index** (favorable) The eurozone remains in deep trouble and the buck is the world's safe haven. The euro has risen substantially since June, but renewed European woes, especially in Ireland, suggest renewed weakness in the eurozone currency. Implement this theme with futures contracts and ETFs on the dollar index as well as put options.

The dollar vs. Australia dollar (favorable). Australia has become a Chinese colony as the island continent's minerals are dug up and sent to China. And China is in the "stop" phase of her stop-go economic policy. This currency has also jumped since June, but we believe China will slow her growth substantially and reverse this rally. Implement this theme with futures.

Eurodollar futures (favorable) This theme depends on the Fed continuing to keep rates flat in the face of an uncertain economy, at least through the middle of the year. Big moves in eurodollar prices are small in absolute terms, so you need the leverage of futures contracts to make meaningful money. Calls on the futures are also available. Unbelievable winner year-to-date.

Income-producing stocks (favorable) Included are utilities, drugs and telecoms with high, safe and rising dividends. Also, high-grade munis, corporates, preferred stocks and master limited partnerships. They can be purchased individually or through ETFs.

U.S. stock market (unfavorable). Stocks have been moving sideways, on balance, since the spring, but with the slowing U.S. economy, looming deflation and likely resumption of eurozone woes, stocks in general appear vulnerable. Implement this theme with ETFs or futures on stock indices.

Commercial real estate (unfavorable) REITs look overblown in view of continuing commercial real estate woes. Individual REITs and ETFs on them can be shorted. Puts are also available on both.

Banks and other financial institutions (unfavorable) Medium-size banks are laden with questionable commercial real estate loans, and large banks are under a cloud with the ongoing eurozone crisis. Implement with ETFs or individual stocks.

Commodities (unfavorable) Many commodities are priced in dollars, so the greenback's strength depresses their prices. Also, popular sentiment is moving toward our forecast of slow global growth in the rest of 2010 and in 2011, and possibly a double-dip recession and deflation. All will reduce demand for commodities as stockpiling in China ends. We've been wrong on this theme since June, but still believe that the fundamental factors favor our position. Implement with futures and ETFs. Our favorite short continues to be copper as softness in global industrial production looms.

Chinese stocks (unfavorable). Chinese stocks remain questionable as the "stop" phase of her stop-go economic policy reigns, and have gone nowhere since late last year. ETFs are available, but they cover only Chinese stocks listed in Hong Kong.

NEW THEMES

Homebuilders (unfavorable). Massive inventories, enhanced by further foreclosures, are likely to depress existing home prices by another 20%. This and the resulting weak sales will hurt homebuilders. The flatness in these stocks as the S&P 500 rose in recent months is ominous. Implement with individual equities or ETFs.

Banks / Financial Institutions (unfavorable). Residential mortgage paperwork and possible renewed eurozone debt problems are troubling for major banks while smaller ones are laden with questionable commercial real estate loans. Here, too, the sideways patterns of these stocks in recent months while the overall market rallied gets your attention. Implement with individual stocks or ETFs.

Consumer Lenders (unfavorable). The equities of some have been flat in recent months, reflecting consumer zeal to repay debts as well as profit-killing new regulations, especially on credit cards. Implement with individual stocks. No suitable ETFs are available.

Summing Up

After a fast start to the month, stock indices ended up modestly ahead for October as investors digested mixed economic data while waiting for the Fed's next move as well as the results of the U.S. mid-term elections. The Dow Jones Industrials rose 3.1% last month while the S&P 500 index was up 3.4% and the Nasdaq advanced 5.9%.

The dollar continued its slide, especially against the yen, in October. Yields on 10-year Treasury notes moved up slightly through the month.

At its policy meeting early this month, the Federal Reserve is expected to leave its federal funds rate unchanged in the 0-0.25% range that it has vowed to maintain for an "extended period."

And the central bank may take additional actions to reinvigorate a lagging U.S. economic recovery, namely in the form of resuming quantitative easing—QE2—via purchases of Treasury securities. Minutes from the September Federal Open Market Committee meeting showed two views on whether QE2 was needed: those who favor action "unless the pace of economic recovery strengthened" and those who favored such action "only if the outlook worsened and the odds of deflation increased materially." Those in the act-now camp "consider it appropriate to take action soon," citing the persistently high jobless rate and stubbornly low inflation, while the wait-and-see crowd "saw merit in accumulating further information before reaching a decision."

PPI rose 0.4% in September vs. July. The core rate was up 0.1%. CPI, meanwhile, rose just 0.1% while the core rate was unchanged. The weaker dollar helped prop up crude oil prices last month with the per barrel price staying in the $80-$84 range.

The first reading of third quarter GDP growth showed a slight upward tick to 2.0% vs. the 1.7% gain in the second quarter, although the third quarter rate is not strong enough to put much downward pressure on unemployment.

Retail sales were up 0.6% in September from August, the third straight monthly increase, and data for July and August was revised upward.

Retailers reported healthy September sales as back-to-school shoppers were helped in part by discounted items. Same-store sales rose 2.8%, according to Thomson Reuters. Target saw a 1.3% increase while Costco's same-store sales were up 5%. Macy's was up 4.8%, Kohl's advanced 3%, and J.C. Penney rose 5.1%. BJ's Wholesale Club's sales were up 1.5% but Gap's sales fell 2%. Sales at Saks rose 6.5% while Nordstrom was ahead 7.5%. A group of seven teen-oriented retailers—including Abercrombie & Fitch, Buckle and American Eagle—reported a combined 6.7% rise in September sales.

The jobs picture continued to be bleak, with nonfarm payrolls falling by 95,000 in September as the 64,000 added by the private sector were more than offset by 159,000 jobs being shed by governments, half of them being temporary census workers. State and local government payrolls dropped by 83,000. The national unemployment rate remained at 9.6%.

Looking ahead to the coming holiday shopping season, the National Retail Federation projects that retail sales will rise a muted 2.3% over their 2009 level. So the outlook for holiday hiring by retailers looks dim. Many retailers say they'll barely increase their seasonal jobs from last year, when hiring was among the lowest in the 14 years. Wal-Mart and Best Buy said they won't hire any more workers than last year. Recruitment firm Challenger Gray forecasts that retailers will add up to 600,000 jobs in October, November and December vs. a net gain of 501,400 holiday jobs last year.

Housing starts rose 0.3% in September, thanks to a 4.4% increase in single-family units. Multi-family unit starts fell 9.7%. Building permit issuance fell 5.6%. Sales of existing homes rose 10% in September from August, the second straight monthly increase, but remain at low levels. Unsold inventories stood at 10.7 months while median price was down 2.4% to $171,700. New home sales were up 6.6% in September vs. August but down 21.5% from a year earlier. The median price stood at $223,800 while unsold inventory was at an elevated 8.0-month level.

The S&P/Case-Shiller house price index of 20 major cities fell 0.3% in August from July but was up 1.7% from a year earlier. That increase, though, was much less than the 12-month increase registered in July.

Consumer sentiment fell to 67.7 in October from 68.2 in September, according to the University of Michigan. Consumer confidence rose slightly to 50.2 in September from 48.6 in August, the Conference Board reported.

Fred T. Rossi
Editor

INSIDE THE NUMBERS

	Oct. 2010 % Change*	Year-to-Date % Change
Dow Jones Industrials	+3.1%	+6.6%
S&P 500	+3.4%	+6.1%
Nasdaq Composite	+5.9%	+10.5%
Nikkei Average	-1.8%	-12.8%
FTSE 100	+1.9%	+4.9%
	Oct. 29	**Sept. 30**
10-yr. Treasury note	2.61%	2.52%
$=¥	80.46	83.48
$=€	0.72	0.74

through Oct. 29

Deleveraging

(continued from page 21)

protection for its financial institutions. Then protection spread to its more classical import-export arena with the advent in late 2008 of massive U.S. consumer retrenchment and the globalization of the downturn that depressed goods and services purchases and trade. And there's nothing like high and rising unemployment to spur attempts to limit imports and promote exports. Recall the high-unemployment, slow recovery of the early 1990s when Pat Buchanan and Ross Perot on the right and Dick Gephardt on the left beat opposite sides of the same protectionist drum.

Sadly, the U.S. appears to be among the leaders for protection of goods and services against foreign competition. Vice President Biden said it was legitimate to have some portions of "Buy American" in the 2009 stimulus package, and it did so under the argument that taxpayers' money should support U.S. products.

Dumping, selling goods abroad at less than production costs because of subsidies, is always grounds for retaliation. China, with its huge growth in exports, is in many countries' crosshairs and in early 2010 was ranked the leading target for dumping and other protectionist measures.

China, in turn, discriminates against foreign companies bidding on government projects in favor of domestic firms in buying technology products. She requires vendors to be accredited for their products if they contain "indigenous innovation." China is also developing a system to screen foreign companies' acquisitions of local firms in order to keep control of key government-linked outfits.

Chart 35

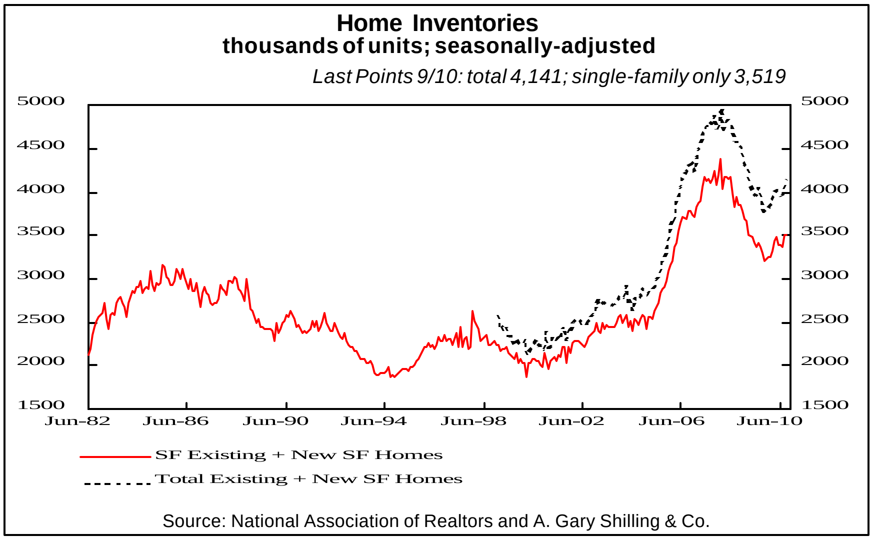
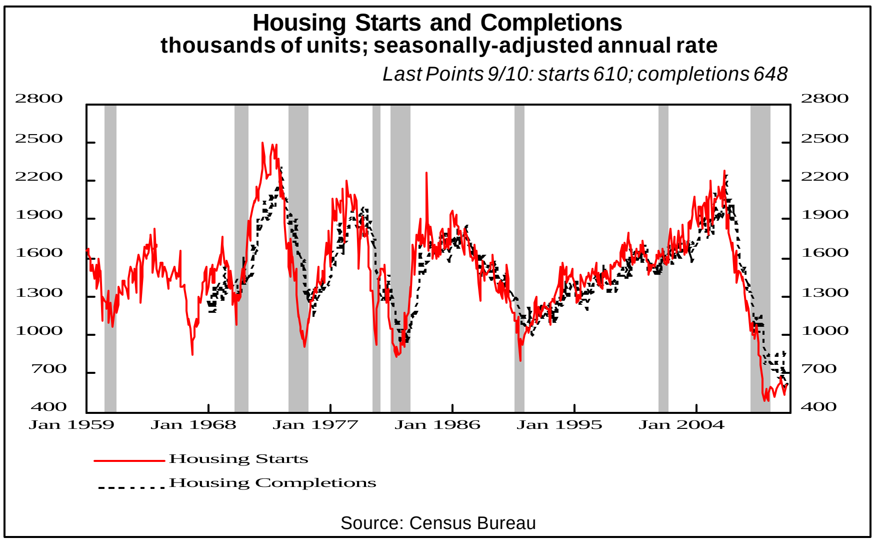


Chart 36



In an early 2010 survey of its members, the American Chamber of Commerce in China found they "are troubled by a mounting number of policy challenges ranging from the inconsistent enforcement of laws to China's discriminatory domestic innovation policies and regulations that limit market access into sectors that have been increasingly open." Authorities there tend to "disfavor foreign rights holders" in disputes over intellectual property, and insist on access to the technology of foreign firms located in China. China appears to be flexing its economic muscles in the form of nationalism and disdain for foreigners operating in that country.

