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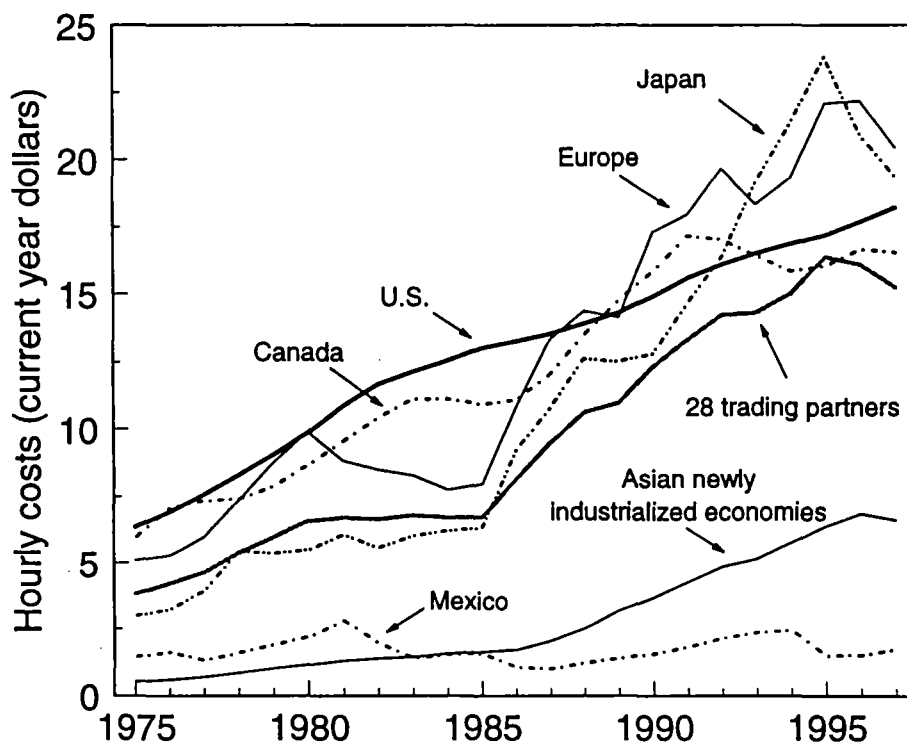
WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

Prepared by the Council of Economic Advisers
with the assistance of the Office of the Vice President

September 25, 1998

CHART OF THE WEEK

Manufacturing Compensation Costs



The gap between the hourly labor compensation costs of U.S. manufacturers and those of a weighted average of 28 U.S. trading partners widened in 1997. The major reason was the strength of the dollar, according to the Bureau of Labor Statistics, which compiled the data. European and Japanese costs, by contrast, fell closer to U.S. levels.

CONTENTS

CURRENT DEVELOPMENT

How Many Jobs Have Been Created?	1
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SPECIAL ANALYSIS

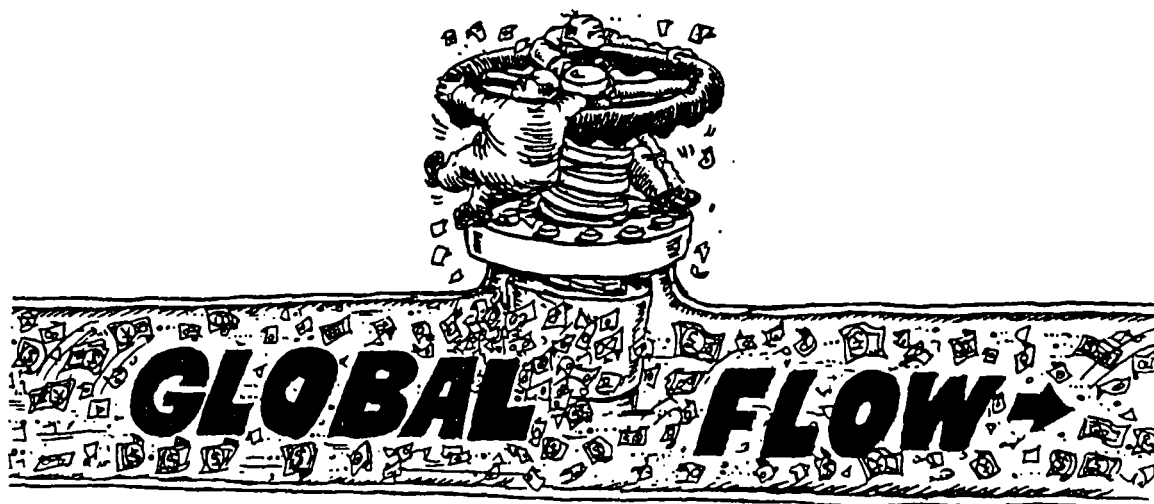
Looking Beneath the Aggregate Income and Poverty Data	2
Big Gains for Lower-Income Groups but No Less Inequality	4

ARTICLE

A New Deal for Russia?	6
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DEPARTMENTS

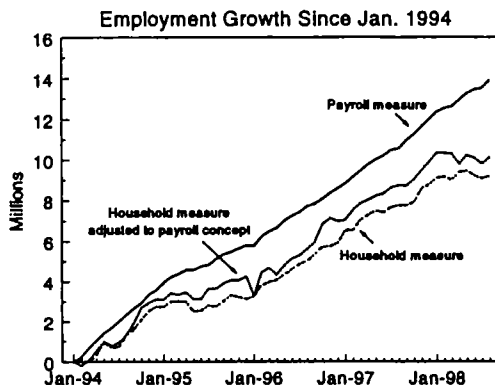
Business, Consumer, and Regional Roundup	8
International Roundup	9
Releases	10
U.S. Economic Statistics	11
Financial and International Statistics	12



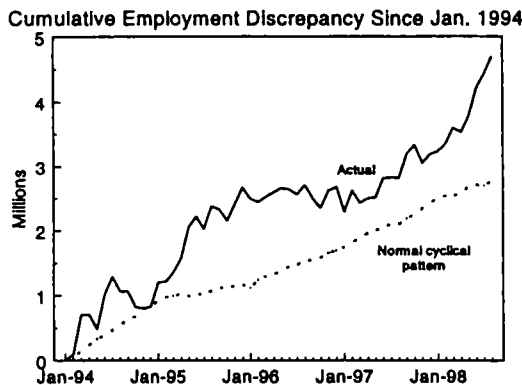
CURRENT DEVELOPMENT

How Many Jobs Have Been Created?

Firms report that they have added 13.9 million jobs since January 1994—4.7 million more than the employment growth reported by households over the same period (see upper chart). What accounts for this discrepancy?



Methodology. The payroll survey collects information from nonfarm employers, whereas the household survey interviews one person from each household about the activities of all the members of that household. Those who hold more than one job are counted once in the household survey but more than once in the payroll survey.



In addition, agricultural, self-employed, private household, and unpaid family workers are counted in the household but not in the payroll survey; and those under 16 are counted in the payroll but not in the household survey. The household survey includes auxiliary questions, including one on multiple jobholders, that can help reconcile the two surveys. But after converting the household survey to the payroll concept, the gap between the two surveys, at 3.8 million, remains wide.

Cyclical differences. The tendency of payroll job increases to outpace household employment growth during good times is nothing new, although the explanation for this cyclical pattern is not clear. It may be that the true number of multiple jobholders is increasing faster than what is implied by responses to the question on the household survey. Or it may have something to do with illegal immigration or some other factor. Whatever the explanation, once the cyclical pattern is removed, the discrepancy shrinks to 1.9 million (see lower chart).

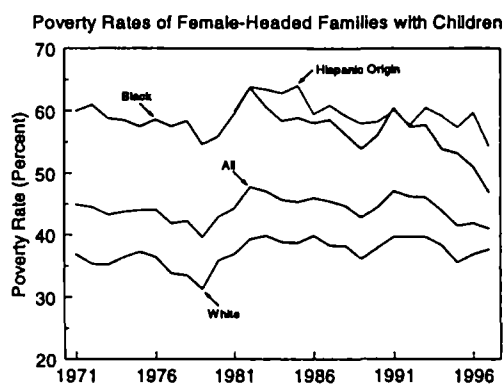
The last 12 months. Neither the methodological differences nor the cyclical pattern explain the growth in the discrepancy over the past 12 months. Over this period, the payroll survey is still subject to revision because it has not yet been benchmarked to the unemployment tax system. The unexplained slower growth in household employment suggests a downward revision of payroll employment at the time of next year's benchmark.

SPECIAL ANALYSIS

Looking Beneath the Aggregate Income and Poverty Data

New data on income and poverty released this week show a rise in real median household income of 1.9 percent and a drop in the poverty rate to 13.3 percent. Gains among the traditionally disadvantaged were particularly noteworthy.

Large gains for female-headed households with children. Historically, the poverty rate has been extremely high for female-headed families with children, and



the rate remained high in 1997 (41.0 percent compared with 15.7 percent for all families). But female-headed families with children have shown substantial improvements in recent years. The rate for all such families is the lowest it has been since 1979, and the rates for black and Hispanic families are the lowest on record (see chart). These are the families most likely to be affected by welfare reform, and it will be important to monitor their well-being in coming years.

Issues in poverty measurement. Problems with the official poverty measure that are currently under review by the Administration are particularly acute for female-headed families with children. Such families are disproportionately likely to receive the EITC, food stamps, Medicaid, or housing assistance, and they typically have work expenses, particularly child care costs. The National Research Council's recommended alternative poverty measure would reflect these additional sources of income and expenditure in measuring the well-being of families. This spring the Census Bureau is scheduled to release unofficial poverty estimates based on this alternative measure.

Central cities share in the progress. Poverty in the central city remained high at 18.8 percent (compared with 9.0 percent in metropolitan areas outside of central cities and 15.9 percent in non-metropolitan areas). The good news is that, although still high, the central city poverty rate fell nearly a full point in 1997 and economic gains were substantial in central cities within larger metropolitan areas. Median family income for central city residents grew by 3.9 percent within metropolitan areas of at least one million people and 2.0 percent for smaller metropolitan areas.

Poverty continues to fall among foreign-born residents. Data that are available only since 1994 show declines in the poverty rate from 22.6 percent in 1994 to 19.9 percent in 1997 for foreign-born residents (compared with a decline from 13.8 to 12.5 percent for the native-born). The rate among naturalized citizens was an even lower 11.4 percent in 1997.

Income deficit remains high for most poor families. Despite the fall in the poverty rate, the income of many poor families is substantially below the poverty threshold. Five percent of families needed only \$500 of additional income to be lifted out of poverty in 1997, and 9.4 percent needed less than \$1,000. However, over half of families in poverty needed at least \$5,000 to reach the poverty line, and the average poverty gap was \$6,602.

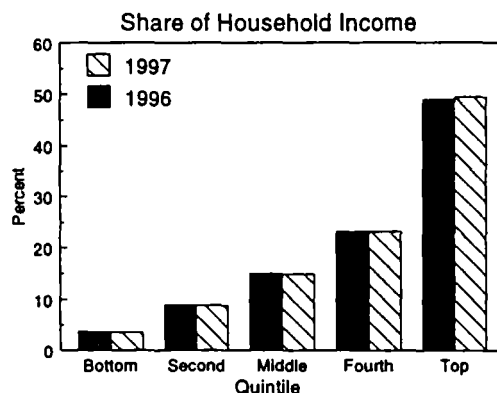
The role of the economy. Many factors have probably contributed to the recent gain in income and reduction in poverty, but one stands out—growth in the overall economy. The poverty rate tends to rise during recessions and fall during expansions. According to a simple model based on historical relationships, economic gains over the past year should have reduced the poverty rate by between 0.3 and 0.5 percentage point. The actual decline of 0.5 point was at the top of this range.

SPECIAL ANALYSIS

Big Gains for Lower-Income Groups but No Less Inequality

Low-income groups experienced particularly large income gains in 1997, yet measures of income inequality increased. What explains these divergent trends?

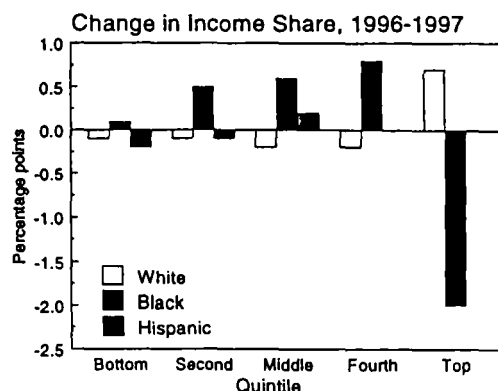
Changes in 1997. Real median household income rose by 4.3 percent for blacks and by 4.5 percent for Hispanics between 1996 and 1997, compared with a 1.9 percent increase in overall median household income. Other groups with median household incomes below the overall median of \$37,005 also experienced disproportionate



gains, including family households headed by single females and elderly households (both up 4.4 percent), Southern households (up 3.6 percent), and those in central cities of metropolitan areas with at least a million people (up 3.1 percent). Meanwhile, the share of household income received by each of the bottom four quintiles fell by 0.1 percentage point, while the share received by the top 20 percent grew by 0.4 percentage point (see upper chart).

Analysis. Three factors might explain why disproportionate gains for lower-income groups did not translate into reduced overall inequality.

- **Share shifts.** If the proportion of the population belonging to the lower-income groups were growing fast enough, the increasing weight attached to their below-average *level* of income could increase overall inequality. This cannot be a large part of the story, however, because 1-year shifts in population shares are quite small. For instance, Hispanic households went from 8.1 to 8.4 percent of all households between 1996 and 1997, and the South's share of households grew from 35.3 to 35.7 percent.



- **Inequality within lower-income groups.** If inequality increased *within* the lower-income groups, that would also tend to increase overall inequality. However, the little information we have suggests that this is probably not the explanation either. For blacks, inequality *decreased* between 1996 and 1997, with the share of income rising in the lower four quintiles and falling at the

top (see lower chart on previous page). For Hispanics, there was some redistribution from the first and second quintiles to the middle quintile, but no change in the share of the top two quintiles.

- Inequality within higher-income groups. Increasing inequality in the *rest* of the population is probably the reason why overall inequality did not diminish. Published data do not exist for the relevant group (non-elderly, non-single mother, non-Hispanic white households living in smaller metropolitan areas and suburbs outside the South), which constitutes a considerable part of the population. But the change in the distribution for white households is suggestive, with the share of aggregate white household income *falling* for each of the bottom four quintiles and *rising* for the top.

Conclusion. Although lower-income groups experienced disproportionate increases in median household income between 1996 and 1997, large gains at the top for other groups contributed to a modest increase in overall inequality.

ARTICLE

A New Deal for Russia?

Like the United States in the Great Depression, Russia currently faces a severe economic crisis with widespread distress. This makes it understandable that Prime Minister Primakov would draw parallels between his plans for increased state intervention in the Russian economy and the New Deal. But such comparisons should be approached cautiously.

Different macroeconomic conditions. The major macroeconomic problem facing the United States in the Great Depression was a sharp drop in aggregate demand. Output in 1933 was nearly 30 percent below its 1929 level, the unemployment rate was almost 25 percent, and prices were falling. In Russia, by contrast, the major macroeconomic problem is a breakdown of the supply side of the economy. The sharp drop in output after 1989 reflected a costly adjustment from a planned toward a market-oriented economy rather than a sharp drop in aggregate demand. There are idle and unpaid workers in Russia today, but the supply-side problems that continue to plague the economy suggest that aggressive demand stimulus would simply aggravate inflation.

What happened during the New Deal? The New Deal transformed America's view of the proper role of government in managing the economy. But modern economic historians question how much it contributed to pulling the economy out of the Great Depression.

- Overall macroeconomic stimulus. Because Russia's macroeconomic conditions are so different, there are few lessons from New Deal macroeconomic policy. It is worth noting, however, that even though Keynesian analysis was forged in the crucible of the Great Depression, U.S. fiscal policy did not really follow the Keynesian prescription until the onset of World War II. The Federal budget remained in surplus through 1930. The subsequent widening of the deficit mostly reflected falling economic activity rather than active fiscal expansion. (The structural balance may actually have been in surplus.)
- Public spending. Although growth in Federal outlays during the New Deal paled in comparison with the size of the output gap (and in comparison with subsequent wartime spending), it was nevertheless substantial. Spending included direct employment (such as the Civilian Conservation Corps and the Works Progress Administration), public investment (particularly for public power and rural electrification), and farm price supports. The Federal Government also took increased responsibility for the social safety net, creating national unemployment compensation, welfare, and social security programs. Whatever the merits of these policies, however, the unemployment rate remained well above 10 percent until 1941.