Competitive Devaluations

Good old-fashioned competitive devaluations to spur exports and retard imports, a mainstay of the 1930s, have made a comeback. The idea is that a cheaper currency promotes imports while retarding exports, at least until trading partners make their currencies even cheaper. As we've detailed in earlier *Insights*, it's the economic health of trading partners that primarily determines export levels, not exchange rates. But that doesn't stop government leaders from manipulating their currencies, which is a lot easier than getting trading partner economies to grow faster and buy more of everything, including your exports.

China stopped allowing its yuan to appreciate until late June 2010 (*Chart 34, page 21*), in part because its labor costs are being undercut by countries like Vietnam and Bangladesh. Since then, the yuan has appreciated very little against the dollar, which has fallen against most other currencies. Partly in response, Japan, Switzerland, South Korea, Brazil, Taiwan and Vietnam, among others, have all intervened one way or another to cheapen their currencies.

Some believe the Fed's quantitative easing is aimed at depreciating the dollar. It sure seems to have had that effect, but the central bank denies any such intention. In any event, at the G-20 finance ministers meeting in South Korea in October, participants agreed to "refrain from competitive devaluation of currencies." Still, no specific rules or targets for trade and current account surpluses and deficits were set, and countries can still act on their own to offset currency fluctuations.

Working But Unsustainable

Since the early 1980s, world trade has functioned in a smooth but unsustainable fashion. The rest of the world produced and America consumed. In many foreign lands, households were weak consumers and big savers, so production exceeded domestic consumption. Their production surpluses were exported, directly or indirectly, to the U.S. where

CHART 37

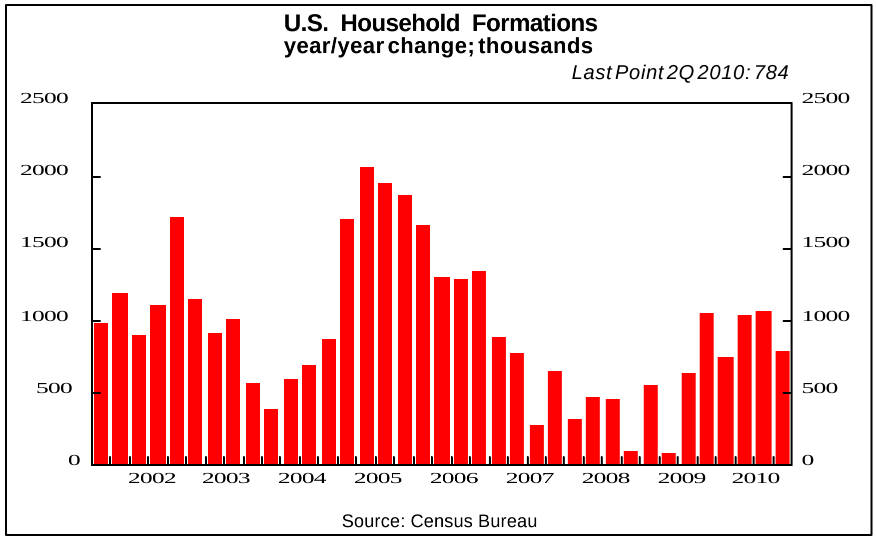


CHART 38

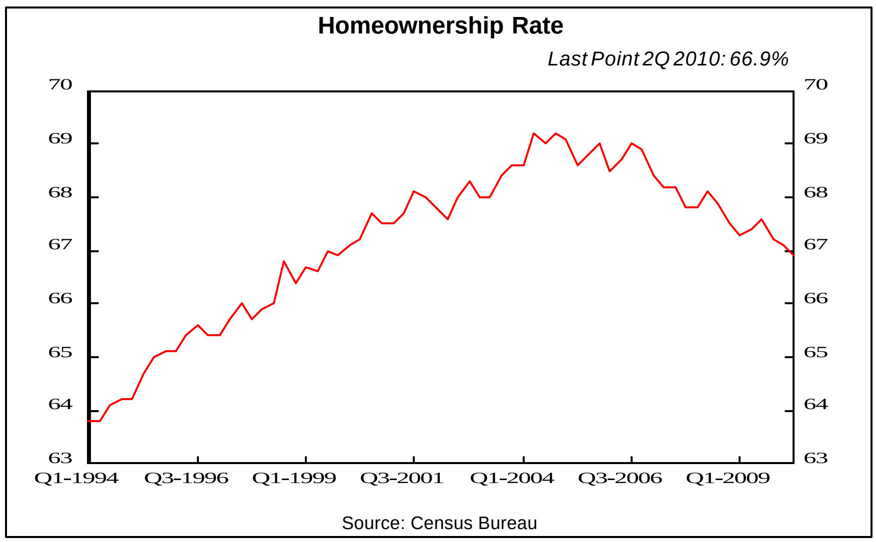
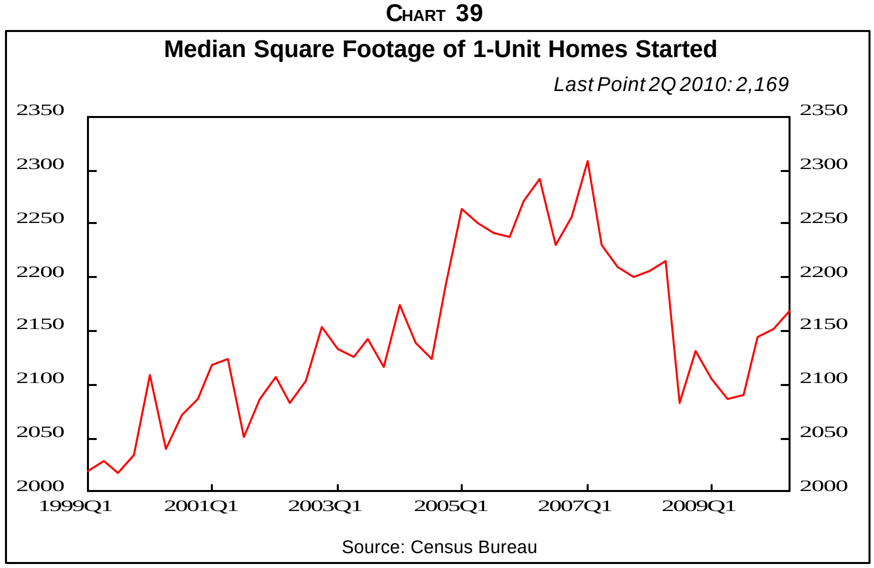


CHART 39



consumers were saving less and less (Chart 14) and spending more and more. Over the past three decades, a 1% rise in American consumer spending spiked imports by 2.4% on average.

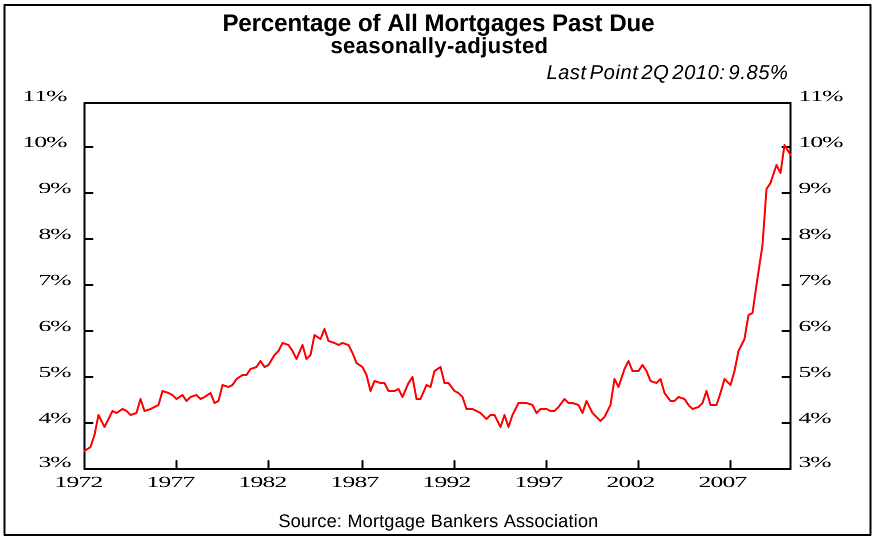
With their growing trade and current account surpluses, foreign nations had growing piles of dollars that they recycled into Treasurys and other U.S. investments, helping to hold down interest rates and making it cheaper for spendthrift American consumers to borrow easily and cheaply to fund their leaping debts (Chart 15).

This world trade system got a big boost after the Asian financial crisis in the late 1990s. Earlier, those lands had been living beyond their means and financing it with debts denominated in foreign currencies. When foreign investors got scared and refused to renew their loans, Asian currencies collapsed and deep recessions followed. In response, those lands emphasized exports, in part by keeping their currencies cheap against the dollar, and built huge foreign currency reserves from their mounting trade surpluses.

This system was unsustainable, but not, as many believed, because foreigners would eventually become overloaded with greenbacks and dump them. We've argued for years that yes, accidents can and do happen. But no major export-dependent country would risk the financial collapse and global depression that would probably result from dollar-dumping. That would be the end of their exports and economic growth and slaughter the value of their remaining dollars.

Instead, the earlier world trade lineup proved unsustainable because of the collapse in the U.S. housing bubble and the follow-on stock market nosedive and widespread financial crisis. That eliminated U.S. consumers' ability to continue to borrow to finance oversize spending and imports.

CHART 40



Now, with American consumers embarking on a saving spree, the U.S. will no longer be the buyer of first and last resort for the globe's excess goods and services, as shown by declines on balance in the trade and current account deficits (Chart 28). Furthermore, with slower global growth for years ahead, virtually every country will be promoting exports to spur domestic activity. When every country wants to export and none want to import, the pressure for protectionism leaps.

Excess House Inventories

Our seventh reason for slow U.S. growth in coming years is the combination of the huge overhang of excess house inventories, the shock of price declines, underwater mortgages, and the resulting weakness of the sector for years to come. Inventories of single- and multifamily housing units are well off their peak, but still huge, and excess inventories are the mortal enemy of prices. Unwanted houses are cleared out by chopping prices to attract bargain hunters. *Chart 35 (page 24)* shows the reported inventories of new and existing single-family homes since 1982. The dashed line adds in inventories of existing multifamily units since they were first reported in 1999. The long-term average of the total is about 2.5 million, suggesting that number is about the normal working level of inventories. So anything above that, 1.6 million of the 4.1 million total in September, is excess inventories. That's a lot considering that about 1.5 million houses are built per year on average (*Chart 36, page 24*).

Excess inventories persist despite the collapse in new construction because household formation has also nosedived since the 2004–2005 peak (*Chart 37, page 25*). A *household* is defined as one or more people occupying a separate dwelling unit. So households aren't formed in a vacuum, waiting to move into unoccupied units. No, no. Household formation is governed by all the forces behind people's willingness and ability to move into a separate abode. During the housing bubble, the prospects of quick profit induced many to leave their families early and ditch roommates to buy the biggest, most expensive houses that loose lenders would let them finance. But afterward, with declining house prices, stringent lending standards, and rising unemployment, they stayed put and household formation dropped sharply.

Disappearing Households

In fact, many households have disappeared as foreclosures extinguished homeownership. Some of the dispossessed move into rental units, so they're still occupying abodes, just different ones. But those who double up with family and friends are putting additional units on the market and adding to inventory. Notice (*Chart 38, page 25*) that the housing boom-driven jump in home ownership is being reversed. And that's true for all age brackets and every ethnic group. Also, the size of new houses is falling as buyers conclude that, with declining prices nationwide for the first time since the 1930s, an abode and a great investment are no longer contained in the same package—their owner-occupied houses (*Chart 39, page 25*). Smaller houses, of course, also save not only on downpayments and monthly mortgage bills but also on utility, maintenance and property tax costs.

Home mortgage delinquencies continue to skyrocket (*Chart 40, opposite page*), but Washington mandated a moratorium on foreclosures as lenders and servicers were encouraged to modify mortgages to keep stressed homeowners in their houses. These attempts are faring poorly since many who couldn't afford chicken coops even when jobs were plentiful were allowed to finance and buy four-bedroom houses. An economic privilege becomes an economic right when society believes it can afford it for everyone. We've learned, painfully, in the past few years that America can't afford home ownership for all, especially those who don't have the incomes and assets to pay for it.