- Microeconomic intervention. The New Deal entailed substantial government intervention in specific industries and sectors, not always to good effect. For example, the *de facto* suspension of antitrust prohibitions against price fixing at the heart of the National Industrial Recovery Act of 1933 was almost surely misguided. In retrospect, extending existing price and entry regulation to trucking and airlines was probably unnecessary and inefficient. Thus, it would probably be a mistake for Russia to emulate elements of the New Deal that tried to “manage” competition.
- Banking and Financial reform. FDR took office amidst a wave of bank runs and bank failures. A bank holiday was declared in March 1933 and solvent national banks were subsequently reopened with temporary Federal deposit insurance. The Nation was effectively taken off the gold standard, and a number of financial and securities reforms were enacted. Like so many other New Deal policies, these actions represented a mixed bag of “try anything” emergency measures and longer-term reforms. Among the latter, the most enduring are probably ones like the creation of the Securities and Exchange Commission that created institutions to increase confidence in markets and make them work better.

Conclusion. The New Deal was neither a consistent nor a comprehensive plan. Neither did it pull the economy out of the Great Depression. But to judge it only on economic grounds is to miss its political and social significance. FDR’s bold experimentation and balancing of conflicting interests kept the country together through a period of severe economic distress and laid the groundwork for the mixed economy that produced a doubling of living standards in the first generation following the end of World War II.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

Colleges Seen as Places to Learn about Diversity. The major findings of the new book by Derek Bok and William Bowen, *The Shape of the River*, have been widely reported: blacks who graduate from elite colleges earn advanced degrees at the same rates as their white counterparts, and they tend to be more active than their white classmates in civic activities. An important finding that received less attention is the increased percentage of graduates who felt that their colleges contributed “a great deal” to their ability to work effectively and get along with people of different races and cultures—a 16 percentage-point increase between 1976 and 1989 for both black and white cohorts (to 46 percent in 1989 among blacks and to 34 percent in 1989 among whites). A similar increase was found for a question regarding the ability to have good rapport with people holding different beliefs. The authors posit that students may be increasingly aware of the importance of learning to get along with a wide range of people, and are taking better advantage of opportunities to learn this in college. The authors also suggest that colleges may be becoming more adept at creating an environment in which students can learn from classmates who are different from themselves.

Traditional South Gets “All Shook Up.” The historically black/white, mostly Protestant, native-born South is rapidly becoming a multi-ethnic society, according to a new study. Whereas whites made up 76 percent of the population 20 years ago, that percentage is down to 68; meanwhile the percentage of Hispanics has jumped from 5 to 11. Although most Hispanics in the South live in Florida or Texas, the six counties with the most rapid growth in their Hispanic populations are in Georgia, North Carolina, Virginia, and Arkansas. Just from 1990 to 1997, the Asian population in the South increased 42 percent, from 1.2 to 1.7 million. The South also contains the five counties with fastest growing Asian populations in the country. The educational attainment of immigrants to the South has been bifurcated: the proportion of foreign-born immigrants with at least a bachelor’s degree is higher than that of all Southerners, but the proportion lacking a high school diploma is also higher. The South has also become less rural: seven in 10 Southerners live in a metropolitan area, and three-quarters of the region’s jobs are in those areas.

Survey Examines Work-Related Trends. Despite low unemployment and strong economic growth, many Americans are still concerned about their economic security, according to a new quarterly nationwide survey of workers or those actively looking for work. In particular, 59 percent of Americans reported that they were very concerned about job security for workers in general, although 55 percent reported being very satisfied with the security of their own job. Nearly four in ten (39 percent) rated the ability to balance work and family as an extremely important factor for a job, followed by health and medical insurance (38 percent), job security (33 percent), and income (33 percent). About 75 percent of respondents said that it is very or extremely important for the government to provide financial assistance for skills training, basic education, and college, and 88 percent think it is very or extremely important for government to improve the quality of education in schools.

INTERNATIONAL ROUNDUP

IMF Offers New Assessment of Capital Market Liberalization. The International Monetary Fund expresses some support for controls on inward movements of capital in its latest annual report on international capital markets. This is noteworthy, considering the IMF's past strong support for open financial markets. The report also reveals that total net private inflows fell 28 percent in 1997, while inflows to Asia plummeted by 87 percent—the first decline in those inflows since 1992. (According to a press report, private capital may now even be flowing out of emerging markets.) The report draws three broad conclusions about financial liberalization. First, strong financial sectors are essential, particularly strong and sound banking systems. Second, despite the large potential benefits derived from global capital markets, critical preconditions need to be met before countries open their capital accounts, and the sequencing of liberalization must be carefully considered. Third, transparency and the timely availability of accurate information are crucial. One clear lesson drawn from the Asian crisis is that unique problems arise when domestic banks are the key intermediaries for volatile capital flows. The report identifies the combination of a weak banking system and an open capital account as “an accident waiting to happen.” It also recognizes that restrictions on short-term capital flows, such as those established by Chile, might be necessary given that there are limits to the pace at which financial sectors can be strengthened. As the report notes, however, it can be difficult differentiating between short- and long-term capital flows, due to both data and conceptual problems. In addition, controls are not substitutes for reform of the underlying financial sector. In fact, certain capital controls might have contributed to the crisis (particularly those that discouraged foreign purchases of long-term securities) by channeling foreign investment through domestic banks.

Blair Calls for Overhaul of the International Financial System. In a speech Monday, British Prime Minister Tony Blair called for “a new Bretton Woods for the next millennium.” He challenged heads of state, finance ministers, international financial institutions, and outside experts to develop the necessary reforms within one year, so that the new institutions would be in place by the year 2000. Blair proposed several measures to deal immediately with the financial crisis. He called on the world's major economies to coordinate macroeconomic policy to ensure that growth is sustained. He also emphasized the urgent need for fiscal action in Japan to boost domestic demand. Urging swift action to provide the IMF with resources to support countries pursuing sound economic policy, he concluded with an exhortation against short-term measures alone. In his view, the 54-year old Bretton Woods institutions, built for a world of fixed exchange rates, capital controls, and smaller international capital flows, are now outdated. Current conditions require greater transparency and improved information transfers among government, the private sector, and the international institutions themselves. Finally, Blair said, open world capital markets require an international lender of last resort, a role that the IMF currently does not and cannot play.

RELEASES THIS WEEK

Gross Domestic Product

According to revised estimates, real gross domestic product grew at an annual rate of 1.8 percent in the second quarter.

Advance Durable Orders

Advance estimates show that new orders for durable goods increased 1.6 percent in August, following an increase of 1.9 percent in July.

MAJOR RELEASES NEXT WEEK

Consumer Confidence—Conference Board (Tuesday)
Leading Indicators (Wednesday)
NAPM Report on Business (Thursday)
Employment (Friday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1997	1997:4	1998:1	1998:2
Percent growth (annual rate)					
Real GDP (chain-type)	2.7	3.8	3.0	5.5	1.8
GDP chain-type price index	5.4	1.7	1.1	0.9	0.9
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.5	1.7	0.9	3.5	0.1
Real compensation per hour:					
Using CPI	0.6	1.9	2.8	4.1	2.0
Using NFB deflator	1.3	2.0	3.9	4.3	3.4
Shares of Nominal GDP (percent)					
Business fixed investment	10.9	10.6	10.7	11.0	11.2
Residential investment	4.5	4.0	4.1	4.2	4.3
Exports	8.2	11.9	12.0	11.6	11.3
Imports	9.2	13.1	13.2	13.1	13.1
Personal saving	5.2	1.5	1.2	0.9	0.3
Federal surplus	-2.7	-0.3	0.0	0.7	0.9
	1970- 1993	1997	June 1998	July 1998	August 1998
Unemployment Rate (percent)	6.7**	4.9**	4.5	4.5	4.5
Payroll employment (thousands)					
increase per month			189	68	365
increase since Jan. 1993					16682
Inflation (percent per period)					
CPI	5.8	1.7	0.1	0.2	0.2
PPI-Finished goods	5.0	-1.2	-0.1	0.2	-0.4

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

FINANCIAL STATISTICS

	1996	1997	July 1998	August 1998	Sept. 24, 1998
Dow-Jones Industrial Average	5743	7441	9097	8479	8002
Interest Rates (percent per annum)					
3-month T-bill	5.01	5.06	4.96	4.90	4.44
10-year T-bond	6.44	6.35	5.46	5.34	4.64
Mortgage rate, 30-year fixed	7.80	7.60	6.95	6.92	6.64
Prime rate	8.27	8.44	8.50	8.50	8.50

INTERNATIONAL STATISTICS

Exchange Rates	Current level September 24, 1998	Percent Change from Week ago	Year ago
Deutschemark-Dollar	1.678	-0.4	-5.5
Yen-Dollar	135.3	2.6	12.4
Multilateral \$ (Mar. 1973=100)	96.40	-0.0	-1.4

International Comparisons ^{1/}	Real GDP growth (percent change last 4 quarters)	Unemployment rate (percent)	CPI inflation (percent change in index last 12 months)
United States	3.6 (Q2)	4.5 (Aug)	1.6 (Aug)
Canada	3.1 (Q2)	8.4 (Jul)	1.1 (Jul)
Japan	-1.8 (Q2)	4.2 (Jul)	-0.1 (Jul)
France	3.0 (Q2)	11.7 (Jul)	0.8 (Jul)
Germany	2.5 (Q2)	^{2/} 7.4 (Jul)	0.9 (Jul)
Italy	1.1 (Q2)	12.4 (Apr)	1.8 (Jul)
United Kingdom	2.6 (Q2)	6.3 (May)	3.5 (Jul)

1/ For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

2/ Rate for former West Germany. Using OECD standardized unemployment data, the unemployment rate for unified Germany for July 1998 is 9.6 percent.

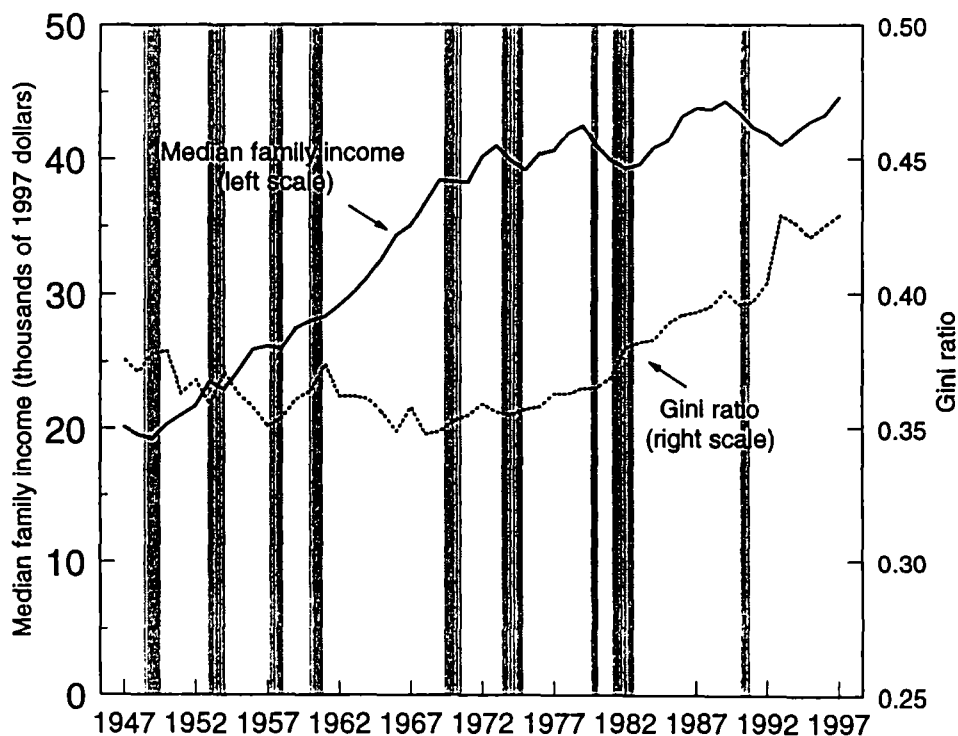
WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

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October 2, 1998

CHART OF THE WEEK

Family Income over the Past Fifty Years



Median family income doubled between 1947 and 1973, after adjusting for inflation. Growth since then has been much more modest and more subject to cyclical fluctuations (the gray bars in the chart represent recession periods). Slower growth in real median family income over the past two decades has also been accompanied by increasing inequality in the distribution of income, as measured by the Gini ratio.

CONTENTS

CURRENT DEVELOPMENT

Hedge Fund Gets Clipped 1

SPECIAL ANALYSES

Are Large Firms More Technologically Innovative? 2

Conditions Improve Substantially for Displaced Workers 3

ARTICLE

Climate Forecast: Increasing Sun and Wind 5

DEPARTMENTS

Business, Consumer, and Regional Roundup 7

International Roundup 8

Releases 9

U.S. Economic Statistics 10

Financial and International Statistics 11



"And now, if you don't want to know today's Dow Jones closing, look away from your set until the music stops."

CURRENT DEVELOPMENT

Hedge Fund Gets Clipped

Last week, a group of large financial institutions urgently invested \$3.5 billion in the hedge fund Long-Term Capital Management (LTCM) in order to prevent its collapse. What is a hedge fund and what got LTCM in trouble?

Funds for the sophisticated. The label “hedge fund” is usually applied to investment funds that are unregulated because they restrict participation to a relatively small number of wealthy investors. No precise figures are available, but the amount invested in hedge funds appears to be in the \$200-300 billion range. These funds often make combinations of transactions—including the use of derivatives—that allow them to hedge some kinds of risk (see box).

What went wrong at LTCM? According to press accounts, LTCM gambled that yield spreads between Treasury bonds and many riskier types of debt would narrow. Instead, the recent “flight to quality” sharply widened risk spreads, causing many of LTCM’s bets to fail at the same time. In addition, LTCM had financed many transactions by borrowing. By leveraging its relatively small amount of equity capital, the fund raised profits when its investment decisions were correct, but reduced its margin for error.

What is the role for government? If LTCM had gone bankrupt and been forced to liquidate its large and somewhat illiquid portfolio quickly, financial markets might have been seriously disrupted. To avoid this outcome, the New York Federal Reserve Bank brought LTCM’s principal creditors together, but it did not set the terms of the rescue or invest public money. Still, analysts have noted that even the appearance of government assistance might encourage greater risk-taking by investment firms in the future.

Why Are They Called Hedge Funds?

By engaging in specific combinations of transactions, hedge funds protect their portfolios against all risks except the ones they choose to take. For example, if a hedge fund believes that the yield spread between mortgage-backed securities and U.S. Treasuries is likely to decline, it can buy mortgage-backed securities and sell Treasuries short. Then, changes in the yield spread will generate gains or losses for the fund, but common movements in the yields will be a wash. Such a “pure play” focuses risk exposure but does not eliminate it.

SPECIAL ANALYSIS

Are Large Firms More Technologically Innovative?

Joseph Schumpeter conjectured more than 50 years ago that large enterprises, by virtue of their superior ability to attract capital and brain power, bear risk, and recoup investments, were superior innovators to small firms. Empirical studies have provided both limited support and important challenges to Schumpeter's claim.

Innovative input: research and development. Studies consistently find that bigger enterprises are more likely than smaller ones to undertake at least some R&D. In addition, among those firms that do undertake R&D, bigger firms tend to make larger R&D investments. But are these investments *proportionately* larger? Early studies found that the intensity of R&D varied somewhat by industry. For example, large firms were found to spend proportionately more on R&D in the chemicals industry, but proportionately less in pharmaceuticals. But in most industries and in most cross-industry studies, size did not prove to be a good predictor of R&D investment per dollar of sales volume or other measures of firm scale. More sophisticated recent research has led to a consensus that, in general, R&D rises only proportionately with firm size. These results suggest that large firms have no particular tendency—nor any notable reluctance—to engage in innovation.

Innovative output: patents. Although evidence based on R&D investment is instructive, several scholars have argued that it would be better to test Schumpeter's conjecture by looking at innovative output. Here several studies spanning the 1960s through the 1990s have found that small firms account for a disproportionately large share of patents—though once again with some variation across industries. Studies that have explicitly matched R&D investment with patent output have found that smaller firms produce more innovations per R&D dollar than do large firms.

These results do not necessarily imply a negative assessment of large firms' innovative efforts. First, there may be diminishing returns to R&D, and large firms may simply be more willing to invest in projects with less prospect of success. Second, not all patents or other innovative outputs are equivalent in value. So simply counting patents and dividing by R&D investment is an imperfect measure of innovative productivity. Third, large firms may earn higher returns on R&D than small ones because of their ability to deploy innovations across a broader array of products or take advantage of process cost savings over a larger production volume. So even though a large firm might produce fewer patents per R&D dollar, it may earn more per patent, perhaps explaining why large firms continue to invest in R&D even after their proportionate patent yield drops below that of smaller firms.