Failed Attempts

As these modification attempts continue to fail, many more houses will be foreclosed and dumped on the market by lenders, adding to excess inventories and downward price pressures. Ditto when the tax credit for new and some existing homeowners ended in April 2010. And the "robo-signing" flap over improperly signed mortgage documents appears to be ending so lender-imposed moratoria on foreclosures are terminating. Note, however, that problems remain in figuring out who actually holds mortgages that went through multiple rounds of securitization and may take years to settle.

More hidden inventory will also surface as speculators who own empty units eventually give up on renting them or waiting for higher prices and, instead, list them for sale. And there's already plenty of hidden inventory. We estimate that somewhere up to 1 million housing units have been held off the market by sellers who have been waiting for higher prices but may well give up and list them for whatever buyers will pay. So the total excess inventory may be 3 million or even higher.

More House Price Weakness

Median single-family house prices nationwide have already fallen 28% from their peak in early 2006 (Chart 22). We see excess inventories pushing them down another 20% from here. As house prices remain weak due to excess inventories, those surplus homes will only slowly be absorbed in coming years as household formation lags. That will keep new house construction at low levels. This is a small component of GDP, but a volatile one. Its likely failure to return to even its long-term average of 6.1% of real GDP from 2.2% in the third quarter of 2010 for a number of years will rob economic growth of an important component. Those who believe that population growth will promote a major revival in housing apparently don't realize that household formation, not population growth, is what's important, as mentioned earlier. Just as faith in ever-rising prices propelled home ownership in the post–World War II era, the shock that house prices nationwide can and do fall substantially may well keep household formation (Chart 37) subdued for many years and home ownership (Chart 38) falling.

Furthermore, demographics are not favorable for housing in the next decade or so. The postwar babies, many now in their 50s, are all housed, and those in their 30s and 40s, the prime first-time homebuyer age when homeowner rates leap, are fewer in number (*Chart 41, page 28*). Also, homeownership was stimulated in the early 2000s by extremely generous mortgage terms for first-time homebuyers, typically people under 45 and especially those under 35.

Furthermore, as the baby boomers retire and seek smaller living spaces, many of the McMansions built in the past decade may be divided into retiree apartments, reducing the demand for other housing units. And population growth may slow as high unemployment continues to retard the inflow of immigrants, an important component of past gains, and restrain domestic births.

Deflation Slows Growth

Chronic deflation, the result of global supply exceeding global demand is the eighth reason we're forecasting slow economic growth in the next decade or so. Later, we'll make the case for chronic deflation despite the ongoing massive monetary and fiscal stimulus, but here, we're interested in its effects on economic growth.

As discussed in our two *Deflation* books a decade ago, and in many subsequent *Insight* reports, chronic deflation spawns self-fulfilling deflationary expectations. Today, who would have the guts to tell a friend he paid the full sticker price for a vehicle? Years of rebates have trained car buyers to expect continuing and even bigger rebates. So they wait to buy. That leads to excess inventories that require even larger price concessions. Buyer suspicions are confirmed so they wait longer, promoting more inventory buildup, more price cuts, etc. in a self-feeding cycle. An effect, of course, is to retard spending and slow economic growth as well as promote more deflation.

The auto industry isn't alone in facing deflationary expectations. Constellation Brands offered promotions on expensive liquor brands to try to stem the switch by drinkers to cheaper brands. Aggressive and widespread coupons and rebate offers appear on store shelves and in newspapers. Supermarkets have developed a pattern of combining discounts on national brands with more prominent displays of house labels, and those that don't go along lose shoppers. About a third of shoppers buy only goods on sale, compared with one in six two years earlier. Kroger has been successful in attracting business with low prices, and intends to continue that strategy.

The reality of deflation at the supermarket level is backing up to food producers who are finding they can no longer count on 2% or 3% annual retail food price increases to

Chart 41

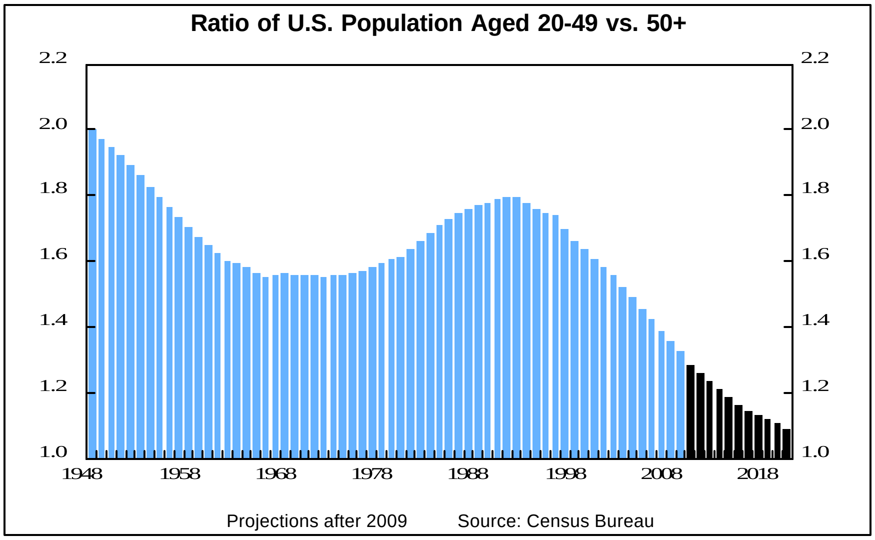


Chart 42

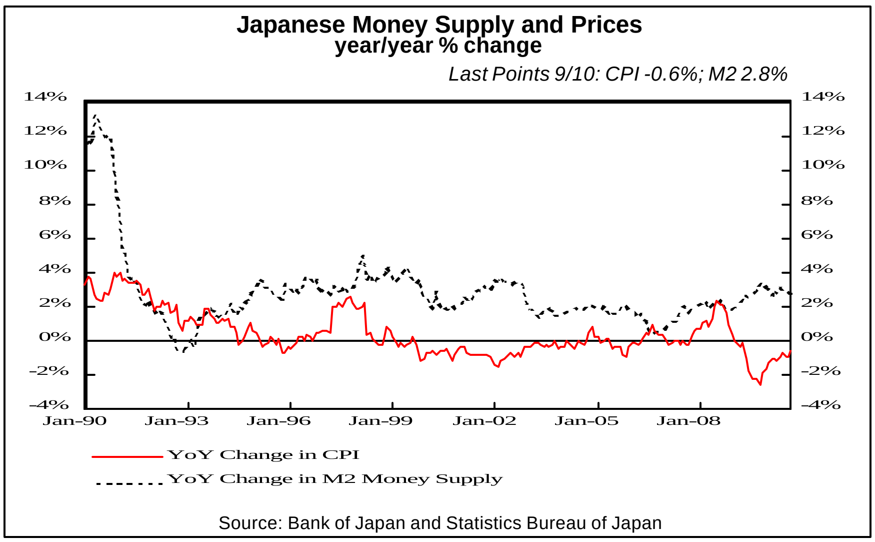
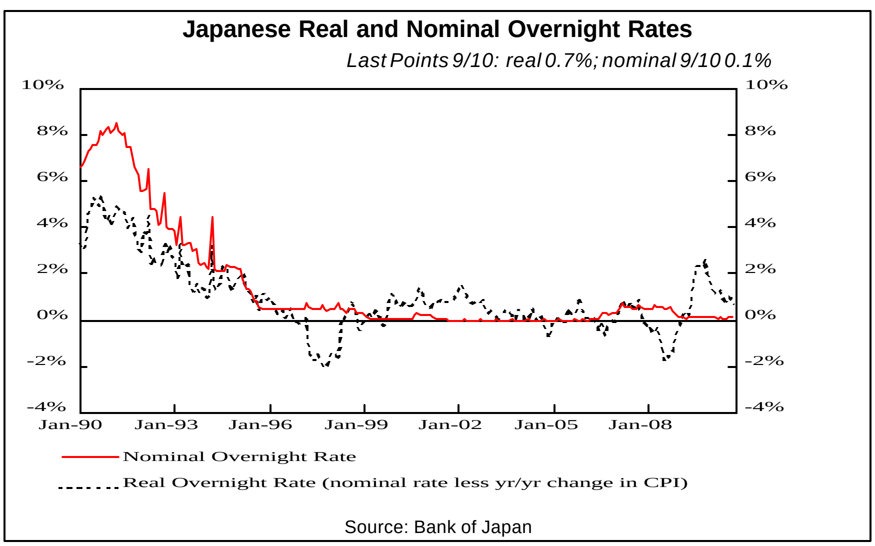


Chart 43



cover any rises in commodity, labor, packaging, and transportation costs. Hotels and cruise lines with more than ample excess capacity find they must continue to offer big discounts to attract conscious consumers.

Worried Central Banks

Central banks and governments take deflation very seriously for three reasons. First, in deflation, conventional monetary policy is impotent once interest rates are reduced to zero; second, in deflation, even zero nominal interest rates are positive in real terms and therefore retard borrowing; and third, deflation can spawn the self-feeding deflationary expectations we just discussed.

Japan has been mired in deflation for almost two decades despite consistent positive money supply growth (*Chart 42, opposite page*). But since zero interest rates are positive in real terms in deflation (*Chart 43, opposite page*), money isn't free. And it's been an almost continuous deflationary depression in Japan with cautious consumers waiting for ever-lower prices before buying. It's hard to believe, but conditions are so severe that in early 2010, the Japanese government pressed the Bank of Japan to set a target for inflation and then implement measures to achieve it. In March 2010, the Finance Minister said, "Two or three years is too long. If possible, I hope that the consumer price index turns positive by the end of the year," although he added that his goal reflected his "wishful thinking." How could any self-respecting central banker ever deliberately attempt to create inflation? Well, the Fed wants to.

In the early 2000s, the Fed was so worried about deflation that it assigned a dozen of its top economists to study the Japanese experience in order to avoid a U.S. repetition. The U.S. central bank concluded that it would need to act early and massively to keep deflationary expectations from developing. The price index for personal consumption expenditures excluding food and energy, the Fed's favorite inflation measure, was running below 1 percent at the time, although later revised upward.

That has a lot to do with the Fed cutting its federal funds rate to 1% in June 2003 and keeping it there until June 2004. Central bankers are well aware that economy-stimulating negative real interest rates are impossible to achieve in deflation since, as we understand it, nominal rates stop declining when they get to zero.

Deflationary Expectations

Deflation is self-feeding and a key, but by no means the only, self-perpetuating mechanism is the anticipation of lower prices. But how much deflation does it take for consumers and businesses to wait for lower prices before buying? There is no simple answer, but it depends on at least four factors:

1. *The breadth of deflation.* Declining prices have to spread across a wide spectrum of goods and services to be convincing. The declines in energy prices in 2009 were too narrow to be convincing.

2. *The chronic nature of deflation.* The consumer price index (CPI) and producer price index (PPI) dropped year over year in 2009, but only for a few months due to declining energy prices. Furthermore, against the background of nonstop inflation since World War II, that experience was not long-standing enough to convince people that it would persist.

3. *Decelerating prices*, at least in the short run. Few Americans expect deflation, and most regard a return to significant inflation as inevitable. This probably means that it will take a pattern of smaller and smaller rates of inflation turning into bigger and bigger rates of deflation to be convincing. Inflation rates have fallen from double digits to essentially zero in the past 25 years. If deflation sets in, but at a steady rate of, say, 1% per year, it will probably take a number of years before people believe in its permanence. More immediately convincing would be 1% deflation followed by a 2% decline in general prices the next year and 3% the following year.

4. *The amount of deflation.* Of course, the deeper the deflation, the more convincing it becomes. Deep deflation would be a big persuader as it promotes big drops in interest rates and tangible asset and commodity prices, and unbelievable consumer bargains, but also job losses in firms that don't cut their costs and prices. Those living on fixed incomes would feel like kings as their purchasing power grows while highly leveraged individuals and corporations would fail.

Furthermore, deflation must be significant enough to spur action. Even if you are convinced that a decline in shoe prices is in the offing, it may not be big enough to make you wait to buy. Waiting could entail another trip to the shoe store to check prices, and besides, if you buy a pair now, you get the use of them in the meanwhile.

In addition, the cost and discretionary nature of a good or service influences the sensitivity to deflation. An expected 5% decline in car prices next year may make you wait. If you're spending $30,000, that's a cool $1,500 in your pocket, and you can probably nurse your old bus along for another year anyway. Recall how rebate programs have pushed vehicle sales up and down like ping-pong balls. But a guaranteed 10% drop in toothpaste prices next month may not make you get out the pliers so you can, by vigorous squeezing, make the old tube last until the lower price is in effect—or to brush your teeth with Ajax while waiting for that price drop.

Trigger Point For Deflationary Expectations

Taking these four factors into account, what would it take to trigger deflationary expectations? Probably not as big a decline in prices as the 3% inflation rate level that seemed to touch off inflationary expectations in the 1970s. Even before that decade, folks had gained familiarity with rising prices throughout the postwar era and were relatively insensitive to the inflationary beast. Been there, done that.

Deflation, however, is a different animal, not seen since the 1930s, and few of us today have had first-hand experience with it. Widespread and chronic falling prices would be such a shock to most that it would probably take less deflation today than it took inflation earlier to get people's attention. Our judgment is that declines in the prices of most goods and a fair number of services, averaging 1% to 2% and lasting for several years, would do the job. Then, anticipation of lower prices by buyers and all of the other self-feeding aspects of deflation would kick in.

Of course, few readers believe chronic deflation is in the wings, so we'll take some words later to make the case that ongoing annual declines in general price indexes of 2% to 3% are likely. If we're right, the world will be quite different than with the 2% to 3% annual inflation rates that most investors currently expect.

State and Local Duress

Another drag on U.S. economic growth in future years will be restrained state and local spending. The recession made life tough for state and local governments. Revenues have plummeted but costs stubbornly refuse to follow. Taxpayers, under financial distress from falling house prices, uncertain stock prices, and high unemployment, deplore tax increases. But they don't want cuts in essential services. Something's got to give.

As unemployment leaped and personal income was compressed in the Great Recession, state personal tax collections—a third of tax revenues in 28 states—fell. Corporate income taxes were also stressed. And as consumers hiked their saving rates for the first time in a quarter-century, state sales taxes also declined. That's bad news for state governments that get 55% of their revenues, before federal transfers, from these three sources. Local governments receive a third of their revenues from property taxes, which are starting to fall as assessments catch up with declining house prices and commercial property values. U.S. city property tax revenues are expected to fall 1.8% in fiscal 2010.

The federal government transferred $246 billion to state governments from the 2009 fiscal stimulus package of $862 billion to help them, but the money from Washington will run out by 2012. The budget legerdemain that, no doubt, allowed rapid growth in state spending in recent years is under fire. Spending growth averaged about 7% annually, and debt leaped 93% from $1.2 trillion in 2000 to $2.4 trillion in 2009. It obviously takes a lot of gnashing of teeth in the outer darkness for state and local governments to flatten, much less cut, their spending after a decade of rapid growth.

Jumping municipal employee costs have been the main reason for mushrooming spending, and cutting what are often unionized state and local workforces is very difficult. Since the recession started in December 2007 through September 2010, private payroll employment has dropped 6.6%, but state and local jobs declined only 1.2%—and that's a lot by historical standards. According to the Bureau of Labor Statistics, in the long run, including business expansions and recessions, layoffs and discharges in the public sector occur at only one-third the rate of the private sector. Public employees seldom lose their jobs due to cost-cutting or poor performance.

Unfunded Pension Costs

Reported state and local bond debt and debt growth vastly understate financial obligations because of underfunded pension and retiree health care obligations. The Pew Center found that as of June 30, 2008, state reports show they are obligated for $3.35 trillion for pension benefits owed to current and retired employees. Nevertheless, they have only contributed $2.35 trillion, so those retirement plans are underfunded to the tune of $1 trillion. Moreover, the Pew Center study found that states on average have set aside only 7.1% of retiree health care and other nonpension benefits, and 20 states have reserved nothing.

Another study noted that state and local pension plans use a much higher interest rate to discount the future cost of their liabilities than is likely in the ongoing low-inflation, low-interest-rate climate. Therefore, that study estimates underfunding at $3.2 trillion. Because of generous state and local governments, annual pension costs for state and participating local governments more than doubled from fiscal 2000 to $64 billion in fiscal 2008.

Raise Taxes, Cut Services

In reaction to their financial woes, many state and local governments have attempted to raise taxes and fees. The usual suspects include higher sin taxes on tobacco and alcoholic beverages as well as taxes on companies based out of state but doing some business in the state. State and local governments are also making some service cuts. Education expenses, nearly sacred in many cities and suburbs, are under fire as 25 to 30 states cut funding for K–12 education in fiscal 2010 and at least 15 are likely to cut outlays in fiscal 2011.

These attempts to raise taxes and cut spending have proved wholly inadequate to solving state and local government funding problems. And those woes appear chronic, especially if our forecast of slow economic growth and even deflation is valid. Rises in taxable personal and corporate incomes will be muted. Retail sales and taxes on them will be sluggish as consumers persist for the next decade in their saving spree, replacing the borrowing-and-spending binge of the past decade, as noted earlier. House prices are likely to fall further in the next several years, under the weight of gigantic excess inventories. Meanwhile, commercial real estate's high vacancies and severe financial problems will take years to resolve, keeping prices depressed for some time. So, all things considered, local government property taxes are likely to be curtailed for many years.

The taxpayer revolt that began with Proposition 13 in California in 1978—which limits real estate taxes to 1% of assessed valuation and annual increases in valuation to 2% unless the property is sold—has resumed. In 2008, Indiana cut property taxes an average 30%, starting in 2010, and capped them at 1% of assessed valuation on residential homes, 2% on rental properties and farms, and 3% for businesses. In New Jersey, the drastic reforms pushed through by Gov. Chris Christie include a 2% cap on property tax increases and a 2% limit on state tax and spending hikes.

CHART 44

Average Compensation: June 2010
$ per hour worked

	a. state & local	b. private sector	Ratio a/b
Total compensation	$39.74	$27.64	1.44
Wages and salaries	26.13	19.53	1.34
Benefits	13.62	8.11	1.68
Paid leave	3.01	1.86	1.62
Supplemental pay	0.34	0.78	0.44
Health insurance	4.55	2.08	2.19
Defined-benefit pension	2.86	0.42	6.81
Defined-contribution pension	0.31	0.54	0.57
Other benefits	2.55	2.43	1.05

Source: Bureau of Labor Statistics

Labor Costs

Taxpayers are beginning to force state and local governments to curb labor costs, which account for half their spending, or $1.1 trillion in wage and benefit outlays in 2008. Years ago, the social contract held that those employees received lower wages than private sector workers, so early retirement provisions and lush pensions allowed them to catch up in their later years. But since the early 1980s, the private sector has been globalized with very little growth in real incomes. Meanwhile, state and local government employees have continued to receive pay raises in excess of inflation and now have wages that are 34% higher than for private sector employees.

But it's in benefits where state and local employees really shine, with a 68% advantage (*Chart 44*). Health insurance, retirement benefits, life insurance, and paid sick leave are not only much more available to public than private employees, but much richer. Public sector defined-benefit plans and other retirement costs also are high because those employees can usually retire at age 55, after 30 years of employment, with pensions equal to 60% or more of final salary and indexed for inflation.

Since many jurisdictions base pensions on salaries in the last one to three years on the job, some—like New York City—routinely give those close to retirement lots of overtime so they end up retiring at close to their base pay levels—*spiking*, it's called. New York Attorney General Andrew Cuomo in early 2010 cited the case of a cop with a base salary of $74,000 who got $125,000 in overtime in his last year of employment, pushing up his total retirement costs by $1.2 million. In contrast, private defined-benefit pensions are typically based on the last five years or career average pay.

Furthermore, in California, New Jersey, Utah, and other states, government employees can double-dip by retiring early and then resuming their previous jobs or taking other government positions. So they get salaries and pensions at the same time. In New Jersey, someone can hold simultaneous government jobs—say, small-town mayor and state senator, both part-time positions, while teaching full-time in a public school—all the while contributing to the state pension fund from three different jobs and ensuring a very comfortable retirement.

CHART 45

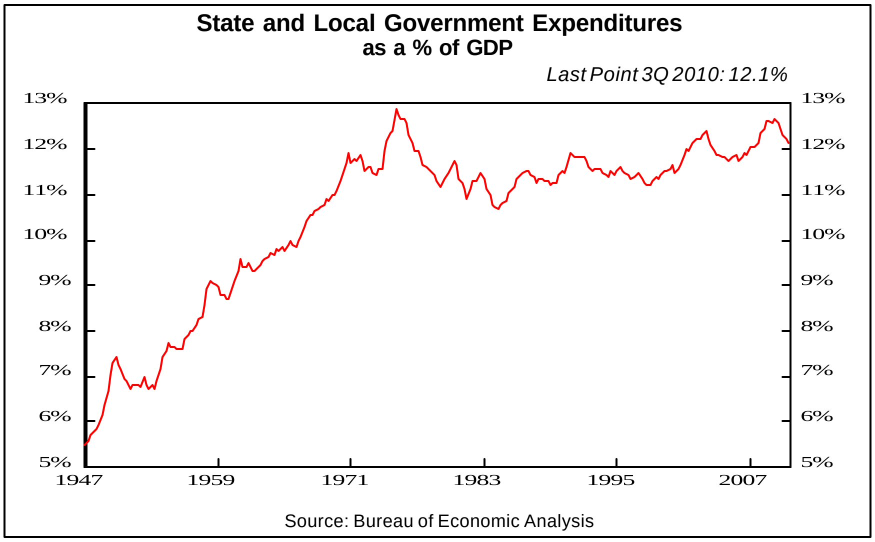
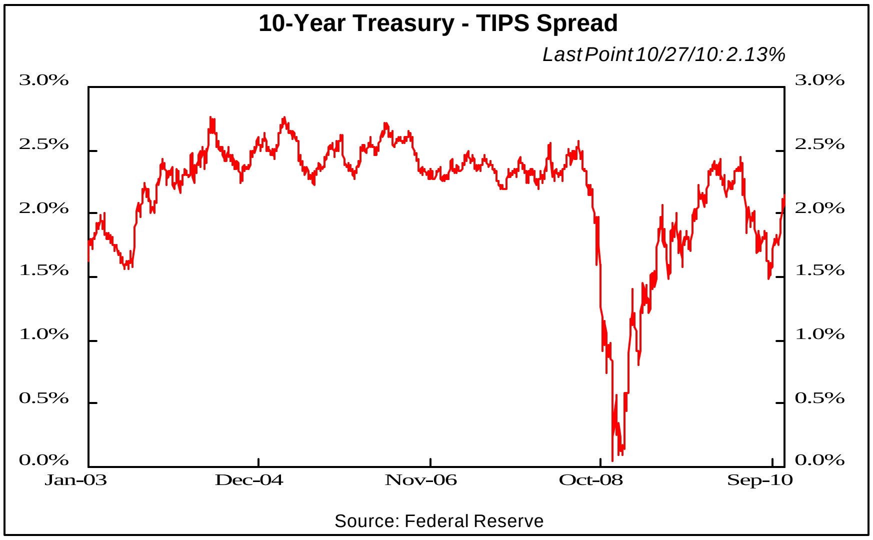


CHART 46



Taxpayer Revolt?

People working in the private sector apparently were willing to accept the fact of higher pay, more job security, and better retirement benefits for state and local government employees in past years. High employment and robust economic growth at least held out the hope that the lots of private sector workers would improve tomorrow. But with slow economic growth, limited income expansion, and high unemployment now in evidence to voters who expect them to persist in future years, their attitudes have changed.

Americans still want basic municipal services, but they are coming to believe that they're paying too much. Recently, 10 states have required employees to increase their contributions to their benefit plans. Indiana's health savings accounts for state employees have been remarkably effective—since people are, in effect, spending their own money—and have cut costs by 11%. Others, including New York, Nevada, Nebraska, Rhode Island, and New Jersey, are reducing new-employee compensation by raising their retirement ages, moving toward defined-contribution plans, eliminating spiking, and reducing pension benefit payouts while increasing employee contributions.