Conclusion. The relationship between firm size and innovation is complex. Available evidence calls into question Schumpeter's conjecture that large firms are superior innovators, but it does not lead to the contrary view that large firms are bad for technological progress and economic growth.

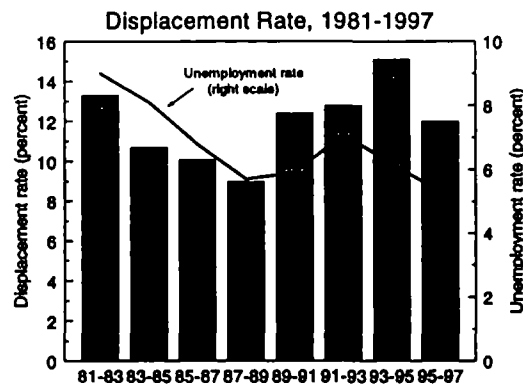
SPECIAL ANALYSIS

Conditions Improve Substantially for Displaced Workers

Based in part on data from the 1996 survey of displaced workers, which showed job displacement to be unusually high given the overall strength of the labor market, some analysts argued that the employer-employee relationship had changed and job instability was on the rise. But new data showing a substantial decline in job displacement and a record low loss in workers' earnings associated with displacement suggest that this interpretation may have been premature.

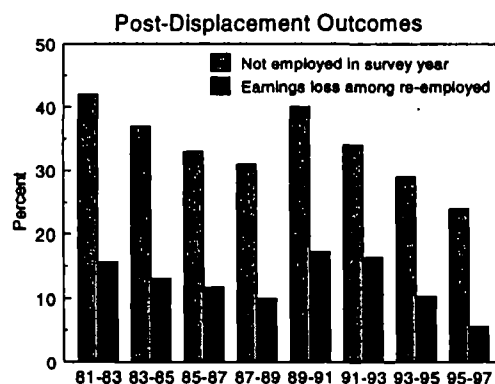
The displaced worker survey. Since 1984, the Department of Labor has conducted a biennial survey of workers who have been displaced from their job sometime in the 3 years prior to the survey. Displacement is defined as job loss due to a plant closing, insufficient or slack work, abolishment of a position or shift, or some other similar reason.

Displacements on the decline. The 1996 survey was cause for concern because it indicated that the number of workers who reported being displaced at some time between 1993 and 1995 was equivalent to 15.1 percent of the workforce—up from



12.8 percent in 1991-93, despite a drop in the overall unemployment rate (see upper chart). The 1998 survey is more encouraging, showing a drop in the displacement rate to 12.0 percent for the 1995-97 period. Moreover, declines were evident for all major groups of workers: men and women, younger and older workers, high school dropouts and college-educated workers, and workers in manufacturing as well as professional

services. Nevertheless, the rate of job displacement in 1995-97 was 20 percent higher than it was in 1987-89—when the unemployment rate was roughly the same.



Costs of displacement. Historically, 30 to 42 percent of displaced workers were not re-employed 1 to 3 years after losing their jobs. Thus it is encouraging that this rate has fallen to 24 percent in the latest survey (see lower chart). In addition, re-employed workers typically earn less than they did in their previous jobs. For example, one study of workers with at least some earnings in the years after displacement found an average earnings decline of 29 percent in the year

of displacement that subsequently shrank to an average loss of 10 percent. The latest data, by contrast, show that the loss in weekly earnings among those who were re-employed was at a record low of 5.7 percent overall in 1995-97. Losses are at or near record lows for workers of all education levels, with workers at higher education levels now experiencing particularly small losses.

Conclusion. The latest data on job displacement goes a long way toward laying to rest the most serious concerns raised by the 1996 results. Nevertheless, job displacement remains more common than it was in the 1980s, which will continue to fuel the discussion of employment insecurity.

ARTICLE

Climate Forecast: Increasing Sun and Wind

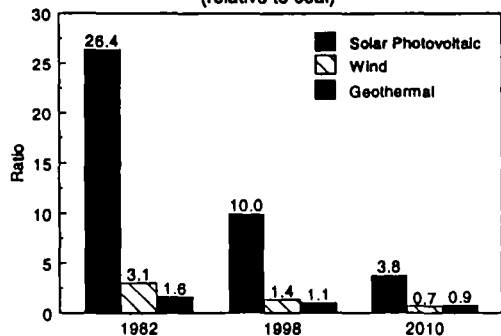
Improvements in (non-hydropower) renewable energy technologies have substantially reduced the costs of these technologies over the past two decades, and some analysts have expressed enthusiasm for the opportunities for such renewable energy to replace significant amounts of fossil fuel-based power. However, the weight of the evidence suggests that these renewable energy sources will most likely supply only a small fraction of total U.S. energy over the next two decades.

Trends and projections. Renewable energy has long been a significant component of U.S. electricity generation. In 1950, hydropower was about 30 percent of total electricity generation—second only to coal as a source of electricity. In the late 1960s, new generation came from non-hydro renewable sources, traditionally defined as wind, solar, biomass and waste combustion, and geothermal power. Non-hydro renewable generation increased through the 1970s and 1980s, in part due to R&D devoted to alternative energy sources spurred by the 1973 and 1979 oil shocks.

By 1996, the share of hydropower had fallen to about 10 percent, while non-hydro renewable generation had climbed to 2.2 percent of total electricity generation. The share of hydropower generation is projected to fall further between 1996 and 2020, while other renewables are projected to edge up to 2.6 percent of total electricity generation. Since most good opportunities for hydropower development have already been employed, growth in renewable power will likely depend on the development of these other sources. Although their costs are projected to decline further, use of non-hydro renewable energy sources is not likely to increase much in the face of low coal prices.

Costs are coming down. While hydropower has long been a cheap source of energy, non-hydro renewables have historically had much higher generation costs. In 1982, solar photovoltaic power cost more than 25 times as much as coal while wind power

Average Cost of Renewable Electricity Generation
(relative to coal)



was about 3 times as expensive (see chart). But continued technological advances, together with cost reductions arising from greater economies of scale in production, have lowered generation costs. Wind is now competitive in some areas, while the costs of solar photovoltaics have fallen 70 percent. In addition, geothermal is now competitive in those limited areas where it is feasible.

Renewables and climate change. Non-hydro renewable energy that generates electricity without carbon dioxide emissions can help address the risks of climate change. The economics of renewables become more attractive, for example, when

coal and natural gas prices include the cost of a greenhouse gas permit. Several modeling simulations indicate, however, that the cost of a greenhouse gas permit would need to be relatively high for non-hydro renewables to increase significantly by 2010. In one simulation, for example, the permit price had to be about \$350 per ton for the share of electricity generation from non-hydro renewables to double; at a price as high as \$65 per ton non-hydro renewables displaced less than 0.5 percent of fossil fuel-based electricity generation in 2010. These results indicate that during the first "budget period" established under the Kyoto Protocol, electricity generators would more likely switch over to natural gas than to non-hydro renewable sources.

Conclusion. Electricity generation costs from non-hydro renewable sources have fallen significantly over the past two decades. Drawing from this experience, one recent analysis even suggests that solar photovoltaic power could cost-effectively replace fossil fuels midway through the next century. Over the next 20 years, however, these renewables most likely will continue to account for only a small share of electricity generation.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

Fed Eases; Markets Unimpressed. A week ago financial markets reacted favorably when Federal Reserve Chairman Greenspan signaled that a rate cut was imminent. But the cut in the Federal funds target rate from $5\frac{1}{2}$ to $5\frac{1}{4}$ percent seemed to disappoint markets, which apparently were hoping for a stronger move by the Fed—either a larger rate cut or an accompanying cut in the discount rate (the rate the Fed charges banks who borrow reserves from it). The Fed funds futures market implies that investors expect a further 0.5 percentage point cut by year-end.

FCC Thwarts Bell Operating Companies on Long Distance—Again. This week the Federal Communications Commission ruled that business agreements entered into by Ameritech and U S WEST to provide long distance service to their local customers violate the Communications Act because the companies have not yet demonstrated that their local telephone markets are open to competition. Both companies had agreements with a third firm, Qwest Communications Corp., to offer Qwest's long distance service as part of a package of services they offered customers under their own brand name. Section 271 of the Telecommunications Act is meant to prevent Bell Operating Companies (BOCs) from leveraging their bottleneck control of local telephone markets into the long distance market and to provide an incentive to open their local market to competition. In 1997, Ameritech made the first of several BOC efforts to try to enter the long distance market, but it withdrew its application when the FCC determined that it had not yet opened its local markets to competition.

Program for Poor Fathers Shows Poor Results. The Parents' Fair Share Demonstration, conducted at seven sites since 1994, offered a quid-pro-quo to low-income noncustodial fathers: in return for their cooperation with the child support system, participants received employment and training services as well as peer support focused on responsible parenting. An experimental evaluation found no increases in employment, earnings, or average child support payments during the first 18 months. The percentage of fathers who made any child support payment during the period showed a modest increase, from 69 to 73 percent. The participants were a disadvantaged group, with the majority in poverty and with little access to public assistance. Half lacked a high school diploma and 70 percent had an adult arrest record.

Census Documents 50 Years of Economic Change Using the CPS. This week the Census Bureau released a chart book chronicling a half century of measuring income in America using the Current Population Survey (see the Chart of the Week, for example). Highlighted trends include a 150 percent increase in the real median income of married-couple families between 1947 and 1997 (due in part to an increase in the number of married women in the labor force); a rise in the ratio of female-to-male earnings to a record high; and a continuing three-decade-long increase in the number of children in poverty. The March supplement to the CPS provides the data for Census' annual income and poverty estimates.

INTERNATIONAL ROUNDUP

IMF Staff Urges Looser Monetary Policy. The International Monetary Fund staff is recommending that monetary policies be eased or that accommodative monetary policies be retained in countries accounting for 90 percent of world GDP, according to IMF chief economist, Michael Mussa. Tighter fiscal policies are being recommended for countries accounting for only about 10 percent of world GDP. Speaking at a press conference on the release of the latest *World Economic Outlook*, Mussa attacked the popular impression that the Fund staff has nothing to recommend but tighter monetary and fiscal policies. Recommendations for easier policies reflect the latest IMF expectation that world GDP will grow only 2 percent this year and 2.5 percent next year.

Pessimism about Global Economy Increases. Private sector concerns regarding the fallout from the Asian crisis are building. For instance, Goldman Sachs recently reported that securities prices are consistent with a 40 percent probability of recession in the next 12 months. WEFA states that the likelihood of a global meltdown is now "significant," assessing its probability at 30 percent. Noting the recent occurrence of key elements of its worst-case scenario, Standard & Poor's DRI also increased its subjective probability of a world recession to 30-35 percent. Included among its concerns are the potential for policy mistakes such as foot-dragging on IMF funding and rising protectionist pressures.

Hungary Stays on Growth Path, Aims for EU Integration. Like other transition economies, Hungary at first suffered a sharp drop in GDP (17 percent between 1990 and 1993). But the stabilization and reform program introduced in 1995 led to a strong recovery, with 4.4 percent GDP growth in 1997. Sustained growth now seems achievable, fueled by exports and investment and supported by comprehensive structural reforms. Privatization and regulatory reform have occurred in infrastructure sectors (such as electricity, gas, telecommunications, and transportation), and regulatory agencies have been created and strengthened in the financial sector. The newly elected center-right government has declared its intent to continue the reform process, and achieving integration into the EU has become the most important issue on the economic agenda. Budget deficits and inflation have been reduced, but progress must continue and the enforcement capacity of the country's legal institutions must be improved.

IIF Forecasts Substantial Fall in Emerging Market Capital Flows. Net private capital flows in 1998 are expected to fall to just over half of their 1996 levels, according to the Institute of International Finance, a global association of private sector financial institutions. The IIF predicts that portfolio equity flows will decline much more than direct investment, which should hold firm. Contraction in commercial bank lending, however, largely accounts for the overall decline. Data for Indonesia, Malaysia, South Korea, Thailand, and the Philippines indicate an expected net private outflow of \$25 billion this year. Reduced bank lending more than accounts for this total; \$30 billion in loans will be withdrawn in 1998.

RELEASES THIS WEEK

Employment and Unemployment

****Embargoed until 8:30 a.m., Friday, October 2, 1998****

In September, the unemployment rate was 4.6 percent; it was 4.5 percent in August. Nonfarm payroll employment rose by 69,000.

NAPM Report on Business

The Purchasing Managers' Index was unchanged in September at 49.4 percent.

Leading Indicators

In August, the composite index of leading indicators was unchanged, following an increase of 0.5 percent in July.

Consumer Confidence

Consumer confidence, as measured by The Conference Board, fell 7.1 index points in September, to 126.0 (1985=100).

MAJOR RELEASES NEXT WEEK

There are no major releases scheduled for release.

U.S. ECONOMIC STATISTICS

	1970- 1993	1997	1997:4	1998:1	1998:2
Percent growth (annual rate)					
Real GDP (chain-type)	2.7	3.8	3.0	5.5	1.8
GDP chain-type price index	5.4	1.7	1.1	0.9	0.9
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.5	1.7	0.9	3.5	0.1
Real compensation per hour:					
Using CPI	0.6	1.9	2.8	4.1	2.0
Using NFB deflator	1.3	2.0	3.9	4.3	3.4
Shares of Nominal GDP (percent)					
Business fixed investment	10.9	10.6	10.7	11.0	11.2
Residential investment	4.5	4.0	4.1	4.2	4.3
Exports	8.2	11.9	12.0	11.6	11.3
Imports	9.2	13.1	13.2	13.1	13.1
Personal saving	5.2	1.5	1.2	0.9	0.3
Federal surplus	-2.7	-0.3	0.0	0.7	0.9
	1970- 1993	1997	July 1998	August 1998	Sept. 1998
Unemployment Rate (percent)	6.7**	4.9**	4.5	4.5	4.6
Payroll employment (thousands)					
increase per month			118	309	69
increase since Jan. 1993					16745
Inflation (percent per period)					
CPI	5.8	1.7	0.2	0.2	N.A.
PPI-Finished goods	5.0	-1.2	0.2	-0.4	N.A.

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

Employment and unemployment data **embargoed until 8:30 a.m., Friday, October 2, 1998.**

FINANCIAL STATISTICS

	1996	1997	August 1998	September 1998	Oct. 1, 1998
Dow-Jones Industrial Average	5743	7441	8479	7910	7633
Interest Rates (percent per annum)					
3-month T-bill	5.01	5.06	4.90	4.61	4.13
10-year T-bond	6.44	6.35	5.34	4.81	4.33
Mortgage rate, 30-year fixed	7.80	7.60	6.92	6.72	6.60
Prime rate	8.27	8.44	8.50	8.49	8.25

INTERNATIONAL STATISTICS

Exchange Rates	Current level October 1, 1998	Percent Change from Week ago	Year ago
Deutschemark-Dollar	1.650	-1.6	-7.0
Yen-Dollar	135.8	0.3	12.4
Multilateral \$ (Mar. 1973=100)	95.52	-0.9	-2.3

International Comparisons ^{1/}	Real GDP growth (percent change last 4 quarters)	Unemployment rate (percent)	CPI inflation (percent change in index last 12 months)
United States	3.6 (Q2)	4.6 (Sept)	1.6 (Aug)
Canada	3.1 (Q2)	8.4 (Jul)	1.0 (Aug)
Japan	-1.8 (Q2)	4.2 (Jul)	-0.2 (Aug)
France	3.0 (Q2)	11.7 (Jul)	0.7 (Aug)
Germany	2.5 (Q2)	^{2/} 7.4 (Jul)	0.7 (Aug)
Italy	1.1 (Q2)	12.4 (Apr)	1.9 (Aug)
United Kingdom	2.6 (Q2)	6.3 (May)	3.3 (Aug)

U.S. unemployment data embargoed until 8:30 a.m., Friday, October 2, 1998

^{1/} For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

^{2/} Rate for former West Germany. Using OECD standardized unemployment data, the unemployment rate for unified Germany for July 1998 is 9.6 percent.