The ramifications of meaningful restraints on state and local government spending would be profound since that sector has been a source of stability in employment and the economy for decades. In the third quarter of 2010, state and local government spending accounted for 12.1% of GDP, at the top of the range that it's held since the early 1970s (*Chart 45*). That share leaped in the early post–World War II decades largely to educate the postwar babies. After they left high school and college, labor and other costs elsewhere in state and local budgets leaped to keep the total at 12% to 13% of GDP. But in the next decade, municipal governments' share of GDP may decline significantly.

2.0% Growth May Be High

Please note that the nine economic growth-slowing forces we've discussed make 2.0% annual advances in real GDP in coming years reasonable, maybe even optimistic. The switch from a quarter-century-long consumer borrowing-and-spending binge to a saving spree will cut 1.5 percentage points off the 3.7% rate of the lush 1982–2000 years, as discussed earlier.

That alone brings growth down to 2.2%, and the eight other forces—global financial deleveraging, increased government economic involvement and regulation, weak commodity prices, fiscal restraint in developed countries, rising protectionism, depressed housing activity, deflation and state and local government spending—can easily reduce growth by 0.2 percentage points more.

Chronic Worldwide Deflation

In the late 1990s, we predicted chronic deflation—to start with the next major global recession. Well, the Great Recession arrived at the end of 2007, so in several years we'll know whether our prognostication of chronic worldwide deflation will be valid. We hope it is, not only to give us credibility, but also to boost distribution of our new book! Very few others believe deflation is possible in democracies with paper money, despite the clear evidence in Japan, the world's second largest economy.

We also think we'll be right on the cause of deflation—an excess of supply over demand, with monetary policy playing only a minor and largely impotent role. Furthermore, the arrival of chronic deflation would substantiate the two books we wrote years ago on the subject, although it would be a Pyrrhic victory since they were published so many years ago that they're both long out of print. The books are *Deflation: Why It's Coming, Whether It's Good or Bad, and How It Will Affect Your Investments, Business and Personal Affairs* (Lakeview Publishing, 1998), and *Deflation: How to Survive and Thrive in the Coming Wave of Deflation* (McGraw-Hill, 1999).

As shown by the spread between the yields on 10-year Treasuries and Treasury Inflation-Protected Securities (TIPS), investors expect inflation to run at 2.13% 10 years hence (*Chart 46, opposite page*). Nevertheless, current interest rates reflect two diametrically opposite investor views. Yields of only 1.18% on 5-year Treasury notes portend deflation, but buyers of 5-year TIPS expect annual inflation of 1.73%. So, at a recent auction, they paid a negative yield of 0.55%, the difference between the two numbers. If inflation is zero or lower over five years, they lose principal. Simply amazing!

No Way!

In any event, most Americans have never seen anything but inflation in their business careers or lifetimes, so they think that's the way God made the world. Few can remember much about the 1930s, the last time deflation reigned. They don't realize that inflation is a wartime phenomenon. In peacetime, deflation rules, as shown in *Chart 47*. Notice that in the 92 war years since 1749, including shooting wars, the Cold War, the War on Poverty, and the recent War on Terror, wholesale prices rose 5.77% per year, on average. In the 168 years of peace, they fell an average 1.16% annually.

Starting in 1941, the nation suffered a uniquely long era of mostly war years,

CHART 47

Historic Inflation and Deflation

Period	Military Engagement	No. of Yrs.	Annualized Wholesale Price Change
1749-1755	Peacetime	6	-0.50%
1756-1763	French-Indian War	8	2.27%
1764-1774	Peacetime	11	-0.35%
1775-1783	American Revolution	9	12.31%
1784-1811	Peacetime	28	-1.91%
1812-1815	War of 1812	4	7.78%
1816-1845	Peacetime	30	-2.36%
1846-1848	Mexican-American War	3	-0.40%
1849-1860	Peacetime	12	1.05%
1861-1865	Civil War	5	14.75%
1866-1916	Peacetime	51	-0.74%
1917-1918	World War I	2	23.92%
1919-1940	Peacetime	22	-2.31%
1941-1945	World War II	5	6.12%
1946-1992	Cold War	47	4.20%
1992-2000	Peacetime	8	1.43%
2001-2009	War on Terror	9	2.53%

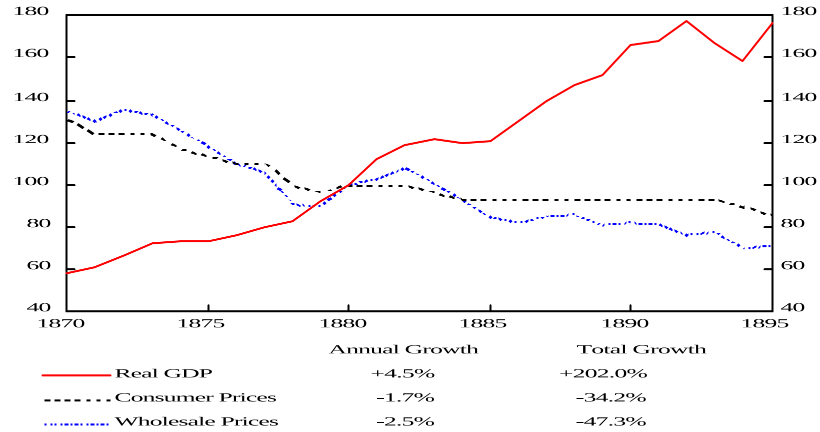
	No. of Yrs.	Avg. Price Change
Wartime:	92	5.77%
Peacetime:	168	-1.16%
Years Total:	260	1.29%

which actually started with rearmament in the late 1930s. This was followed by World War II, which promptly gave way to the Cold War that was augmented by the War on Poverty, and now the War on Terror. Fueled by excess government spending on Vietnam and Great Society programs, inflation rates began to rise in the late 1960s.

By 1980, with double-digit rates prevailing, most forecasters believed high inflation would last forever. The Philadelphia Federal Reserve Bank's inflation expectations survey that year found professional forecasters looking for consumer price index (CPI) inflation of nearly 9% annually for the next 10 years. We were almost alone at the time in predicting a declining inflation trend and eventual drop to 3 percent rates or less. In fact, CPI inflation peaked in 1980, averaged 4.7% over the next decade, and dropped below 3% a few years later (Chart 13).

Chart 48

Real GDP, Consumer Prices and Wholesale Prices: 1870-1895
1880=100



Source: *Historical Statistics of the United States*

The Root Cause of Inflation

In free markets, inflation results when ex ante demand exceeds supply, and deflation when ex ante supply exceeds demand, assuming prices are allowed to move up or down to bring supply and demand together. Historically, inflation is associated with wartime because it's then that the federal government creates excess demand for goods and services on top of an already fully employed economy. Recently, of course, Washington has been a big spender and is likely to remain so in the slow-growing economy we foresee, as mentioned earlier. But these huge outlays aren't even offsetting severe weakness in the private sector (Chart 4).

The federal government is the only sector that can overspend enough to create inflation because it's the only one with the credibility in financial markets to float the immense borrowing to finance it. Other sectors, especially real estate, occasionally attempt huge and chronic outside financing but soon run out of lender credibility, as was seen in 2007–2008 with the collapse of subprime mortgages, Bear Stearns, and Lehman Bros. Once inflation is well established, as in the 1970s, however, federal deficits don't appear that huge, because federal receipts benefit as taxpayers are pushed into higher brackets and corporations are taxed on underdepreciation and inventory profits.

Also, we don't believe that inflation is a monetary phenomenon. Even if money may be linked to inflation or deflation in some cases, it likely isn't the prime mover even then. Those who believe it is have to consider the monetary authorities to have been reckless and irresponsible for allowing the money supply to explode in the early 1940s and induce subsequent major inflation.

The Handmaiden

Obviously, during World War II, monetary policy was merely the handmaiden of fiscal policy. With so much of production going to the military, there was limited output of civilian goods and services, far less than the purchasing power in the then-fully employed economy. The government didn't want to risk reducing patriotism by raising taxes to soak up the surplus income and finance the war effort. So it resorted to other means—selling war bonds and mushrooming the money supply. The inflationary response to this fiscal policy–induced explosion in the money supply came later after wartime price and wage controls were removed.

In any event, when the nation is not at war—a shooting war, a Cold War, or the War on Terror—deflation is the norm as government spending in relation to GDP drops back. During those times, the productive capability of the nation, and now the world with globalization, is so great that supply chronically exceeds demand. That's what we believe lies ahead, assuming that the War on Terror will be wound down and not escalate into Cold War dimensions. That implies that deflation will reign until the next major war or some similar event. And unfortunately, unless human nature suddenly changes, there's another war out there in future years, waiting for us in the underbrush.

Two Flavors

Deflation comes in two flavors: the good deflation of excess supply and the bad deflation of deficient demand. Good deflation is driven by new, productivity-soaked technologies that expand supply faster than demand can catch up. Actually, new technologies aren't really new by the time they generate good deflation. Think about computers. They were first developed right after World War II, but even with the advent of PCs, computers had limited impact on the economy until much later. Ditto for other post–World War II new technologies such as the Internet, telecommunications, and biotech. Only in recent years have they collectively become large enough to have importance to the overall economy. Today, deflation-spawning productivity is simply gushing from these new technologies, both in their production and their use. Think about the explosion in computer consumption in recent decades while prices, adjusted for mushrooming computer power, collapsed.

The American Industrial Revolution was a huge driver of good deflation. It commenced in New England in the late 1700s along with its genesis in England, but only came into full flower and became big enough to drive the economy after the Civil War. Similarly, railroads were first developed in England in the mid-1700s, but only after the Civil War was this new technology large enough to drive the U.S. economy as railroads pushed across the continent, carrying people westward and bringing agricultural products and minerals east. That opened up vast acres for farmers, ranchers and miners.

More Productivity Equals Lower Prices

Overall, U.S. productivity after the Civil War grew at a sustained rate unequaled at any other period of history. Real GNP per capita grew at an average annual rate of 2.1% from 1869 to 1898, and the population rose at about the same rate, encouraged by waves of immigrants. Consequently, real GNP grew 4.3% per year in the greatest period of sustained growth in American history. That compares with 3.7 percent in the 1982–2000 salad years.

The availability of so much output produced at such lower costs depressed prices considerably—even though the reduced prices vastly expanded sales, and ordinary Americans could afford to eat better and buy manufactured goods for the first time ever. *Chart 48 (opposite page)* shows the rapid growth of real GDP as well as the drop in wholesale and consumer prices in the 1870–1895 good deflation years. Real GDP grew at a 4.5% annual rate but wholesale prices fell a cumulative 47% while consumer prices dropped 34%.

Good Deflation in the 1920s

Although we'll probably never again see anything like the growth explosion of the Industrial Revolution and the opening of the West in the late 1800s, good deflation has not been confined to that era. The Roaring Twenties were also a time of deflation driven by supply growing faster than demand as productivity advanced rapidly.

Again, there were two major new technologies that drove productivity and growth and, again, both had been invented much earlier but only got big enough to have economic importance in the 1920s. Edison electrified parts of lower Manhattan in 1882, but it wasn't until the 1920s that electrification of factories and homes sparked. This in turn spawned further new technologies that required electric current, such as appliances and radio. Automobiles existed in the late 1800s as custom-built toys of the rich, but only with Henry Ford's mass production did they mobilize America in the 1920s and pave the way for highways and bridges, hotels and motels. In the eight years following the sharp 1920–1921 recession, industrial production almost doubled as wholesale prices fell on balance.

In addition to today's wave of new tech, big-output growth in future years will result from the globalization of production. With U.S. consumer retrenchment and a shrinking pool of global imports, export-dependent lands such as Germany as well as developing nations will be competing even more fiercely for the remaining markets. China talks of developing a consumer-led economy, but that's probably at least a decade away and after government retirement and health care programs are developed to replace the current need of households to save. Meanwhile, the rising share of Chinese GDP accounted for by exports and declining share by consumption will likely persist (*Chart 49, page 36*).

Bad Deflation

In contrast to good deflation that occurs when overall supply grows rapidly and exceeds demand, bad deflation reigns when demand drops below supply. That, of course, is the story of the 1930s when incomes and demand collapsed following the 1929 Crash that revealed just how overleveraged the financial system was. Bankruptcies spread rapidly and were followed by massive layoffs and pay cuts for those still working. The association of pay cuts with the Depression and resulting pressure to maintain nominal wages is probably the main reason why wage reductions since the 1930s have been few—until recently.