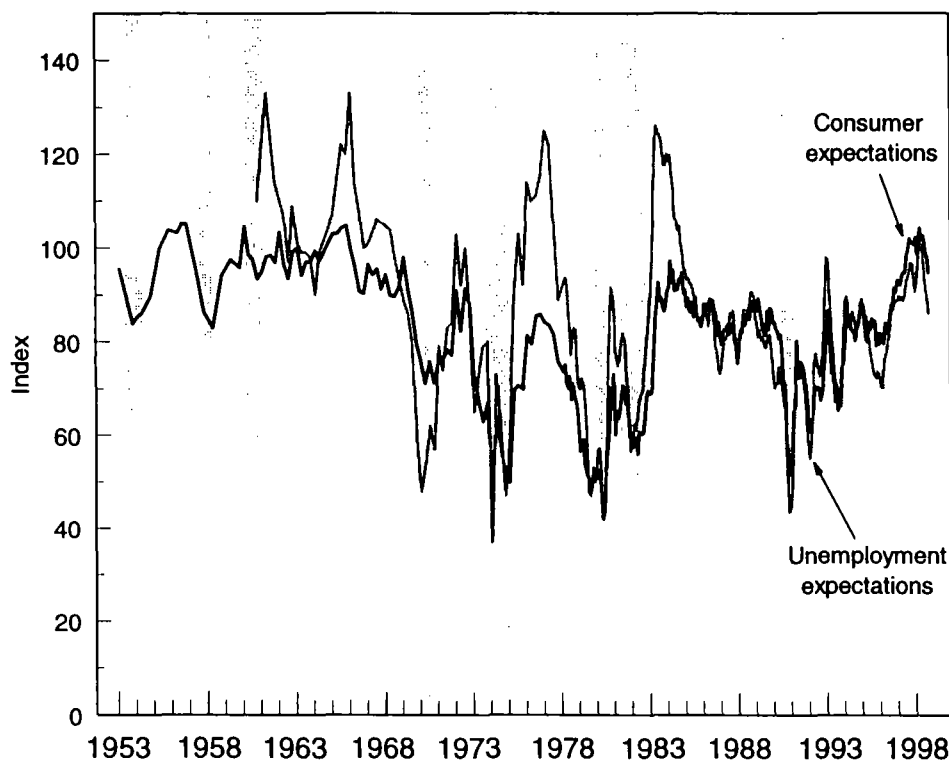
WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

Prepared by the Council of Economic Advisers
with the assistance of the Office of the Vice President

November 6, 1998

CHART OF THE WEEK

Consumer Expectations and the Business Cycle



Consumer confidence remained high in October, though its level fell. The University of Michigan's index of consumer expectations is a component of the index of leading economic indicators, but researchers have found that an index of unemployment expectations, also based on the Michigan survey, is much more robustly correlated with most measures of spending. The index's average reading of 86 for the 3 months ending in October reflects the fact that 14 percent more respondents expected unemployment to rise than expected it to fall.

CONTENTS

SPECIAL ANALYSES

Energy Consumption: Low Prices Offset Efficiency Gains	1
Potential Barriers to Work among Welfare Recipients	2

ARTICLE

Modernizing Bank Capital Standards	4
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DEPARTMENTS

Business, Consumer, and Regional Roundup	6
International Roundup	7
Releases	8
U.S. Economic Statistics	9
Financial and International Statistics	10

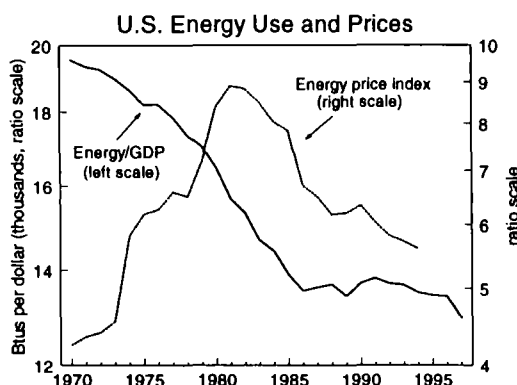


"Why, these are nothing but a lot of tax-and-spend proposals!"

SPECIAL ANALYSIS

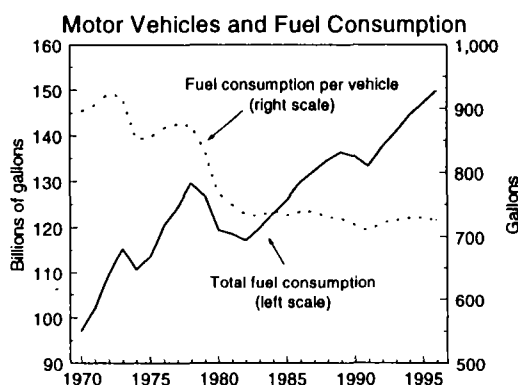
Energy Consumption: Low Prices Offset Efficiency Gains

Energy efficiency is much greater now than it was at the time of the first oil shock 25 years ago. Nevertheless, total U.S. energy consumption is greater than it was then.



Trends. The ratio of energy use to GDP (in Btus per dollar) fell rapidly in the 1970s and early 1980s, though it has remained relatively flat in the 1990s (see upper chart). Despite the efficiency gains, total energy use rose by 27 percent between 1973 and 1997, stimulated by population growth and rising per capita GDP. The entire increase came after 1986, a period of relatively low energy prices. Before 1986, relatively high energy prices had kept energy use flat.

Motor vehicles. One of the most dramatic increases in energy use was in motor vehicle transportation, where annual consumption rose 51 percent between 1970 and 1995. The average fuel efficiency of new passenger cars doubled between 1973 and 1996, from 14.2 to 28.5 miles per gallon.



These efficiency gains were partially offset, however, by an increase in miles traveled per vehicle and a shift toward more powerful vehicles. Average horsepower, for example, increased from 137 in 1975 to 166 in 1996. The net effect was a small decline in fuel use per vehicle (see lower chart) but a large increase in total fuel consumption due to an increase in the number of vehicles.

Residential. Energy consumption in the residential sector, by contrast, was about the same in the early 1990s as it was in the 1970s. Efficiency gains kept pace with increases in the number of households, average house size, and average number of appliances per household. For example, the efficiency of the average new refrigerator improved 192 percent from 1972 to 1996. Per household energy use declined rapidly in the late 1970s and early 1980s but has been stable since.

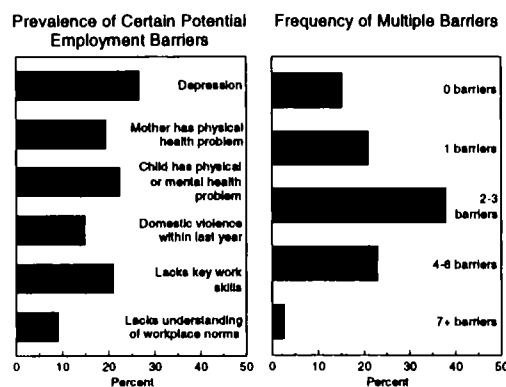
Conclusion. Changes in energy use are a race between efficiency gains and increases in population and income, with shifts in consumer behavior the “swing voter.” Lower energy prices have shifted demand toward energy-intensive goods and services and resulted in higher energy use.

SPECIAL ANALYSIS

Potential Barriers to Work among Welfare Recipients

Most discussions of welfare and work have focused on how education, work experience, child care, and transportation limit welfare mothers' employment and wages. However, other potential barriers to employment, such as mental and physical health problems, substance abuse, and domestic violence, also affect welfare mothers disproportionately and make employment difficult.

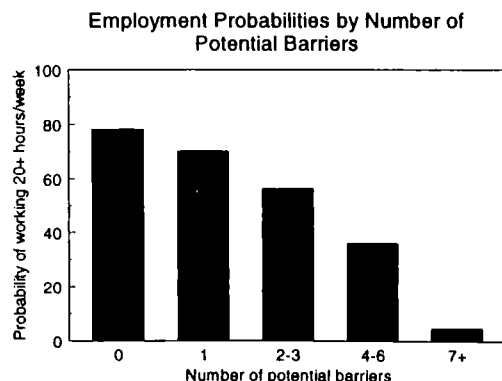
Prevalence of potential barriers. Two recent surveys of welfare recipients in San Bernardino County, California, and in an urban county in Michigan indicate that the vast majority of welfare recipients face at least one potential employment barrier.



Most face multiple barriers (see upper chart). In one study, for example, over 20 percent lacked key job skills, and roughly one in ten misunderstood workplace norms on issues such as punctuality, absenteeism, and lines of authority in the workplace. Mental health problems were quite common: the proportion diagnosed with depression was at the low range of previous surveys of low-income mothers but about twice as high as among all women. About one

in five had a physical health problem, and respondents were twice as likely to report physical limitations as women nationally. The share that reported severe physical abuse by a husband or partner in the last year was about four to five times the national average—though similar to rates reported in other welfare studies. Previous research has also found that 25 to 35 percent of recipients had a learning disability.

Employment. The studies find that these barriers do in fact affect employment. In one study, for example, the probability of working at least 20 hours per week decreased steadily with increases in the number of potential barriers faced by an individual (see lower chart). Even so,



many people who faced barriers were able to work, and in some cases the differences in work participation were not large between those with and without a particular barrier. In San Bernardino, for example, just over one quarter of recipients with health problems met the 1998 California work requirement of 26 hours per week, a level similar to the 30 percent with no health problems who met the requirement.

Overcoming barriers. Why are certain people able to overcome potential barriers to employment while others are not? The surveys do not examine this question, but previous research points to the confluence of “special circumstances” that help poor women work. These include co-residence with relatives or supportive boyfriends (and its associated economies of scale), free child care provided by relatives or friends, receipt of regular and substantial child support, access to transportation, and employer tolerance while new workers adjust to their jobs.

Implications. Overcoming barriers to employment will be a key component of recipients’ success under the new welfare system. New findings confirm that recipients differ in the number and severity of the barriers they face. For those with few or no barriers, providing job search assistance may be enough. For those with multiple barriers, more intensive, coordinated services may be required if they are to achieve economic self-sufficiency.

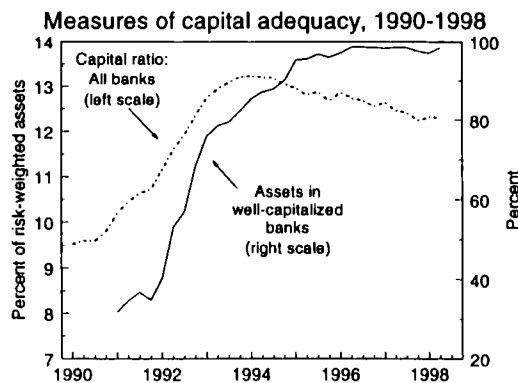
ARTICLE

Modernizing Bank Capital Standards

In 1989 Federal regulators adopted minimum risk-based capital (RBC) requirements for banks. RBC ratios have since come to play an important role in bank regulation and supervision. But these requirements may not be a reliable guide to the capital adequacy of large, global banks. Insuring that “regulation remains as modern as the markets” may require some updating of the standards.

The role of capital requirements. A bank’s capital acts as a cushion to absorb unanticipated losses and declines in asset values that could otherwise cause it to fail. The public policy interest in setting appropriate capital requirements arises because deposit insurance and other aspects of the Federal safety net (such as “too big to fail” intervention) provide incentives for excessive risk-taking by banks. Capital requirements provide a counterbalance by assuring that bank shareholders are exposed to a certain percentage of potential losses. The most commonly used measure of bank capital adequacy is the total risk-based capital ratio, defined as the ratio of a bank’s total capital to its risk-weighted assets. The 1988 Basle Accord, a G-10 agreement applying to internationally active banks, determined risk-weights by placing all assets in four risk categories. Cash, at one extreme, receives a risk weight of zero. Most non-mortgage loans receive a risk weight of 100 percent.

Our well-capitalized banks. Judged by their RBC ratios, U.S. banks are in very sound condition (see chart). Capital ratios of all banks have increased substantially since 1990, averaging 12.3 percent in the second quarter of 1998—well above the Basle minimum of 8 percent. In fact, the share of bank assets at “well-capitalized”



banks stood at 98.5 percent in the second quarter of 1998, up from just over 30 percent in 1991. (“Well-capitalized” banks are those that meet a number of conditions, including having a total capital ratio greater than 10.)

Are capital adequacy standards adequate? Critics question whether the Basle capital requirements provide an adequate measure of banks’ risk positions.

- **One big bucket.** Most bank assets—ranging from a secured loan to a triple-A borrower to an unsecured loan with a junk bond rating—are assigned the identical 100 percent risk weight and 8 percent capital requirement to cover credit risk.
- **Diversification does not count.** Although theory and practice prove that it is highly risky to put all of one’s eggs in a single basket, a portfolio consisting

entirely of agricultural loans to California farmers is treated identically with respect to risk as a diversified portfolio of loans across businesses and regions.

Regulatory arbitrage. The “one-size-fits-all” nature of the Basle capital regulations affords banks the chance to game the system. Through securitization and other financial innovations, a sophisticated bank can increase the riskiness of its portfolio to a preferred level while meeting or exceeding the regulatory capital requirements. One technique is cherry-picking, which involves shifting low-risk assets with unduly high regulatory capital requirements off the regulated banking book while retaining higher risk assets. This regulatory arbitrage might explain why no major U.S. bank holding company’s parent corporate debt is rated AAA, and, in fact, the parent corporate debt of almost 80 percent of the top 50 U.S. banking companies is rated below AA-.

Alternatives to RBC requirements. One alternative to the Basle Accord’s rule-based measures of credit risk entails increased reliance on the mathematical models now used by globally active banks to measure and manage risk as a matter of “best business practice.” A recent amendment to the Basle Accord permits banks to use their own Value-at-Risk (VaR) models for calculating RBC requirements against specific risks within their trading portfolios (bonds, swaps, derivatives). U.S. regulators are studying the feasibility of extending this approach and using banks’ internal models to estimate the economic capital required to support credit activities on the banking book. However, the collapse of Long-Term Capital Management—a firm that appears to have relied heavily on such a model-based approach to determine acceptable risks—serves as a cautionary tale. An even more radical alternative than internal models is to base a bank’s capital requirement on its own pre-commitment to a maximum loss exposure over a designated horizon, with appropriate penalties for non-compliance.

Conclusion. As the activities undertaken by sophisticated banking organizations have become more complex, the difficulty for examiners in evaluating bank capital adequacy using traditional capital tools has increased. The challenge is to protect the public interest in a safe and sound banking system while allowing banks adequate scope to pursue sophisticated profit-maximizing strategies.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

Beige Book Reports Cautious Views about the Economic Outlook. The latest summary of commentary on current economic conditions from the Federal Reserve districts suggests that the pace of economic expansion moderated in the past 2 months, amid signs of slowing in some sectors. Retail sales were mostly at or below merchants' expectations, but there were only scattered reports of involuntary inventory accumulation. Real estate and construction activity remained generally robust, especially in residential markets, but most districts reported that more stringent credit standards were a factor slowing commercial and real estate activity. Manufacturing activity, though continuing at relatively high levels, was the sector most often cited as showing signs of softening. Labor markets remained very tight in most districts, although demand for workers in manufacturing industries was softening in some areas. Upward pressure on most wages remained subdued, prices at the retail level were little changed, and producers' prices for intermediate inputs were generally flat or down. Low commodity prices and adverse weather conditions in some areas were causing increasing concern among farmers and agricultural banks. Virtually all districts reported that businesses and consumers remained cautious about the economic outlook.

New Jersey Family Cap Lowers Birth Rate. Since 1992, New Jersey has precluded welfare recipients from receiving additional cash benefits for children conceived while on welfare. A new study tracks a sample of recipients subject to the family cap, as well as a control group exempt from the cap, over a 4-year period. While the immediate impact was to increase abortions among those subject to the cap relative to the control group, the study also found a growth over time in the use of family planning services among those subject to the cap. The net result was a decline in births that was larger for those just entering the rolls (12 percent) than for those already part of the caseload (9 percent). The decline in the birth rate among new cases was related both to increased use of contraception and to abortion, while the decline in the birth rate among ongoing cases was associated with more sterilizations and increased use of family planning services. A large majority of those subject to the cap said that the family cap was a fair rule that promoted individual responsibility.

Study Says Layoffs Do Not Lead to Higher CEO Pay. Firms that announce layoffs in the previous year pay their CEOs more and give them larger percentage raises than firms that do not have at least one layoff announcement in the previous year. However, a new study finds that the likelihood of announcing a layoff varies along other dimensions, such as firm size, that are also correlated with CEO pay. Taking into account these other effects, the CEO pay premium for laying off workers disappears. In addition, the study found a small negative share price reaction to layoff announcements.

INTERNATIONAL ROUNDUP

Developing World Gets in on the Anti-Dumping Act. Developing countries have become major users of anti-dumping policies, according to a forthcoming study. Developing countries have initiated over half of all dumping investigations since 1993, and they accounted for two-thirds of the total in 1996. The United States has initiated the most anti-dumping cases since 1987. Mexico, Argentina, and Brazil are the three most active new users. In fact, relative to the size of their imports, they are more active initiators than the United States and collectively initiated a fifth of all investigations between 1987 and 1997. Intense foreign competition brought on by accelerating trade liberalization might explain the growing use of anti-dumping policies among developing countries. However, the rise in the share of all cases brought by developing countries also reflects a decline in recent years in the number of cases brought by anti-dumping's past heavy users, particularly the United States and Canada. The study argues that this decline is probably temporary. Nevertheless, the study concludes that discussions of anti-dumping should no longer portray it as the exclusive domain of developed countries.

Signs of Life for Emerging Market Bonds. Just weeks ago, the market for emerging market bonds seemed closed. New issues from developing countries had virtually ceased, and prices for existing securities demonstrated strong investor reluctance to hold emerging market risk without a very high expected return. Sovereign spreads—the excess yield offered by emerging market bonds over comparable-maturity U.S. Treasury securities—had increased to levels unseen for most of the last decade. However, signs of life have recently reappeared, at least in the eyes of some market participants. Last week, Argentina became the first emerging market borrower to place a new issue since the Russian devaluation in August. Venezuela followed shortly thereafter. Improved investor sentiment has also become evident in declining sovereign spreads. Spreads for bonds included in JP Morgan's Emerging Markets Bond Index have fallen by over 650 basis points since September 10. Despite this decline, however, private borrowing costs remain substantially higher for emerging market countries than those prevailing even in early August.

More Declining Interest Rates in Europe. Spain and Portugal announced interest rate cuts this week, surprising many observers. Among countries shifting to the euro, only Ireland continues to maintain significantly higher interest rates than the rest. Once the single currency is established, short-term interest rates will have to be essentially the same in all member countries.

Britain Hopes to Close Productivity Gap. A recent report by the McKinsey Global Institute identified a significant British productivity gap when UK companies were benchmarked against global top performers in key market sectors. This may have colored the pre-budget report of the Chancellor of the Exchequer, Gordon Brown, who asserted that improving Britain's competitiveness was essential for it to remain at the forefront of the coming knowledge-driven international economy.

RELEASES THIS WEEK

Employment and Unemployment

Released 1:30 p.m., Thursday, November 5, 1998

In October, the unemployment rate was unchanged from September at 4.6 percent. Nonfarm payroll employment rose by 116,000.

Leading Indicators

In September, the composite index of leading indicators was unchanged for the second consecutive month.

NAPM Report on Business

The Purchasing Managers' Index fell to 48.3 percent in October from 49.4 percent in September

MAJOR RELEASES NEXT WEEK

Productivity (Tuesday)
Retail Sales (Friday)
Producer Prices (Friday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1997	1998:1	1998:2	1998:3
Percent growth (annual rate)					
Real GDP (chain-type)	2.7	3.8	5.5	1.8	3.3
GDP chain-type price index	5.4	1.7	0.9	0.9	0.8
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.5	1.7	3.5	0.1	N.A.
Real compensation per hour:					
Using CPI	0.6	1.9	4.1	2.0	N.A.
Using NFB deflator	1.3	2.0	4.3	3.4	N.A.
Shares of Nominal GDP (percent)					
Business fixed investment	10.9	10.6	11.0	11.2	10.9
Residential investment	4.5	4.0	4.2	4.3	4.4
Exports	8.2	11.9	11.6	11.3	11.0
Imports	9.2	13.1	13.1	13.1	13.0
Personal saving	5.2	1.5	0.9	0.3	0.1
Federal surplus	-2.7	-0.3	0.7	0.9	N.A.
	1970- 1993	1997	August 1998	September 1998	October 1998
Unemployment Rate (percent)	6.7**	4.9**	4.5	4.6	4.6
Payroll employment (thousands)					
increase per month			322	157	116
increase since Jan. 1993					16962
Inflation (percent per period)					
CPI	5.8	1.7	0.2	0.0	N.A.
PPI-Finished goods	5.0	-1.2	-0.4	0.3	N.A.

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

FINANCIAL STATISTICS

	1996	1997	September 1998	October 1998	Nov. 5, 1998
Dow-Jones Industrial Average	5743	7441	7910	8164	8915
Interest Rates (percent per annum)					
3-month T-bill	5.01	5.06	4.61	3.96	4.47
10-year T-bond	6.44	6.35	4.81	4.53	4.82
Mortgage rate, 30-year fixed	7.80	7.60	6.72	6.71	6.89
Prime rate	8.27	8.44	8.49	8.12	8.00

INTERNATIONAL STATISTICS

Exchange Rates	Current level November 5, 1998	Percent Change from Week ago	Year ago
Deutschemark-Dollar	1.657	0.2	-3.8
Yen-Dollar	117.5	0.1	-4.2
Multilateral \$ (Mar. 1973=100)	93.97	0.0	-1.9

International Comparisons ^{1/}	Real GDP growth (percent change last 4 quarters)	Unemployment rate (percent)	CPI inflation (percent change in index last 12 months)
United States	3.4 (Q3)	4.6 (Oct)	1.5 (Sept)
Canada	2.9 (Q2)	8.3 (Aug)	0.9 (Sept)
Japan	-1.8 (Q2)	4.2 (Jul)	-0.2 (Sept)
France	3.1 (Q2)	11.7 (Jul)	0.6 (Sept)
Germany	2.5 (Q2)	^{2/} 7.4 (Aug)	0.8 (Sept)
Italy	1.1 (Q2)	12.4 (Apr)	1.8 (Sept)
United Kingdom	2.5 (Q3)	6.2 (Jun)	3.2 (Sept)

1/ For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

2/ Rate for former West Germany. Using OECD standardized unemployment data, the unemployment rate for unified Germany for August 1998 is 9.6 percent.

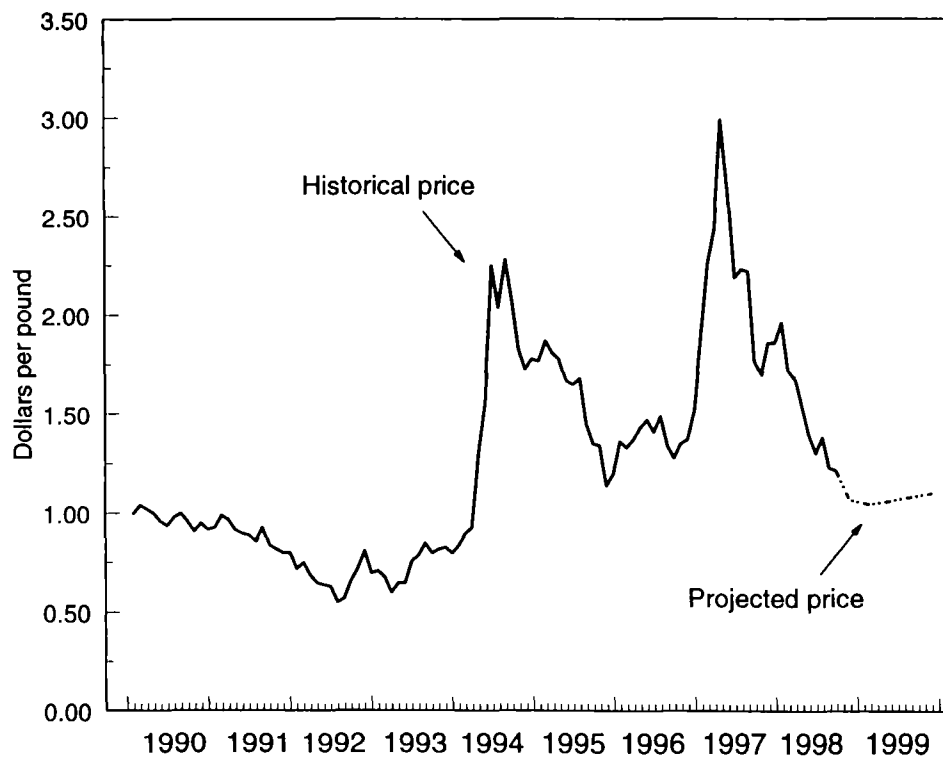
WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

Prepared by the Council of Economic Advisers
with the assistance of the Office of the Vice President

October 23, 1998

CHART OF THE WEEK

Colombian Coffee Prices



The price of Colombian coffee is down about 60 percent from its peak of almost \$3.00 per pound in May 1997 and futures markets expect coffee prices to remain around current levels over the next year. (The projected price is based on coffee produced in several countries; Colombian coffee trades at a slight premium.) An international roundup discusses the role of coffee in the Colombian economy.

CONTENTS

CURRENT DEVELOPMENT

Daily Trading in Foreign Exchange Reaches \$1.5 Trillion	1
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SPECIAL ANALYSES

Gender Differences in Pension Wealth	2
Evaluating Environmental Compliance Cost Estimates	4

ARTICLE

Competition in Markets for Network Products	6
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DEPARTMENTS

Business, Consumer, and Regional Roundup	8
International Roundup	9
Releases	10
U.S. Economic Statistics	11
Financial and International Statistics	12

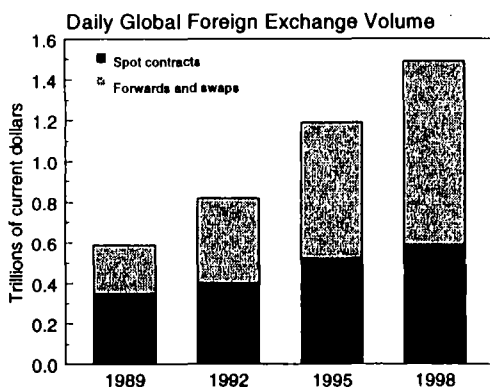


"I love the convenience, but the roaming charges are killing me."

CURRENT DEVELOPMENT

Daily Trading in Foreign Exchange Reaches \$1.5 Trillion

The Bank for International Settlements in Basle, Switzerland, has just released its triennial compilation of 43 central bank surveys of foreign exchange markets. It shows that global foreign exchange trading has continued to grow substantially—to a daily volume of \$1.5 trillion in April 1998 (see upper chart).



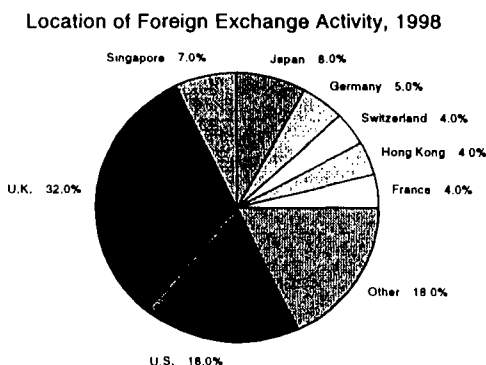
Growth in volume. Measured in current dollars, the growth rate between 1995 and 1998 was 26 percent. The volume of foreign exchange trading is roughly 100 times greater than the volume of global merchandise trade.

What is traded? Spot market purchases amounted to 40 percent of foreign exchange transactions, down from 44 percent in 1995. Forward instruments

(contracts to buy or sell foreign exchange at a future date) continued to grow in importance relative to spot sales.

Who trades? Most trades take place between professional traders at banks and other financial institutions; only a fraction of foreign exchange sales and purchases directly involve those who ultimately import and export goods, services, and securities. In the most recent U.S. survey, the share of total transactions involving non-financial customers was 20 percent of all turnover. Though this proportion has increased substantially, it still suggests that each foreign exchange dollar is passed along five times before ultimately finding its way to someone willing to hold it.

Where does trading take place? Trading tends to be focused in major centers. Arguably, there is a natural equilibrium consisting of one major center in each of



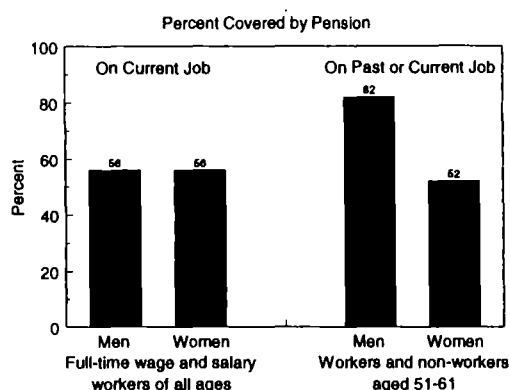
three 8-hour time zones. London continues to handle the greatest volume of foreign exchange transactions, with the U.K. share of world turnover increasing to 32 percent (see lower chart). New York is the main center in the Western Hemisphere, with U.S. volume now accounting for 18 percent of world turnover. Tokyo's turnover has fallen off recently, and its dominance in the Asian time zone is being threatened by Singapore.

SPECIAL ANALYSIS

Gender Differences in Pension Wealth

Among those approaching retirement age, a smaller proportion of women than men have pension coverage, and the women's accumulated pension benefits are smaller. However, the increasing prevalence of defined contribution plans is likely to reduce the pension gender gap at retirement somewhat.

Coverage and vesting. In 1993 (the most recent year for which data are available) 56 percent of both male and female full-time wage and salary workers were covered by a pension on their current job (see chart). When part-timers are included,



51 percent of men and 46 percent of women were covered (coverage rates are lower for part-timers generally, and a larger fraction of women work part-time). Among full-time workers in the private sector only, 39 percent of men and 36 percent of women reported that they were vested in a pension plan. The gap in prospective pensions between women and men nearing retirement age is much larger, however, because of women's lower lifetime labor force participation

and shorter job durations. An analysis of Health and Retirement Survey (HRS) data for men and women aged 51 to 61 in 1992 shows that 82 percent of men but only 52 percent of women expected to receive a pension from *some* job.

Wealth. The gender gap is larger for pension wealth than it is for pension coverage, because pension amounts increase with earnings and job tenure and women are at a disadvantage in both. For example, in the HRS survey of people approaching retirement, men's median pension wealth from their current job was 1.8 times what it was for women.

DB versus DC plans. Pension coverage has been shifting rapidly from defined-benefit (DB) to defined-contribution (DC) plans. Between 1975 and 1992, the share of active participants who were in DC plans rose from 29 to 60 percent. This shift is likely to narrow the gender gap in retirement wealth, because DC plans have advantages for those who change jobs frequently (such as women). Typically, when workers leave a job after being vested in a DB plan, their benefits are frozen in nominal terms. With a DC plan, by contrast, accumulations continue to earn a rate of return after the worker moves on. Thus, a succession of jobs with DC plans is likely to produce a larger lifetime pension benefit accumulation than a succession of jobs with DB plans. Among the 51-61 year olds in the HRS who had DB plans, women's median pension wealth was 45 percent of men's; but among those who had DC plans, women's pension wealth was 60 percent of men's.

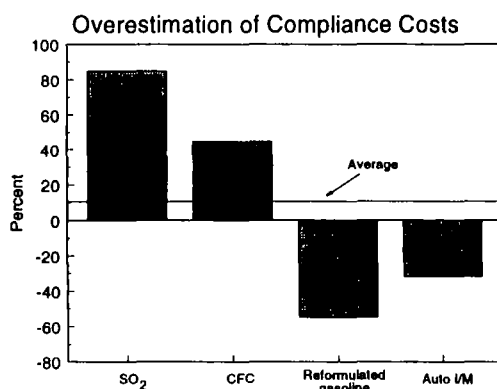
Conclusion. The difference in employer pension wealth is even larger than the earnings difference between men and women. But the shift away from DB plans toward DC plans should reduce the pension disparity for future cohorts—especially if women “roll over” their DC and 401(k) pension funds when they change jobs.

SPECIAL ANALYSIS

Evaluating Environmental Compliance Cost Estimates

Estimates of what it will cost to comply with new environmental regulations are subject to considerable uncertainty. But are these estimates biased, as some critics claim, in the direction of overestimating costs and hence discouraging stricter environmental standards that would in fact confer net economic benefits?

The record. Comparisons between pre-implementation estimates of compliance costs and reported post-implementation costs have been done for four EPA regulations. In two cases, reported costs were underestimated (automobile inspection/maintenance and reformulated gasoline); in the other two (the SO₂ program and the CFC phaseout) they were overestimated (see chart). For the four cases taken together, the average discrepancy was a modest 11 percent overestimate of actual costs.



program and the CFC phaseout) they were overestimated (see chart). For the four cases taken together, the average discrepancy was a modest 11 percent overestimate of actual costs.

Changes in technology and market conditions. Forecasting future costs is a difficult task that involves predicting future technologies and market conditions. Changes in market prices

may either raise or lower the costs of compliance. In the case of reformulated gasoline, for example, costs may have been underestimated because the EPA did not foresee that methanol prices would increase. In the case of SO₂, declines in rail costs allowed utilities to abate more cheaply by switching to low-sulfur western coal. To the extent that cost estimates do not adequately incorporate future technological advances, the costs of compliance will be overstated. For example, the installed costs of scrubbing sulfur from utility smoke stacks has fallen nearly 40 percent since implementation of the acid rain program. Early cost estimates did not foresee this dramatic drop in scrubbing costs.

Compliance. Cost estimates are typically based on the assumption of 100 percent compliance with regulations. Since firms with the highest compliance costs tend to be those who do not comply, actual costs calculated from data that include only complying firms will tend to be lower than estimates based on perfect compliance.