Wholesale prices and employment nosedived in tandem as unemployment leaped. The American Federation of Labor estimated that in October 1930, there were approximately 4.6 million unemployed workers. In October 1931, the number rose to 7.8 million; to 11.6 million in October 1932; and early in 1933, to more than 13 million—almost 25% of the civilian labor force. Wages fell faster than prices, even more so when periods of unemployment and short hours are included. The lower incomes had to be spread over a lot of unemployed people as well, especially at a time when government relief programs were tiny. Of course, the United States was not alone in those dreadful years of the early 1930s: The Depression was global (*Chart 50*).

It's hard to pin the collapse on American business or even the Hoover administration. Because the federal government ran a budget surplus in 1929, there was leeway to offset the weakening economy with fiscal stimulus. In November 1929, President Hoover called for tax cuts and expanded public works programs. He also gathered the captains of industry and made them promise to help sustain purchasing power by maintaining wage levels and increasing capital spending. After that meeting, Henry Ford raised the wages of his autoworkers from his celebrated $5 per day to $7 per day.

Nevertheless, neither Ford nor other manufacturers could withstand the onslaught of the Depression. The average hourly wage of those

CHART 49

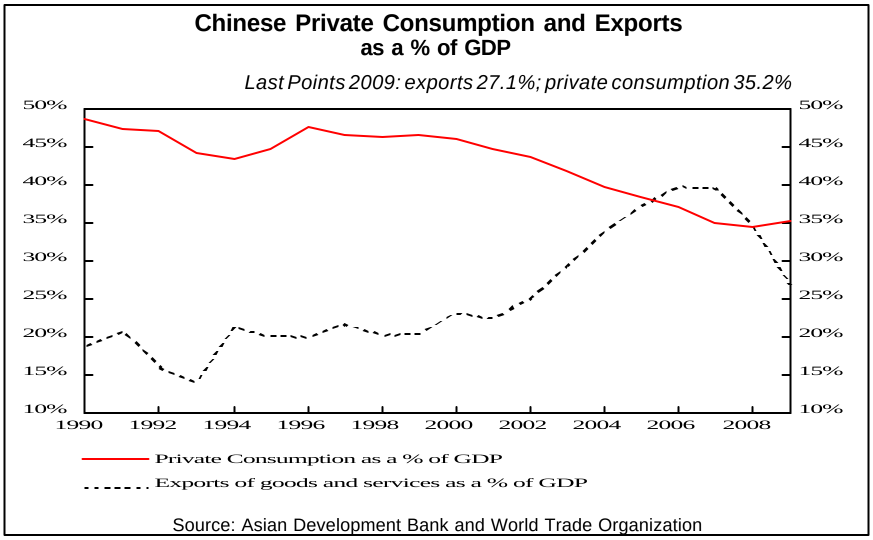


CHART 50

Percentage Change in Industrial Production and GDP: 1929-1932

	Industrial Production	GDP
Austria	-34.3%	-22.5%
Belgium	-27.1%	-7.1%
Denmark	-5.6%	4.0%
Finland	-20.0%	-5.9%
France	-25.6%	-11.0%
Germany	-40.8%	-15.7%
Italy	-22.7%	-6.1%
Netherlands	-9.8%	-8.2%
Norway	-7.9%	-0.9%
Spain	-11.6%	-8.0%
U.K.	-11.8%	-5.8%
U.S.	-44.7%	-28.0%
Czechoslovakia	-26.5%	-18.2%
Hungary	-19.2%	-11.5%
Poland	-37.0%	na
Romania	-11.8%	na

Source: United Nations

production workers lucky enough to keep their jobs in manufacturing fell 21% from 1929 to 1932, and because hours were cut as well, average weekly earnings fell 32%. Many weren't so lucky. By 1932, 38% of those production jobs in manufacturing that existed in 1929 had been eliminated.

Japan's Bad Deflation

Japan also has suffered bad deflation over the past two decades after the collapses of its 1980s housing and stock market bubbles (*Charts 51 and 52, opposite page*). But in Japan, the lack of demand wasn't caused by a dearth of employment and income as in the U.S. in the early 1930s, but because the government delayed cleaning up the financial institutions while consumers refused to spend their incomes. And note that no amount of monetary ease and deficit spending

CHART 51

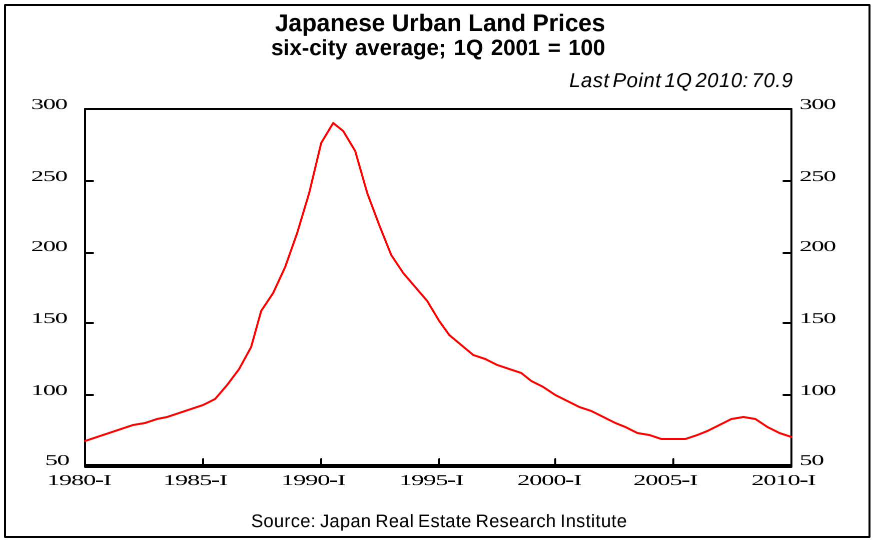
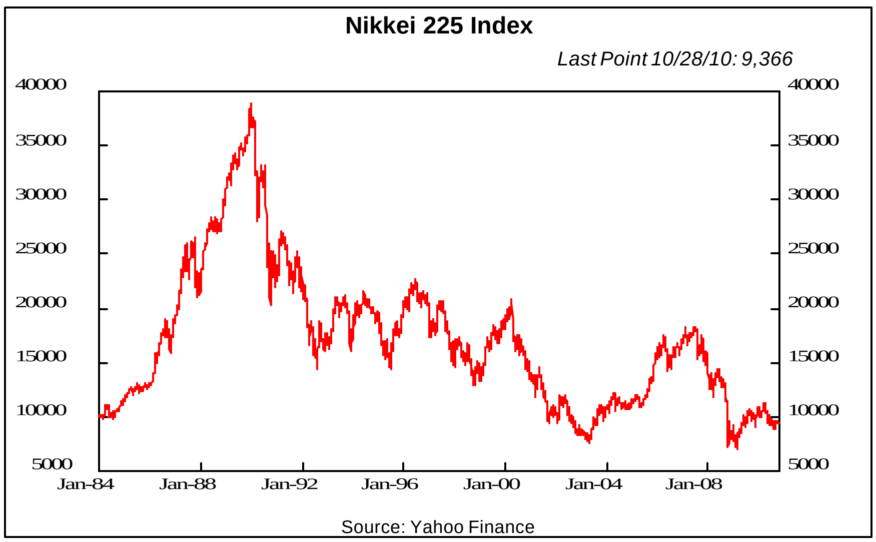


CHART 52



could prevent deflation.

We've been forecasting chronic good deflation of excess supply because of today's convergence of many significant technologies such as semiconductors, computers, the Internet, telecom, and biotech that should hype productivity and output. Ditto for the globalization of production. Still, in our two earlier *Deflation* books and subsequent reports, we said clearly that the bad deflation of deficient demand could occur—as a result of severe and widespread financial crises or due to global protectionism. Both have unfolded, as explained earlier.

Furthermore, with slower global economic growth in the years ahead due to the U.S. consumer saving spree, worldwide financial deleveragings, increased government regulation, state and local government contraction, fiscal restraint in many developed countries, massive excess house inventories here and abroad, low commodity prices, and protectionism, slow growth and excess global capacity will probably be chronic problems. So deflation in the years ahead is likely to be a combination of good and bad. The chronic 1% to 2% deflation from excess supply that we forecast earlier still seems likely, but now we are adding 1% due to weak demand, for a total of 2% to 3% annual declines in aggregate price indexes for years to come.

Monetary and Fiscal Excesses

You're well aware that most forecasters vigorously disagree with our forecast of chronic deflation. They believe that inflation is part of the modern economy. With the exception of Japan, it has been among developed countries since the 1930s, and that decade of the Great Depression is irrelevant in today's world of active, even hyperactive, monetary and fiscal policies, most contend. In fact, the huge excess reserves piled up at the Fed (Chart 30) and the likely continuation of $1 trillion federal deficits (Chart 31) positively, absolutely, without question, guarantees rapid inflation—maybe not immediately, but chronically in future years, they maintain. These excesses could well precipitate inflation, but only if they generate aggregate demand in excess of overall supply. That we doubt very much.

After the Fed started cutting its discount rate in August 2007 and then the federal funds rate in September (Chart 19), it soon realized that the financial crisis was so severe that banks didn't want to lend and creditworthy borrowers didn't want to borrow. The central bank was stuck in a liquidity trap where no amount of reserves offered or low interest rates spurred demand. So it embarked on a long list of quantitative easing measures to pump reserves into the banking system that is still continuing as QE2 follows the massive $1.7 trillion QE1 purchases of mortgage and Treasury securities. The result was the explosion of Fed assets.

Make No Mistake

And make no mistake, the Fed is not printing money as it would if it bought Treasurys directly from the Treasury. That practice is pursued by some hyperinflation-laden banana republics, but never by any developed countries in modern times, as far as we know. Instead, the Fed is buying securities on the open market, which creates commercial bank reserves at the Fed as the central bank's payments clear through the banking system. Those reserves only turn into money—currency or deposits at financial institutions—if those reserves are lent by the commercial banks.

CHART 53

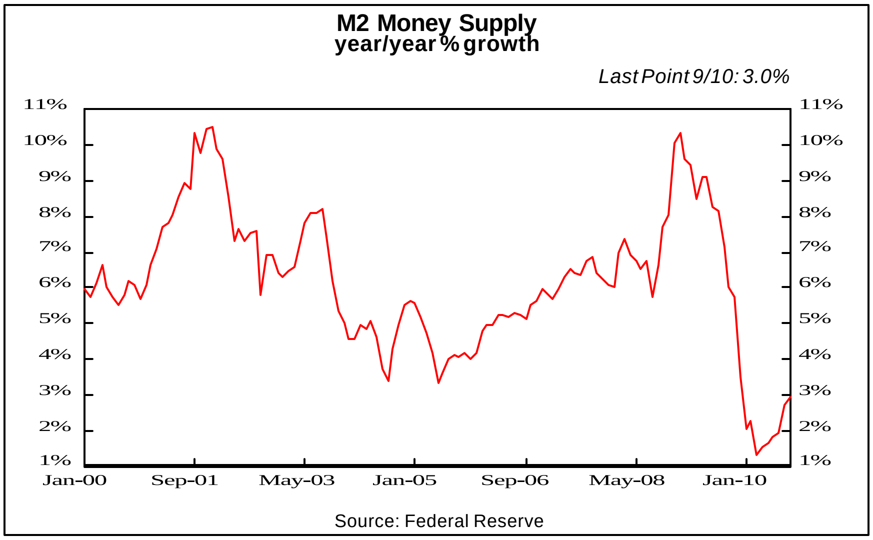
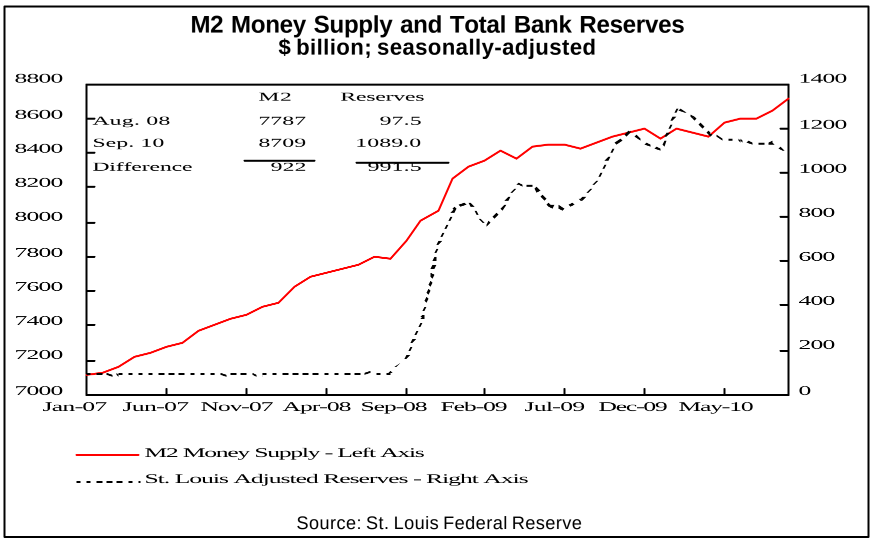


CHART 54



They haven't been to any meaningful extent so excess bank reserves have mounted to about $1 trillion have piled up (Chart 30). Those reserves remain only a distant potential threat to inflation as money supply growth remains sluggish (*Chart 53*). Normally, when the Fed creates bank reserves by buying Treasurys, they promptly create money. Notice that in early 2007, before the financial crisis erupted, bank reserves were about $100 billion and the M2 money supply, $7 trillion (*Chart 54*), so the banks multiplied each dollar of reserves into $70 of M2. But from August 2008, when massive quantitative easing got under way, through September 2010, reserves rose $991.5 billion, but M2 was up only $922 billion. The effect of the increased reserves wasn't 70 to 1 but less than 1 to 1!