Policy changes. Another reason why actual compliance costs differ from pre-implementation estimates is that policies tend to change between the proposal and the implementation stages. In phase 1 of the SO₂ program, for example, additional allowances were allocated to firms that installed scrubbers. Further, other firms were allowed to opt into the program and receive permits. Firms would only do so if they expected to sell permits. Both of these changes expanded the supply of permits and lowered the permit price.

Conclusion. While estimates of compliance costs for specific environmental programs are inherently subject to considerable uncertainty, they do not seem to be systematically overestimated. Though the total number of cases studied is small, it is interesting to note that the two cases of overestimated costs occurred with market-based policies. These policies give firms the flexibility to take advantage of unexpected circumstances, such as declining rail costs in the SO₂ case, which may result in lower-than-predicted costs.

ARTICLE

Competition in Markets for Network Products

Underlying the Microsoft trial that began this week are questions about competition in network markets.

Network externalities. A “network externality” arises when a product’s value to consumers increases with the number of users. Each new telephone subscriber is an additional person current and future subscribers can call. Each new buyer of a word-processing system is another person with whom earlier purchasers can exchange documents. Products displaying network externalities are generally called “network goods.” In the competition among network products, an early lead can reinforce itself: new customers buy the more popular good because of the larger externality, which then grows and makes the product yet more attractive to additional purchasers. This dynamic makes network markets prone to “tipping” toward monopoly.

Risks and benefits of dominance. A network monopoly has benefits not generally found in conventional markets because dominance can maximize the network externality for consumers. But network dominance also poses hazards that compound the usual concerns about monopoly. First, the best product will not always win. Because consumers want the good that will have the largest externality, expectations of a product’s success can be at least as important to buyers as price and quality. No one wants a Betamax video system, even if it might be superior to VHS. Second, network markets can be particularly hard for new competitors to enter. Once customers invest in learning a system from which they derive large network benefits, they face high costs in switching to a different standard. And third, a network monopolist may have advantages in selling complementary goods—for example software for an operating system—that allow it to extend dominance from one market to another.

The challenge for antitrust. Even if an inferior standard dominates or if dominance results from anticompetitive tactics, it may be impractical or undesirable to remedy network monopolies. Innovation incentives diminish if honestly earned dominance can be second-guessed by regulators. And once customers have adopted a standard, it is costly to reduce the accrued network externality no matter how it has come about. Hence, the reduced feasibility of after-the-fact remedies makes early injunction of anticompetitive practices in network markets essential. Such quick action can be difficult, however, because competitive strategies that are inherently suspect in a conventional goods market may be reasonable given the winner-take-all potential of network rivalry. Pricing below cost, for example, is usually presumed to be predatory and undesirable because its intention is to drive rivals from the market and create a monopoly. But in network markets, the intention may be simply to gain customers quickly and raise expectations about a product’s network externality. Antitrust authorities must decide if such low prices are a legitimate competitive strategy or if they instead undermine competition.

Similarly, authorities must determine whether a network monopolist's advantage in markets for complementary products stems from genuine efficiencies or from anticompetitive arrangements. A Federal appeals court, for example, recently ruled that Microsoft's joint provision of the Windows operating system and Explorer web browser was a legitimate integration rather than an anticompetitive bundling or tying strategy against rival browsers. In the trial starting this week, the court will examine other allegations that Microsoft abused its monopoly in operating systems to foreclose competition in the browser market. Did Microsoft use legitimate competitive tactics, regulation of which will reduce innovation incentives and consumer welfare? Or, has Microsoft engaged in predatory and exclusionary conduct that forecloses competition and innovation to the ultimate detriment of consumers? Where the boundary lies is the difficult question to be explored in court.

Conclusion. Network monopolies offer benefits when they maximize network externalities to consumers. They can also be very costly when barriers for new entrants into network markets are high and the potential for leveraging market power into complementary markets exists. Network markets thus pose a continuing challenge for antitrust enforcement.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

Study Analyzes Who Is Leaving the District of Columbia. The conventional wisdom on the decline of central cities is that population losses have been especially heavy for middle- and upper-income households. But a recent case study of income and population in the DC metropolitan area found that it was the District's lowest- and moderate-income taxpayers who were leaving, as well as two-earner couples of relatively modest means. Higher-income households have generally stayed. The study finds that substantially more Federal tax filers who leave DC move to Maryland than move to Virginia. Between 1987 and 1995 about 7,000 Federal tax filers per year moved from DC to Montgomery County, MD, and between 3,000 and 4,000 per year moved to Prince George's County, MD; whereas fewer than 2,000 per year have moved Arlington County, VA, and even fewer to Fairfax County, VA. The author speculates that because overall taxes are considerably lower in Virginia than they are in the District, whereas Maryland taxes are more comparable, factors other than taxes are probably determining the pattern of out migration.

Home Care Increases for the Seriously Ill. Medicare policy changes in the 1980s provided incentives for increased use of home health services rather than prolonged hospital stays. The result, according to a new study, has been a dramatic increase in hospice and home care for the seriously ill and a modest decrease in hospital care—generally the most expensive form of health care. Growth in hospice and home care also increased Medicare utilization. The study finds that the percent of recipients who died in hospice care rose from about 2 percent to 10 percent during the 1989-95 period; those dying in an acute care hospital fell from 42 to 35 percent over a similar period. Meanwhile, the percentage of recipients who died without any Medicare services fell substantially, from 40 to 25 percent, and monthly Medicare expenditures before death rose from about \$5,500 in 1988 to more than \$7,000 in 1995 (in 1995 dollars). The study concludes that the growth of non-hospital care may have improved the well-being and satisfaction of dying patients and their families, but it does not appear to have slowed the growth of Medicare expenditures.

Surviving Shoe Companies Eschew Piece Rates. A tradition of piece-rate methods of pay was once a distinguishing characteristic of the American shoemaking industry. But companies that have survived in an industry that has shrunk dramatically in the face of import competition have turned increasingly to time rates of pay. A new study finds that establishments in which labor costs were a large share of total costs were disproportionately likely to close down over time. Looking at detailed internal data for a single firm that survived, the study found that the shift to time rates was part of a move toward continuous-flow methods of production, with job rotation and rapid changes in work tasks to introduce new styles and "just-in-time" products to retail stores. Although the change to time rates reduced labor productivity, it appears to have lowered costs even more through mechanisms such as lower workers' compensation insurance costs, smaller inventories, lower monitoring costs, lower wages and fewer grievances over wages during the labor contract, and the ability to produce an increased number of new styles of shoes.

INTERNATIONAL ROUNDUP

Coffee Contributes to Colombia's Highs and Lows. Like other developing countries, Colombia has been under pressure recently from international financial markets. The surprise devaluation of the peso in September took little pressure off the currency and had to be supplemented by successive increases in interest rates. In addition, President Pastrana's fiscal reform proposals pledge to reduce the deficit to 2 percent of GDP by 1999. Nonetheless, the peso has continued to trade at a value near the lower edge of its exchange band. Colombia's difficulties have been compounded by changing global prices of primary commodities, particularly coffee, which accounts for one-fifth of the country's exports. In August exports were a third off the pace of a year earlier, and coffee prices have continued to decline (see Chart of the Week). Historically, Colombia has exhibited a classic commodity price cycle. During the phase of high world coffee prices—most recently in 1997—Colombia's increased export revenues have tended to increase foreign exchange reserves, thereby putting upward pressure on the money supply, and, in turn, domestic prices. The danger is that rising wages and production costs affect all Colombian exporters and impair competitiveness in the non-commodity sector. (Sometimes the effect can come more directly, via upward pressure on the currency, but either way it is a "real appreciation.") This economic phenomenon is widely known as "Dutch Disease," after an earlier natural gas boom in the Netherlands. With the recent decline in coffee prices and uncertain financial market conditions, Colombia is squarely in the down-phase of the cycle, featuring an outflow of reserves and a tightening of monetary conditions at home.

Hyundai Wins Bid for Kia, Faces Challenges of Corporate Restructuring. The fate of the Korean car maker Kia illustrates some of the problems underlying the Asian crisis and the challenges that remain. Arguably, the magnitude of Kia's troubles resulted from an extreme case of "connected" lending. Kia's former chairman was sentenced earlier this week for embezzlement and he reportedly used the money for bribes to obtain preferential bank loans and keep Kia afloat. Since defaulting on an estimated debt of about \$9 billion, Kia has been put on the auction block three times. The first two failed over the issue of whether the bidders would assume Kia's large debt. Hyundai's winning bid in the most recent auction this Monday awaits creditor approval. Press reports indicate that Hyundai is currently demanding that about 60 percent of the debt be written off, including some that will be swapped for equity. Even if its creditors approve, Hyundai will face an uphill battle to return Kia to viability. Redundant investments in saturated industries like autos are generally thought to have been the fundamental factors underlying the Korean crisis. To be successful, companies must strengthen their financial structure and redeploy their productive assets. Although Kia's labor union, which has a reputation for toughness, is likely to resist any large-scale layoffs, some analysts think that Hyundai has the necessary clout to rationalize production. Moreover, if Samsung ceases automobile production in the wake of its failed bid for Kia, as some analysts think it will, some of the excess capacity that has plagued the Korean car industry may well be eliminated.

RELEASES THIS WEEK

Housing Starts

Housing starts fell 2 percent in September to 1.576 million units at an annual rate. During the first 9 months of this year, housing starts were 9 percent above the same period a year ago.

U.S. International Trade in Goods and Services

The goods and services trade deficit was \$16.8 billion in August; it was \$14.5 billion in July.

MAJOR RELEASES NEXT WEEK

Consumer Confidence—Conference Board (Tuesday)
Advance Durable Shipments and Orders (Wednesday)
Employment Cost Index (Thursday)
Gross Domestic Product (Friday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1997	1997:4	1998:1	1998:2
Percent growth (annual rate)					
Real GDP (chain-type)	2.7	3.8	3.0	5.5	1.8
GDP chain-type price index	5.4	1.7	1.1	0.9	0.9
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.5	1.7	0.9	3.5	0.1
Real compensation per hour:					
Using CPI	0.6	1.9	2.8	4.1	2.0
Using NFB deflator	1.3	2.0	3.9	4.3	3.4
Shares of Nominal GDP (percent)					
Business fixed investment	10.9	10.6	10.7	11.0	11.2
Residential investment	4.5	4.0	4.1	4.2	4.3
Exports	8.2	11.9	12.0	11.6	11.3
Imports	9.2	13.1	13.2	13.1	13.1
Personal saving	5.2	1.5	1.2	0.9	0.3
Federal surplus	-2.7	-0.3	0.0	0.7	0.9
	1970- 1993	1997	July 1998	August 1998	Sept. 1998
Unemployment Rate (percent)	6.7**	4.9**	4.5	4.5	4.6
Payroll employment (thousands)					
increase per month			118	309	69
increase since Jan. 1993					16745
Inflation (percent per period)					
CPI	5.8	1.7	0.2	0.2	0.0
PPI-Finished goods	5.0	-1.2	0.2	-0.4	0.3

**Figures beginning 1994 are not comparable with earlier data.

FINANCIAL STATISTICS

	1996	1997	August 1998	September 1998	Oct. 22, 1998
Dow-Jones Industrial Average	5743	7441	8479	7910	8533
Interest Rates (percent per annum)					
3-month T-bill	5.01	5.06	4.90	4.61	3.90
10-year T-bond	6.44	6.35	5.34	4.81	4.62
Mortgage rate, 30-year fixed	7.80	7.60	6.92	6.72	6.73
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Exchange Rates	Current level October 22, 1998	Percent Change from Week ago	Year ago
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2/ Rate for former West Germany. Using OECD standardized unemployment data, the unemployment rate for unified Germany for August 1998 is 9.6 percent.

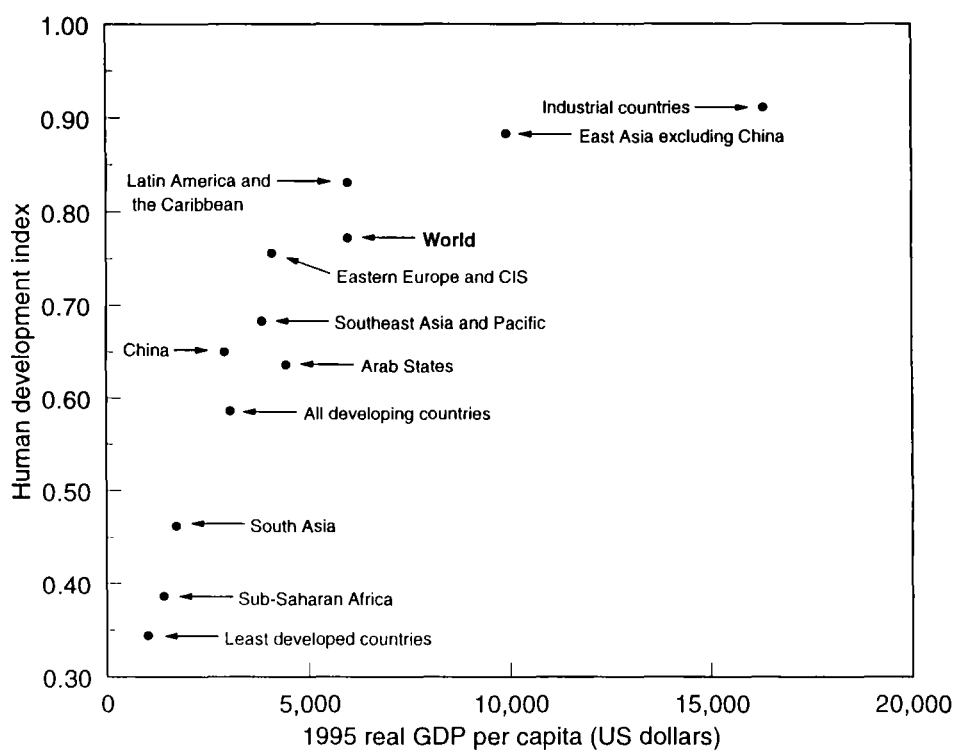
WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

Prepared by the Council of Economic Advisers
with the assistance of the Office of the Vice President

October 16, 1998

CHART OF THE WEEK

The UN Human Development Index and Income



This year's Nobel Prize winner in economics, Amartya Sen, has argued that although income is a key determinant of welfare because of the opportunities it creates, actual opportunities, or capabilities, depend on a number of other factors as well. The UN human development index reflects the spirit of Sen's views: it averages indexes of real per capita GDP, life expectancy, and education. It is correlated with income, but not perfectly.

CONTENTS

CURRENT DEVELOPMENT

Sen Awarded Nobel Prize in Economics 1

SPECIAL ANALYSES

Has Trend Productivity Growth Increased? 3

Does More Competition Lead to More Innovation? 4

Crime and the Labor Market 5

DEPARTMENTS

Business, Consumer, and Regional Roundup 6

International Roundup 7

Releases 8U.S. Economic Statistics 9Financial and International Statistics 10

"I give you a fifty-fifty chance. Pay me up front, and I'll make it sixty-forty."

CURRENT DEVELOPMENT

Sen Awarded Nobel Prize in Economics

This year's Nobel Prize in economics was awarded to Amartya Sen of Trinity College, Cambridge, U.K. Sen, an Indian citizen who taught at Harvard from 1989 to 1997, was awarded the prize for his contributions to welfare economics. These contributions range from highly theoretical analyses of social choice to empirical studies of famine.

The theory of social choice. A fundamental question in social choice theory is whether individual preferences can be aggregated into social preferences that allow for rational collective decision making. According to Nobel laureate Kenneth Arrow's impossibility theorem, they cannot be, under fairly general conditions. For example, consider three sets of voters: one prefers a balanced budget (B) to more education spending (E), and more education spending to a tax cut (T); a second prefers E to T, and T to B; a third prefers T to B, and B to E. Collectively, a majority prefers B to E and a (different) majority prefers E to T. But a (third) majority prefers T to B, hence the choices cannot be ranked by majority voting. Such intransitivity illustrates the difficulty in aggregating individual preferences into social preferences that allow rational choices among policies. Sen did not refute Arrow's impossibility theorem, but his research helped refine and enrich understanding of fundamental social choice issues in normative economics and moral philosophy.

Indexes of welfare and poverty. Sen applied the theory of social choice to the construction of theoretically sound indexes to measure differences in income and welfare. For instance, in contrast to the standard measure of poverty (the share of the population with income below a predetermined poverty threshold), Sen developed a measure that also takes into account the distribution of income within the poor population. Such an index is not calculated explicitly for U.S. poverty data, but the related poverty gap is reported (the amount of income needed to raise the entire poor population to the poverty threshold). Sen also emphasized the importance of factors other than income when measuring welfare (see the Chart of the Week, for example).