For these idle reserves to spawn inflation, three steps are necessary, none of which we expect to occur. First, economic growth has to be much stronger than we foresee, robust enough to make banks feel it's safe to lend, and to make creditworthy borrowers interested in taking on debt. At present, corporations are loaded with cash—6% of assets as of the second quarter of 2010 compared to a norm of about 4%—and are repaying loans. In fact, many are increasing dividends, buying back stock or embarking on acquisitions as uses of excess funds. Credit-worthy consumers, meanwhile, are reducing debt (Chart 15).

Creditworthy

We emphasize *creditworthy* borrowers because many financial institutions, small businesses, homeowners, and consumers who borrowed easily in the loose lending standards and lax climate of yesteryear were not creditworthy under prudent credit specifications. They're even less so in today's atmosphere of stern financial regulation, deleveraging financial institutions, tight lending standards, and high unemployment. Those borrowers are in dire financial straits and are a huge burden for Washington to bail out. But they're not part of the lending and borrowing business going forward.

There is, of course, a slim, remote, inconsequential, highly improbable chance that we're dead wrong in our forecast and, instead, the economy takes off like a scalded dog. Then creditworthy borrowers and lenders would be eager to do business. The excess bank reserves would turn into loans and M2 money, further spurring the economy toward full employment and the excess demand that creates inflation.

But this brings us to the second step in the process: the length of time it would take to fully utilize excess labor and capacity, and on a global basis. The unemployment rate remains high in the U.S. (Chart 25) and even higher in many European countries. Global capacity to produce vehicles is about 90 million per year, but just 60 million are likely to be made and sold in 2010. Developing countries have plenty of excess capacity since the retrenchment of U.S. consumers has robbed them of all-important exports. China's huge 2009 fiscal stimulus program has created substantial industrial capacity that historically has been used to produce exports, but is or soon will be underutilized. Back in the States, capacity utilization is still at very low levels. In our judgment, it would take three or four years of robust global growth before all the excess labor and business capacity were absorbed.

Anti-Inflation Genes

So it's on to step three in the process by which excess bank reserves inspire serious inflation. The Fed and other central banks must sit on their hands while demand surges, eats up excess capacity, and creates inflation. That violently goes against the grain of central bankers. We wonder if, before they take their oaths of office, they don't go to medical facilities for inoculations of the anti-inflation gene. They may fear deflation as they did in the early 2000s and are now concentrating on preventing, but they hate inflation with a passion.

Recall that early this year when the economy looked much stronger, Fed Chairman Bernanke and other high Fed officials worked diligently to assure financial markets that they would withdraw financial stimulus when it was no longer needed. On February 18, 2010, the Fed raised the discount rate from 0.5% to 0.75%. This was symbolic since, with all the excess reserves, borrowing from the discount facility had dwindled to below $15 billion right before the announcement from more than $100 billion. But that move showed that the Fed still is a force to be reckoned with, contrary to some suggestions that it had become a toothless tiger.

The central bank has also made several test run of reverse repo operations, designed to withdraw bank reserves on a short-term basis. Also in late 2009, the Fed got Congressional approval to pay interest on reserves and now does at a 0.25% annual rate. The central bank has said that one way to deal with excess reserves if they threaten to spur too rapid growth is to encourage banks to place them in term deposits.

Offsets to Central Banks

These who worry about excess bank reserves spurring inflation also aren't considering the huge destruction of liquidity taking place in the private sector. Homeowners' equity has largely evaporated (Chart 8) and consumers are slashing their borrowing power as their credit card debts are written off and residential mortgage delinquencies (Chart 40) turn to foreclosures. The financial sector is also starting to delever (Chart 4) and the decline has a long way to go to return to trend.

Over-the-counter derivatives are only one segment of the previously exploding, now collapsing shadow banking system. Their notional value leaped from $100 trillion in 2000 to $548 trillion in December 2008, according to the Bank for International Settlements. Netting out all of the offsets and double-counting reduced this to $32.4 trillion in December 2008, up from $11.1 trillion in June 2007. With deleveraging, that measure fell to $21.6 trillion in December 2009—a $10.8 trillion drop in only one year! Recall that the M2 money supply rose a mere $871 billion between August 2008 and September 2010 while bank reserves jumped a trifling $991.5 billion (Chart 54). These derivatives, even in netted form, continue to dwarf the M2 money supply of $8.7 trillion. Derivatives can't buy a gallon of milk in a supermarket, but they can be used as money in many other venues and financed much of the U.S. housing bubble and lots of other economic activity.

Big Federal Deficits

The slow economic growth in future years that we're projecting will curtail the rise in federal individual and corporate tax and other government revenues. At the same time, federal outlays will continue to rise rapidly due to ongoing fiscal stimulus of one stripe or another. Consequently, the deficit projection of the Congressional Budget Office (Chart 31), which assumes 4.3% annual growth in real GDP in the next decade compared to our 2.0% projection, will no doubt be low. The slow growth we foresee also will force Washington to create large numbers of jobs on an ongoing basis. Thus, we look for federal deficits to continue in the $1 trillion or greater range for years, even before the leap in outlays when the postwar babies start drawing on Medicare and Social

Security in huge numbers (*Chart 55*). Meanwhile, the unemployment picture is already dim.

The unemployment rate of 9.6% in September (Chart 25) considerably underestimated the excess supply of American labor. Notice that the gap has widened between the headline number and the broader measure that also includes those who have given up looking for work, those working part-time but desirous of fulltime positions, those forced to leave work to care for sick relatives, and so forth. The same story is told by the decline since 2000 in the ratio of employment to working age population and the labor force participation rate (those employed or looking for work as a percentage of working-age population (Chart 17).

Throughout the past decade, American business has been controlling labor costs by not hiring people as opposed to laying them off. Notice that layoffs and discharges were fairly steady before the recession and rose little when it hit, compared to the collapse in job openings (*Chart 56*). Also, at the business peak in 2007, job openings were 11.7% below the 2000 peak even though real GDP had grown 18.5% in the meantime—a 30.2 percentage point spread. Recently, job openings have rebounded but hires have not, indicating that employers are in no rush to fill positions unless exactly the right applicants with the right skills come around.

Chronic High Unemployment

High unemployment will probably be chronic. *Chart 57* is a scatter diagram of the year-over-year percentage change in real GDP against the year-over-year change in the unemployment rate over the post–World War II years, as well as our fitted curve. The 2% average real GDP

CHART 55

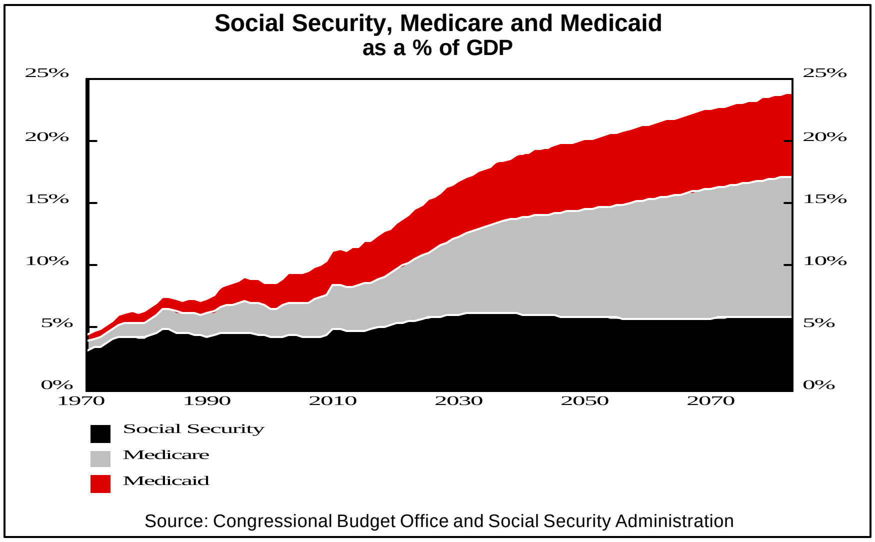


CHART 56

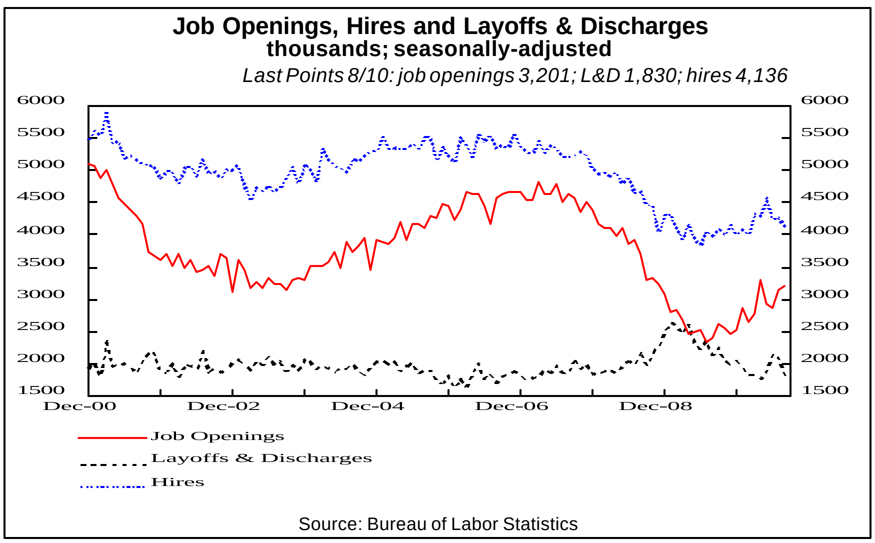
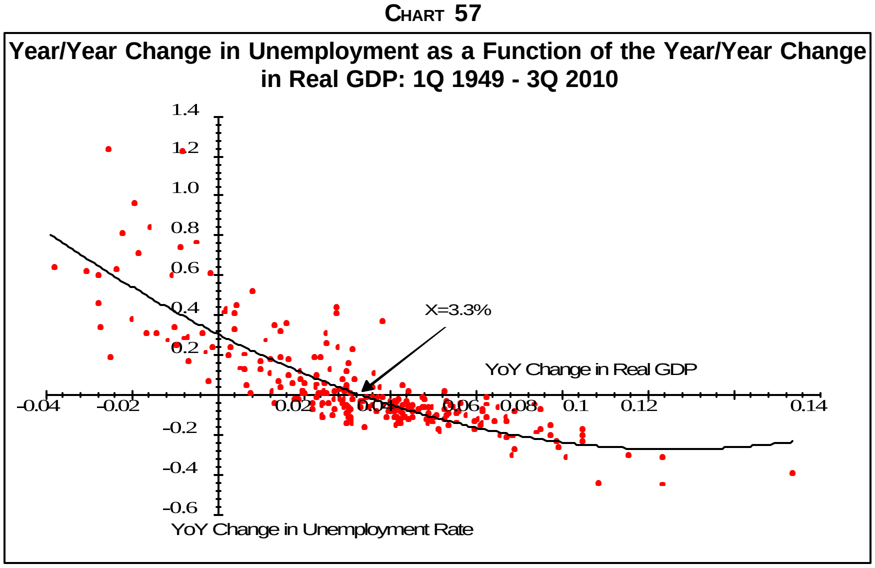


CHART 57



growth we foresee over the next decade is far below the 3.3% needed to keep the unemployment rate stable. Faster growth pushes the unemployment rate down, but growth slower than 3.3% means a rising unemployment rate year after year. In fact, the fitted curve indicated that 2% real GDP growth is linked to a 10.7% annual growth in the unemployment rate. If the rate were 10% this year, it would be 11.07% next year. By 2018, the unemployment rate would be 23% with a 2% annual real GDP growth in the interim.

When we fitted the curve shown in Chart 57, we didn't realize it but it is a somewhat more sophisticated version of Okun's Law, first proposed by economist Arthur Okun in 1962. Our analysis found that a first- and second-order equation fit the scatter diagram well, while Okun and subsequent updates use linear equations. In any event, one of those updates was run by the Federal Reserve Bank of Kansas City using data from the second quarter of 1948 through the second quarter of 2007 (our database was the first quarter of 1948 through the fourth quarter of 2009). The Kansas City equation says that to keep the unemployment rate steady, real GDP must grow 3.3% at annual rates, precisely the same as our numbers. It also implies that at 2% real GDP growth, the unemployment rate will rise 0.9 percentage points per year, only a little lower than our equation suggests.

Big Federal Spending

If, then, we're right on our forecast of slow economic growth in the next decade, unemployment will be high and chronically rising—absent huge federal intervention. And that intervention is assured since no government—left, right, or center—can withstand high and rising joblessness for long.

Some of this federal intervention will probably take the form of more federal employees and direct purchases of goods and services. But most of it will be transferred to individuals as federal unemployment benefits, extra Social Security checks, etc., and to state and local governments to fund everything from leaf-raking and other make-work projects to more productive activities like repairing roads and bridges. Massive job creation is the obvious response to keep unemployment to politically acceptable levels.

Many government-sponsored jobs will no doubt be in medical services. That sector was going to expand anyway without the new health care law as the postwar babies age. Health care is already huge, employing 13.8 million, or 10.6%, of payroll employees, and covers a full range of skills from attendants in nursing homes to medical researchers to health insurance and hospital administrators to developers of medical equipment to brain surgeons.

Slow economic growth will also keep upward pressure on the labor supply as Americans look for work and downward force on compensation as well as employment in future years. One can argue, of course, that massive creation of jobs by the federal government will enhance economic growth as the resulting wages are spent and respent. But we believe that much of that money will be saved and used for debt repayment, continuing the new trends (Charts 14 and 15).

Households have a long way to go to get debts in relation to after-tax income back to the 65% level of the early 1980s. In the second quarter of 2010, it was 119%, down from 131% in the first quarter of 2008. Also, as discussed earlier, our assumption that the household saving rate will rise to 12% may well be on the low side. Note as well that in the 1930s, all the government make-work programs such as WPA, PWA, CCC, TVA, and so on did little to revive the economy. It finally took rearmament and World War II to restore spending and economic growth.

Deficits Equal Inflation?

With the prospect of huge federal deficits for the next several years, why won't significant inflation follow? After all, excessive government spending is the root of inflation, we argue. Still, it's excessive only if the economy is already fully employed, as in wartime. And that's not the case now, nor is it likely in the slow economic growth years we see ahead. The continuing $1 trillion deficits result from a sluggish economy, which retards revenues and hypes government spending, not from high government spending on top of a robust private sector.

Looking at it from the financial side, the federal government debt expansion is replacing the contraction in the private sector (Chart 4)—the socialization of debt, if you will. If, contrary to our forecast, the economy leaps, federal revenues will, as usual, grow much faster as corporate profits skyrocket in relation to sales and expanding personal incomes push taxpayers into higher tax brackets.

How will the chronic high federal government deficits be financed? In the past, federal deficits were financed substantially by foreigners as they recycled back to the United States the dollars gained from their trade and current account surpluses with America. The earlier growing U.S. current account deficit (Chart 28) measured the increasing gap between domestic saving and investment, or, in effect, the need for foreigners to not only finance government deficits but also make up for declining U.S. consumer saving (Chart 14).

Shrinking Deficits

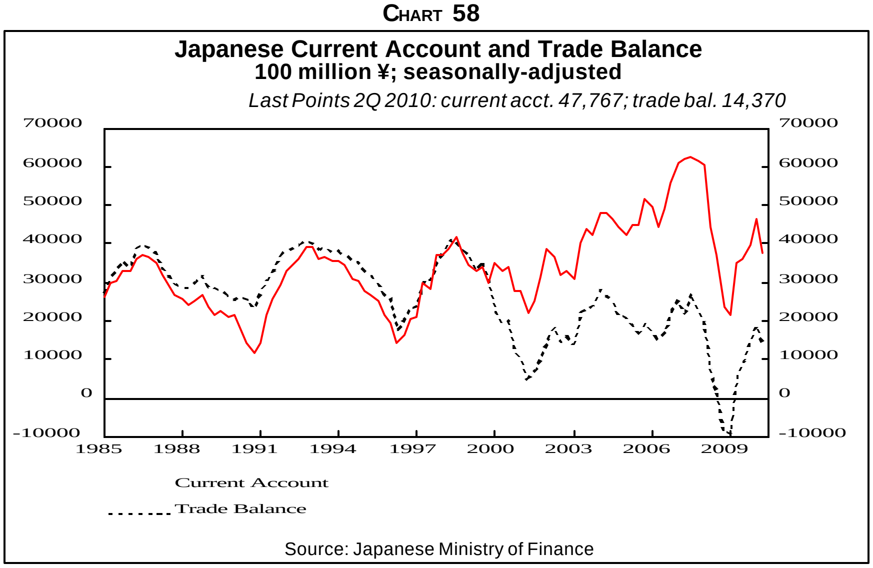
But the current account and trade deficits will continue to shrink on balance as American consumers retrench and slash imports. Declines will also accrue in future years if exports grow faster than imports, as we suspect, so foreigners will have smaller American current account deficits to finance. At the same time, much more of federal deficits will probably be financed by rising U.S. consumer saving.

Although the stock bulls may salivate over the prospect that increased saving will mean more equity purchases, we believe that most of the money will continue to go to debt repayment (Chart 15)—the flip side of a saving spree (Chart 14). Since after-tax income is now about $11 trillion annually, a 10% saving rate in future years would produce $1.1 trillion in funds. Since money is fungible, much of the consumed debts will end up financing a major part of the federal deficit.

Repaying debt will be attractive to many Americans in future years as they continue to shun many investments after the volatile but trendless stock market in the past decade and their shocking setbacks in real estate. A number will want to be less leveraged as slower economic growth makes employment less stable and unemployment more likely. Chastened lenders, pressed by regulators, will be pushing individuals to lower their leverage by repaying debt.

The deflation we foresee will also encourage consumers to repay debts. Many incomes may grow on average in real or inflation-adjusted terms, but shrink in current dollars. Still, debts are denominated in current

CHART 58



dollars and therefore will grow in relation to those current dollar incomes and the ability to service them. This will be the reverse of inflation, which reduces the value of debts in real terms and makes it easier to service them as incomes rise with inflation.

U.S. Like Japan

Interestingly, the United States is moving toward the financial conditions of Japan. For the past 15 years, the Japanese government has been running huge deficits and mounting net debts that equaled 112% of GDP in 2009 as it attempts to stimulate the nation's way out of her deflationary depression. But consumers simply saved much of the resulting increases in incomes as they persisted in anticipating even bleaker times ahead. So households earlier, and Japanese business more recently, saved so much that they easily funded government deficits and have money left to export. That money is the equivalent of Japan's big current account and trade surpluses—until the recent weakness in exports (*Chart 58, opposite page*). Note that foreigners own only 5.8% of Japanese government bonds at the end of September 2009 and domestic investors owned the rest. In contrast, half of U.S. Treasuries are owned abroad.

The U.S. is moving toward the condition of Japan, but American consumers are unlikely to save so much and buy so few imports that the U.S. runs a trade and current account surplus. That would be disastrous for the world unless other countries replaced the U.S. consumer as the buyers of the globe's excess goods and services or if the Chinas of the world ceased to be huge net exporters. Otherwise, there would be too many exporters and not enough importers, a sure prescription for devastating protectionism, as mentioned earlier.

Commentary

Middle Class Crisis

The recession and lingering unemployment woes have unveiled the barbell nature of the labor market. Years ago, when it became clear to us that middle income jobs were disappearing fast, we characterized the eventual outcome by two people: the high-paid business traveler and the bellman carrying his bags—with virtually no one in between. Upward income mobility is essential to the American Dream, and what's being eliminated is the auto worker in Detroit who bridged the gap between his southern sharecropper father and his kids who moved on to the professions.

Earlier, rapid economic growth and financial and housing euphoria papered over this reality. But now, on top of permanent job losses in the aftermath of the financial and housing bubble collapses, American business continues the decade-long cost-cutting needed to compete domestically and globally. Many middle income, middle skilled staffers are nice to have but unessential. They're gone in areas as diverse as manufacturing, retail trade, network broadcasting, law offices, and even state governments.

At the same time, monthly job openings have risen 863,000 since their July 2009 low point, but new hires have gained only 71,000. Why this gap? Many employers are waiting for just the right people and can be choosy with so many applicants. Our recent ad on Monster.com for an Associate Economist got 223 resumes.

More important, many of the unemployed lack the required skills and backgrounds. They may have soft people skills but lack the math and dedication to operate a computer-controlled machine on the factory floor—if they're even willing to work there. Many prefer unemployment benefits that extend to 99 weeks over food service and other jobs that pay less to start. Others refuse to accept reality and take any position that pays less than their previous peak. Some can't sell their underwater houses and move to where jobs are available.

More education is normally proposed to restore the middle class, and the statistics are impressive. In September, the unemployment rate for those over 25 with bachelor's degrees was 4.4%, but 10.0% for high school graduates with no college. And the former make 64% more than the latter.

But college costs continue to leap. This year, tuition at public institutions is up 7.9% to $7,605 and 150% higher than in 1990, while private schools hiked their tuition 4.5% on average to $27,293 this year. Total costs including room and board average $16,140 at public and $36,993 at private schools. A July poll found 64% of Americans regard college education as a good investment, down from 79% a year earlier.

Those polled have a point. Years ago, the brighter high schoolers were considered college material, but not the rest. Now they all are even if they need extensive remedial studies before starting classes. At my alma mater, Amherst College, the departing president, Tony Marx, deliberately reduced the admission standards for subpar minority applicants.

The dumbing down of American education is nothing new. There are institutions to match any mental ability, as long as the government or someone else will pay for them. For-profit schools that rely heavily on government student loans have been so discredited that Congress wants to see their job placement records, not just their graduation rates. Business leaders complain about the deficiency of many college graduates in basic English and math, and have established remedial programs for new hires.

So it's not surprising that the income gap between college and high school graduates stopped widening in 2001 after rising sharply for two decades. A college degree is no longer the hallmark of superior ability so recruiters concentrate on the better schools. What students learn in them is not the issue. They are the screeners since, by and large, the better students attend the better institutions.

Education started as training of the mind but now, except for career academics and a few others, is focused on job preparation. So colleges should look to where the jobs are with more emphasis on math and science, even to the detriment of the popular economics major. Ugh!! And wouldn't many be better off learning a skilled trade rather than facing bleak job prospects and lifetime student loan repayments after graduating from lesser institutions? Think about what skilled electricians earn.

The story goes that a homeowner calls in a plumber to unclog a toilet. He's shocked to pay $150 for a half hour of work, and says, "You charge more than the $250 per hour I make as a lawyer." The plumber replies, "Yeah, $250 an hour is about what I made when I was a lawyer." Who's in the middle class?

Gary

If you enjoy reading Gary Shilling's monthly "Commentary," you may be interested in *Letting Off Steam*, a collection of more than 130 of Gary's "Commentaries" from 1989 through 2003. This 286-page book is available for $20 (shipping included). Call 973-467-0070 to order.