Analysis of famine. Sen's applied work deals with development economics and often the welfare of the poorest people in society. His analysis of poverty and famines challenged the common view that a shortage of food is the most important explanation of famine. His analysis of a number of catastrophes in India, Bangladesh, and Saharan countries showed that famines have occurred even when the supply of food was not significantly lower than during previous non-famine years, and that famine-stricken areas have sometimes exported food. Part of his explanation for the Bangladesh famine of 1974 is that flooding throughout the country that year significantly raised food prices, while work opportunities for agricultural workers declined drastically. As a result, the real incomes of agricultural workers declined sharply and that group was disproportionately stricken by starvation.

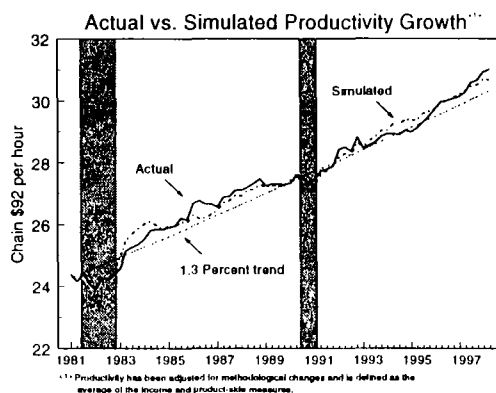
Conclusion. The awarding of the Nobel Prize to Amartya Sen recognizes a body of work that combines the highly theoretical (social choice theory) with the eminently practical (how to prevent famine). Its unifying theme is a concern for social choice and distributional issues generally, with special emphasis on the welfare of the most impoverished members of society.

SPECIAL ANALYSIS

Has Trend Productivity Growth Increased?

The official measure of productivity in the nonfarm business sector has grown at a 1.9 percent annual rate over the past 3 years, substantially faster than the 1.1 percent average annual growth rate between the business cycle peaks of 1973 and 1990. Is it reasonable to conclude that the trend rate of productivity growth has picked up?

A methodological change. Part of the increased rate of growth of productivity observed over the past 3 years reflects the official decision to switch to using the geometric consumer price index to deflate consumption. This change, which was implemented beginning with the July revisions to the national income and product accounts, raised the annual growth rates for output and productivity by about 0.2 percentage points per year for 1995 and subsequent years. If the same methodology were applied to earlier years, the average annual rate of productivity growth since 1973 would be 1.3 percent rather than the 1.1 percent growth now officially reported.



Income- versus product-side measures.

Since 1993, the average annual growth rates of the income-side measures of output and productivity have been 0.5 percentage point higher than the official product-side measures. The CEA believes that both measures contain useful information. The data in the chart and the following analysis are based on an average of the two measures.

Cyclical behavior. In the long term, productivity increases with training, technology, and capital accumulation. But productivity growth also shows considerable variation over the business cycle, falling below its trend during recessions, then growing faster than trend during the mid-expansion, and finally falling again in advance of the business-cycle peak. The behavior of productivity between the business cycle peaks in 1980 and 1990 is typical. This cyclical behavior can be captured by a model in which firms adjust towards their desired employment, but only partially in any quarter because hiring and firing are costly. As shown in the chart, a simulation from this model reproduces the above-trend behavior of productivity in recent years.

Conclusion. The most straightforward explanation of these results is that trend productivity growth has not changed over the post-1973 period and that recent productivity growth reflects purely cyclical factors. But those looking for a more optimistic interpretation might conclude from the rapid growth in productivity since 1994 that the U.S. economy entered a new period of higher trend productivity growth starting in that year.

SPECIAL ANALYSIS

Does More Competition Lead to More Innovation?

Under static conditions, competitive markets usually benefit consumers by producing more output at lower prices than do concentrated markets. But competition may not always be best for promoting the R&D and innovation that over time bring new products and technologies into the marketplace.

Theoretical considerations. A firm trying to increase or defend its market share from rivals has the incentive to develop new products and processes. Returns to innovation may, however, be short-lived in a highly competitive market. Even if intellectual property rights give the innovator a temporary monopoly, rivals may develop similar or better advances. Moreover, firms in truly competitive markets have lower cash-flow margins to invest in R&D. Monopoly, by contrast, probably provides more cash and lower risk for R&D. Monopolists, however, already have the market share for which competitive firms strive and thus have less incentive to innovate in the first place. Economic intuition suggests innovation will be most intense in firms with a mix of competitive incentives and supra-competitive returns.

Empirical studies. The foregoing intuition is borne out by empirical analyses finding that the correlation between market structure and innovation follows an “inverted-U” pattern: innovation is observed to be low at high levels of competition, to reach its peak at intermediate levels of oligopoly (where the four leading firms control roughly half the market), and then to fall off as market structure approaches monopoly. Several studies question whether there is an optimal market structure for promoting innovation, but they too find little evidence that either particularly high levels of competition or pure monopoly correlate with high levels of innovation.

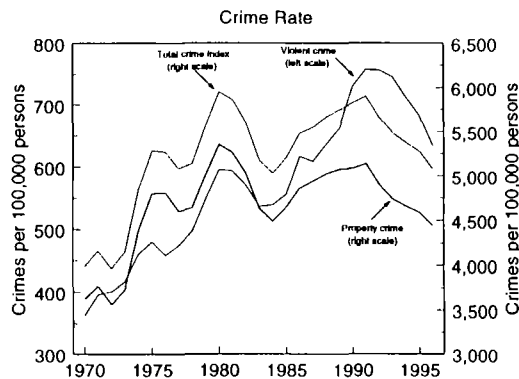
More than market structure matters. One cannot, however, rely on the above correlations to predict R&D activity in a given case. Industry-specific characteristics of products and technologies are also significant determinants of innovation. Thus, fierce competition may yield R&D: as many as 45 firms are racing to develop new anti-obesity drugs. And so might monopoly: Microsoft, the dominant maker of computer operating systems, often introduces new products. But in each case factors independent of market structure are important. The market for anti-obesity drugs is new, and the rewards for successful R&D are huge—an estimated \$5 billion per year in sales. The market for operating systems software contains technological opportunities that make complacency risky for even a dominant firm.

Conclusion. Market structure is a potential, but ambiguous and relatively weak, driver of innovation. Studies suggest that neither heavy competition nor pure monopoly is likely to encourage R&D effort. But even in those polar cases, the evidence shows that market structure alone cannot be relied on to predict innovation levels.

SPECIAL ANALYSIS

Crime and the Labor Market

Two new studies suggest that the decline in wages among unskilled workers that began in the 1970s had a significant upward effect on crime rates. Recent wage gains may therefore bode well for the crime rate.



Trends. Crime rates rose substantially in the 1970s and started to decline in the early 1980s (see chart). Although it was thought that rates might continue to drop with the maturing of the baby boom and a decline in the number of young people (those most likely to commit crimes), rates started to rise again through the late 1980s. Until a pickup in 1997, wages for men aged 16 to 24 had declined significantly over the past three decades.

A new methodology. Most studies of the relationship between crime and the labor market have used the unemployment rate as their measure of labor market conditions. Such studies have typically found modest evidence that unemployment rates are positively linked to crime. The new studies argue that potential criminals are more likely to be influenced by longer-term prospects in the mainstream economy than by shorter-term conditions and that wages are a better measure of these longer-term prospects than the unemployment rate.

The effect of wages on crime. The new research shows that young men are responsive to wage incentives. First, declining real wages appear to have played an important role in influencing crime rates. In particular, the decline in wages of low-skilled men between 1979 and 1995 is estimated to have increased property crimes by 10 to 13 percent and increased violent crimes by about half that amount. These findings are consistent with the idea that monetary incentives play a larger role for economically motivated crimes such as burglary and robbery than they do for crimes like murder and rape. Second, the black-white wage gap explains about one-quarter of the racial differential in the probability of committing a crime. Third, one study found that the age distribution of crime is largely a labor market phenomenon, with the growth in market opportunities as they move into their early twenties largely responsible for the concomitant decrease in crime.

Implications. Falling wages provide at least a partial explanation for why property crimes have not fallen much over the last 20 years along with the proportion of 18-to-24 year olds in the population. However, the correlation between wages and crime suggests that recent efforts to “make work pay” through the minimum wage and the EITC may have added benefits by reducing crime.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

Financial Services Industry Is Feeling the Pinch. Global financial turmoil and exposure to troubled hedge funds may be having their effect on Wall Street firms and money center banks. For example, Merrill Lynch announced plans on Tuesday to cut 3,400 employees, about 5 percent of its global work force, after third-quarter profits fell sharply from a year ago. The company cited financial market turbulence and diminished profit opportunities in emerging markets as leading reasons for the cost-cutting move. Earnings were also down at other Wall Street firms. In addition, BankAmerica announced Wednesday that its third-quarter earnings were 50 percent lower than a year ago, owing in part to a \$372 million writedown of a credit to a single trading and investment firm. Bank stocks, especially those of money center banks, have fallen more sharply than the market as a whole in recent months. But the news was not all bad for banks. First Union posted record quarterly profits, while Wachovia reported a 13 percent jump in operating income. Both are regional banks and are therefore not so vulnerable to global troubles.

Study Throws Cold Water on Supply Siders. The 1986 Tax Reform Act lowered marginal tax rates substantially, with the top bracket falling from 50 to 28 percent. Research has shown that, subsequent to the rate cut, incomes of wealthy taxpayers generally rose. Some have presumed that the lower rates increased work incentives among the affluent, leading them to work more and thereby increase their incomes. But a recent study of 500 men surveyed both before and after the tax act (in 1983 and then again in 1989) finds no evidence of a labor supply response (measured by hours worked) among the affluent (or for that matter among those with low or middle incomes). Economic theory allows for offsetting effects from the wage incentive to work more hours and the income incentive to take more leisure, but the authors also note that most affluent men were already working more than 2,500 hours per year before the act, which might have limited their opportunity to increase their work hours. Full-time work is generally considered to be 2,000 hours per year.

Automobile Anti-Pollution Devices to Be Treated as a Cost in the CPI. The Bureau of Labor Statistics has decided that, beginning in 1999, it will no longer treat modifications to goods and services that are made solely to meet air quality standards as quality improvements in the consumer price index. Price increases associated with such modifications will be treated as increases in the index. The new policy will have its most significant effect on the motor fuel and new and used motor vehicle components of the CPI. The rationale for the decision is that price changes deriving from mandated product changes that affect only public goods (like clean air) are properly treated in the CPI as pure price changes, because the benefits do not accrue to the individual purchaser. By contrast, mandated changes that also entail a change in product characteristics for which consumers would ordinarily pay (like increased safety) should continue to be treated as a quality improvement. BLS estimates that the CPI would have risen an additional 0.7 percent (0.025 percent per year) between 1968 and 1997 if the proposed procedures had been in effect.

INTERNATIONAL ROUNDUP

Flexible Monetary Strategy Set for EMU. This week, the Governing Council of the European Central Bank (ECB) shed light on two questions: (1) whether they would target the inflation rate or some other variable when they begin operations in January, and (2) the initial level of interest rates. On the first question, the ECB agreed on the three main elements of its monetary policy strategy. First, the maintenance of price stability will be the primary objective of the European System of Central Banks. Price stability has now been defined as a year-over-year increase of below 2 percent in the Harmonized Index of Consumer Prices for the euro area. Second, quantitative reference values for the growth of a broad monetary aggregate will be announced, a decision that shows the influence of Bundesbank thinking. However, the concept of a reference value is not meant to imply a commitment to correct deviations mechanistically over the short term. Third, a broadly based assessment of the price outlook using a wide range of economic indicators will play a major role in the monetary policy strategy. Much uncertainty remains, however, regarding the second question: exactly how interest rates will converge in the various countries involved. In remarks following the announcement, ECB officials rejected calls for world-wide interest rate cuts, citing expected reductions as all member countries' rates converge downward to French and German levels. It has been argued that the ECB would like to start off with a reputation for monetary discipline.

Japanese Bank Bill Is Moving through the Diet. A rescue package for Japan's weakest banks may emerge from the parliament as early as Friday. The release of official details is pending the expected passage, but the likely enactment of a 60 trillion yen (about \$500 billion) package came as a pleasant surprise to many observers who had expected a much smaller amount. It appears that roughly 30 percent will be committed to protecting depositors, 40 percent to recapitalizing banks, and 30 percent to purchasing the shares of nationalized banks. Questions remain, however, about the bailout's overall effectiveness. Strict conditions on management responsibility are imposed on banks receiving public funds. This, along with the stigma associated with state support, has some analysts questioning whether banks will voluntarily apply for injections of public capital. Such concerns led Prime Minister Obuchi's chief cabinet secretary to suggest that the government retain the option to force public recapitalizations at its discretion. Even so, uncertainty about the economic future might prevent even well-capitalized banks from lending, which could prolong Japan's credit crunch.

UN Study Analyzes Consumption for Human Development. Despite a dramatic surge in global consumption, with real expenditures doubling over the last 25 years, more than a billion people still lack the opportunity to consume in ways that meet their basic needs, according to The United Nations' *1998 Human Development Report*. The report also argues that many people, especially in industrial countries, are consuming in ways that cannot be long sustained environmentally or socially.

RELEASES THIS WEEK

Industrial Production and Capacity Utilization

****Embargoed until 9:15 a.m., Friday, October 16, 1998****

The Federal Reserve's index of industrial production declined 0.3 percent in September. Capacity utilization fell 0.5 percentage point, to 81.1 percent.

Consumer Price Index

****Embargoed until 8:30 a.m., Friday, October 16, 1998****

The consumer price index was unchanged in September. Excluding food and energy, consumer prices increased 0.2 percent.

Producer Price Index

The producer price index for finished goods increased 0.3 percent in September. Excluding food and energy, producer prices increased 0.4 percent.

Retail Sales

Advance estimates show that retail sales increased 0.3 percent in September. Excluding sales in the automotive group, retail sales rose 0.1 percent.

MAJOR RELEASES NEXT WEEK

U.S. International Trade in Goods and Services (Tuesday)
Housing Starts (Wednesday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1997	1997:4	1998:1	1998:2
Percent growth (annual rate)					
Real GDP (chain-type)	2.7	3.8	3.0	5.5	1.8
GDP chain-type price index	5.4	1.7	1.1	0.9	0.9
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.5	1.7	0.9	3.5	0.1
Real compensation per hour:					
Using CPI	0.6	1.9	2.8	4.1	2.0
Using NFB deflator	1.3	2.0	3.9	4.3	3.4
Shares of Nominal GDP (percent)					
Business fixed investment	10.9	10.6	10.7	11.0	11.2
Residential investment	4.5	4.0	4.1	4.2	4.3
Exports	8.2	11.9	12.0	11.6	11.3
Imports	9.2	13.1	13.2	13.1	13.1
Personal saving	5.2	1.5	1.2	0.9	0.3
Federal surplus	-2.7	-0.3	0.0	0.7	0.9
	1970- 1993	1997	July 1998	August 1998	Sept. 1998
Unemployment Rate (percent)	6.7**	4.9**	4.5	4.5	4.6
Payroll employment (thousands)					
increase per month			118	309	69
· increase since Jan. 1993					16745
Inflation (percent per period)					
CPI	5.8	1.7	0.2	0.2	0.0
PPI-Finished goods	5.0	-1.2	0.2	-0.4	0.3

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

CPI data **embargoed until 8:30 a.m., Friday, October 16, 1998.**

FINANCIAL STATISTICS

	1996	1997	August 1998	September 1998	Oct. 15, 1998
Dow-Jones Industrial Average	5743	7441	8479	7910	8299
Interest Rates (percent per annum)					
3-month T-bill	5.01	5.06	4.90	4.61	4.05
10-year T-bond	6.44	6.35	5.34	4.81	4.58
Mortgage rate, 30-year fixed	7.80	7.60	6.92	6.72	6.90
Prime rate	8.27	8.44	8.50	8.49	8.25

INTERNATIONAL STATISTICS

Exchange Rates	Current level October 15, 1998	Percent Change from Week ago	Year ago
Deutschemark-Dollar	1.626	1.3	-7.0
Yen-Dollar	117.5	-1.1	-3.1
Multilateral \$ (Mar. 1973=100)	92.90	0.8	-4.1

International Comparisons ^{1/}	Real GDP growth (percent change last 4 quarters)	Unemployment rate (percent)	CPI inflation (percent change in index last 12 months)
United States	3.6 (Q2)	4.6 (Sept)	1.5 (Sept)
Canada	3.1 (Q2)	8.3 (Aug)	1.0 (Aug)
Japan	-1.8 (Q2)	4.2 (Jul)	-0.2 (Aug)
France	3.0 (Q2)	11.7 (Jul)	0.7 (Aug)
Germany	2.5 (Q2)	^{2/} 7.4 (Jul)	0.7 (Aug)
Italy	1.1 (Q2)	12.4 (Apr)	1.9 (Aug)
United Kingdom	2.6 (Q2)	6.2 (Jun)	3.3 (Aug)

U.S. CPI data **embargoed until 8:30 a.m., Friday, October 16, 1998.**

^{1/} For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

^{2/} Rate for former West Germany. Using OECD standardized unemployment data, the unemployment rate for unified Germany for July 1998 is 9.6 percent.

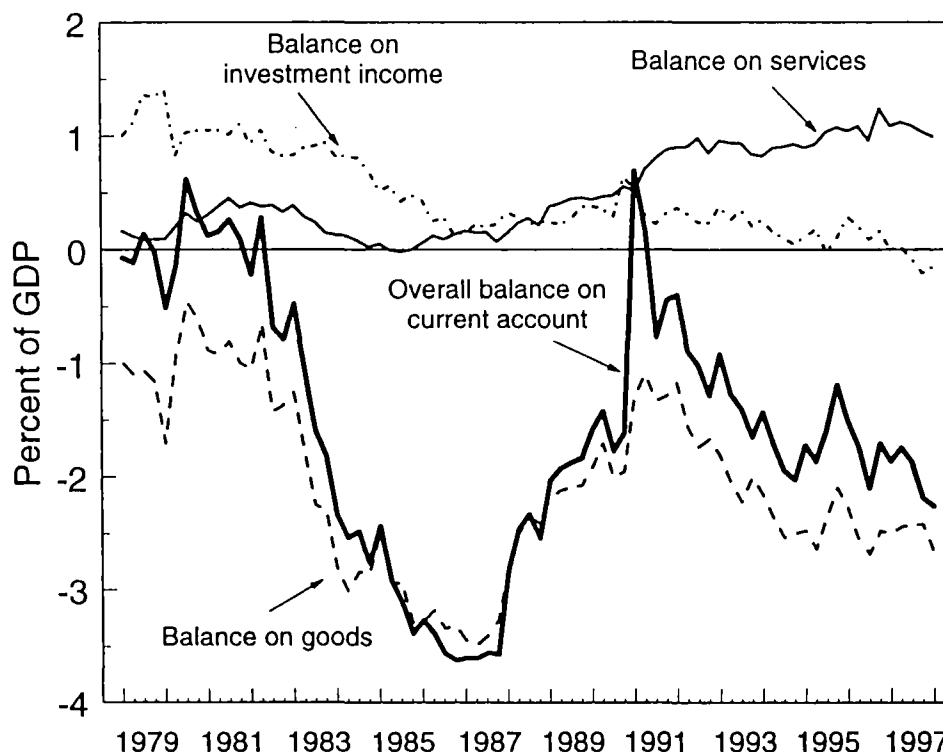
WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

Prepared by the Council of Economic Advisers
with the assistance of the Office of the Vice President

June 19, 1998

CHART OF THE WEEK

The Current Account Balance



The current account deficit widened again, to \$47.2 billion in the first quarter. In dollar terms, this is the second record quarterly deficit in a row—though deficits were much larger as a share of the economy in the mid-1980s. The current account deficit reflects the rate at which U.S. residents must borrow from abroad to finance spending in excess of income. In addition to trade in goods and services, which is reported monthly, the current account deficit includes investment income and unilateral transfers (public and private remittances).

CONTENTS

MACROECONOMIC UPDATE

Growth May Be Moderating	1
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SPECIAL ANALYSES

Placing a Value on Improvements in Health	3
Life Insurance: Profiles in Coverage	5

ARTICLE

The Malthusian Economics of Easter Island	6
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DEPARTMENTS

Business, Consumer, and Regional Roundup	8
International Roundup	9
Releases	10
U.S. Economic Statistics	11
Financial and International Statistics	12



"Sure, we doctors make a lot of money. But, don't forget, we spend a heck of a lot, too."

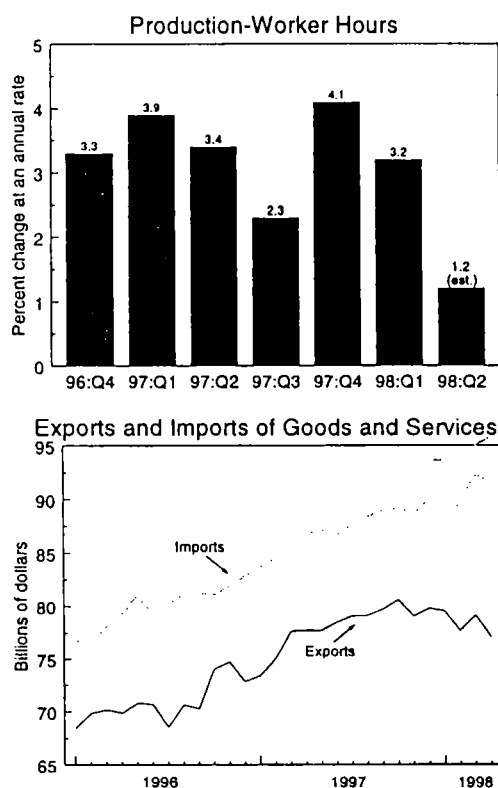
MACROECONOMIC UPDATE

Growth May be Moderating

The supercharged pace of growth over the past year may be moderating.

Employment and output. Increases in production-worker hours appear to have slowed to a 1¼ percent annual rate in the second quarter (see upper chart). In addition, unemployment insurance claims have edged up recently—though they remain very low.

Consistent with the high and rising dollar, the slowdown in production is most notable in manufacturing, where output has grown more slowly than in the economy as a whole so far this year.

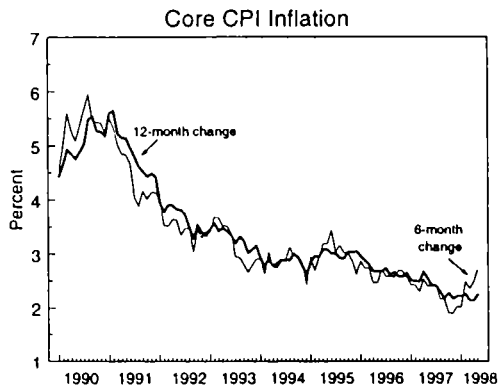


Demand. Available data hint that inventories and net exports are the components of demand that are slowing. Inventory investment was very high in the first quarter, and second-quarter stock building is likely to fall back towards a more normal pace. Retail sales in May show that consumption continues to grow at full throttle—with particularly rapid spending on motor vehicles. But to the extent that consumers are buying goods produced abroad, import growth may partly offset the boost from consumption—as it did in the first quarter. Weakness in the Asian economies appears to be reducing exports as well (see lower chart).

The GM strike. The ripple effects of the strike by two United Auto Workers locals are expected to shut down almost all of General Motors' production by the end of this week. Without a strike, real GDP might have grown at around a 3 percent annual rate in the second quarter. But with a strike continuing through the end of the quarter, the CEA estimates that real growth would be about 0.6 percentage point less. Unless the strike is prolonged well beyond the end of June, these output losses could be recouped later in

the year so that the net effect would simply have been to shift output from one quarter to another.

Prices and wages. Inflation has picked up slightly in recent months. Although core CPI inflation has fallen

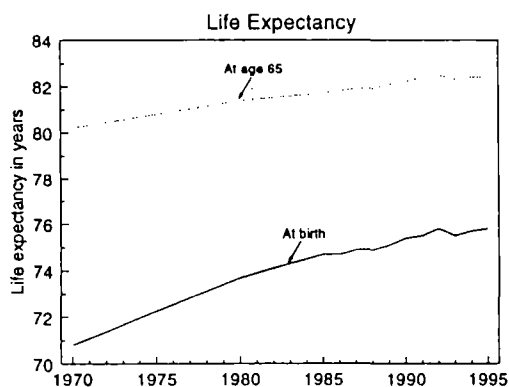


0.3 percentage point over the past year, the core CPI increased at a 2.7 percent annual rate in the 6 months ending in May—up from a 1.9 percent annual rate during the preceding 6-month period (see chart). Nevertheless, inflation remains relatively low and under control. As a result, increases in nominal wages have translated into healthy increases in real wages, which are up 2.8 percent over the past 12 months.

SPECIAL ANALYSIS

Placing a Value on Improvements in Health

Increases in expenditures for health care have been substantial over the past three decades, but have they been “excessive”? The answer depends on the value of health benefits that have flowed from these expenditures. A definitive assessment is impossible, but a recent study finds very large increases in the value of total improvements in health between 1970 and 1990, suggesting that increases in health expenditures may well have been cost effective, on average.



Health improvements. From 1970 to 1990, the health of the population improved markedly. Life expectancy at birth rose from 70.8 to 75.4 years, and life expectancy at age 65 rose from 80.2 to 82.2 (see chart). The quality of health at a given age has also improved. Although, the prevalence of chronic conditions has increased because people are living longer, improved medical technology lets those with many of these conditions enjoy a better quality of life.

Valuing longevity and health. Attaching a dollar value to changes in health and longevity is inherently difficult and likely to result in a wide range of estimates. One strategy pursued in several studies is to look at how much individuals are willing to pay for technologies—such as smoke detectors—that reduce their mortality risk, or how much additional pay individuals demand to work in riskier jobs. Another approach is to use evidence from surveys that ask individuals directly how much they would pay for hypothetical health improvements. The new study uses a central estimate from this literature of \$100,000 per additional year of life in perfect health. The authors then adjust this value to reflect the prevalence and impact of several chronic diseases. An individual’s “health capital” is the present discounted value of expected future “quality-adjusted” years of life. The authors construct estimates of health capital for newborns and 65 year-olds in 1970 and 1990. Changes over time in the value of health capital provide a measure of the value of health improvements.

Results. The study estimates that health capital for an individual born in 1990 was about \$95,000 greater than that for an individual born in 1970. The value of health improvements were even greater for older people; for a 65 year-old, the value of health capital was about \$170,000 greater in 1990 than in 1970. To compare the costs and benefits of medical spending, the change in health expenditures must be measured in comparable present discounted value terms at birth and at age 65. The study estimates that the present discounted value of expected lifetime medical

spending at birth rose \$25,000 between 1970 and 1990, and the present discounted value of remaining health spending at age 65 rose by \$45,000 over the same period.

Is medical care worth the cost? In addition to advancements in medical technology, many factors including smoking, diet, exercise, and environmental quality influence the health of the population. The authors compare changes in health capital to changes in expected lifetime health spending. The cost and health estimates imply that the additional medical spending was, on average, worth it if advancements in medical care were responsible for at least 30 percent of the observed improvements in health. Since these are estimates of the average cost-effectiveness of medical care, they do not imply that every treatment or procedure has been cost-effective.

Conclusion. There are signs that health expenditures may have begun rising more quickly after several years of slow growth—though growth rates recently still do not approach the double-digit growth rates of the 1980s. But it is important to bear in mind the health improvements that additional spending may provide, even though estimating the value of those potentially large health benefits is difficult.

SPECIAL ANALYSIS

Life Insurance: Profiles in Coverage

A recent *New York Times* article suggested that people are forgoing the life insurance coverage that once protected families in the event of the death of a policyholder. In fact, life insurance coverage has declined only modestly: 78 percent of households owned life insurance in 1992, compared with 83 percent in 1960. What *has* declined is usage of those types of life insurance that can also serve as tax-deferred savings shelters or tax-exempt bequests.

Types of life insurance. Term life insurance provides life insurance for a specified period of time, with annual premiums increasing with the life of the policyholder. Cash value life insurance policies (such as whole life), in contrast, charge a constant annual premium throughout the life of the policy. The premium charged in the early years is higher than the actual cost of the insurance coverage; the excess amount of the premium is held in reserve as the policy's cash value, and this cash value grows over time from investment earnings. A policyholder who surrenders a cash value life policy receives the cash value contained in the policy at the time of surrender. Over the last 15 years, there has been a trend in life insurance purchases away from cash value policies and toward term policies.

Why buy life insurance? Both term and cash value policies provide insurance for dependents of the policyholder against financial hardship in the event of the policyholder's death. But cash value life insurance also serves as a savings vehicle. Because the assets in a cash value policy earn interest that is not taxed as it is accumulated, a cash value policy serves as a tax-deferred way of saving. In addition, Federal income and estate taxes can be avoided on money received under a life insurance contract paid by reason of the death of the insured—including the investment income earned on the accumulated cash value. Thus, families with substantial wealth can use cash value life insurance to reduce Federal estate taxes.

Explaining changing patterns of life insurance. There do not appear to be any careful studies of why the demand for the savings features of whole life may have decreased. Lower tax rates may have diminished the attractiveness of tax-deferred savings vehicles. In addition, the development of other attractive tax-deferred savings vehicles, such as IRAs (which were not widely available until 1981) and variable annuities, may have reduced demand for cash value life insurance. Consumer awareness about alternative savings vehicles that offer better returns than cash value life insurance may also have increased.

Conclusion. Life insurance has traditionally served multiple functions, offering not only insurance in the event of death but also a tax-deferred savings vehicle and a tax-exempt bequest vehicle. Americans are covered by insurance against death in roughly similar proportions as always, but they appear less willing than in the past to buy policies that bundle other features together with basic insurance.

ARTICLE

The Malthusian Economics of Easter Island

Thomas Malthus warned in 1798 that the tendency for growth in population to outstrip growth in the means of subsistence could end in disease, famine, and poverty. Two centuries of impressive gains in living standards, accompanied by rapid population growth and stability (or even decline) in the relative prices of resources and primary commodities have left most economists skeptical of the Malthusian logic. But an intriguing new analysis of the rise and decline of Easter Island suggests that a Malthusian outcome can occur when natural resource degradation occurs gradually, when the payoff from taking action is long-deferred, and when cooperation on a large scale is required.

The mystery of Easter Island. At the time of its discovery by Europeans in 1722, Easter Island was a Polynesian island with a “late stone age” culture. Enormous carved stone statues, resting on large platforms around the island, bore witness though, to a past in which the island was both richer and more populous. The statues had been moved substantial distances from the island’s lone quarry to their destinations; but observers estimated the population of the island at 3,000 in 1722—far too small to have transported the larger statues without appropriate tools. Moreover, the island had no trees suitable for making such statue-transport equipment. Local residents believed that the statues had walked to the platforms under the influence of a spiritual power.

What happened? A variety of theories have been advanced to explain the Easter Island mystery, but recent archaeological evidence suggests that after perhaps a thousand years of peace and prosperity, Easter island suffered a Malthusian fate. Its population rose above a sustainable level, the environment was degraded to the point it could no longer support its population, the social order disintegrated, and the civilization crashed.

The depletion of the palm forest. Easter Island was apparently settled around 400 A.D., at a time when great palm forests flourished. These forests were a nesting place for birds, a source of food. The palms also likely provided the wood needed for tools and for canoes used to fish. With abundant food, the population had ample time for artisan activities including carving and moving statues. As Malthus would predict, population grew rapidly. The statues appear to have been carved between 1100 and 1500 A.D.

The pollen record points to noticeable forest reduction by about 900 A.D., although the pace of forest loss was probably gradual enough to have been imperceptible to the typical Easter Island resident over his 30-year expected lifespan. By 1400 the palm forest was gone. Diet changed for the worse (less fish and hence less protein) with the depletion of the forests, and soil erosion lowered agricultural yields. With falling food consumption, carving activity declined and ultimately ceased. The islanders

developed dagger-like weapons and began inhabiting caves and fortified dwellings, suggesting violent internecine conflict. By 1774, some statues that were still standing in 1722 had been knocked over, statue worship had disappeared, and the population had further declined in size.

Why Easter Island? If the Malthusian theory applies to Easter Island, how did other Polynesian islands, with similar demographics, culture and technologies, escape the same fate? A likely explanation relates to the particular species of palm tree (Chilean Palm) indigenous to Easter Island but found nowhere else in Polynesia. The Easter Island palms are particularly slow-growing, requiring 40 to 60 years to bear fruit. In contrast, the palms found elsewhere in Polynesia reach fruit-growing age in 7 to 10 years. More rapid forest growth implies a greater likelihood that regeneration of a shrinking resource base can occur, which would contribute to other islands' being able to avoid the dramatic collapse suffered on Easter Island. Depletion on Easter Island, once it occurred, would not quickly be reversed. Moreover, the investments needed to rebuild Easter Island's resource base would have produced payoffs for the island's descendants but not for the inhabitants themselves.

Other Malthusian episodes? Recent archaeological evidence suggests that the Easter Island experience was probably not unique. Environmental decline may have precipitated the collapse of the Mayan, Mesopotamian and Chaco Anasazi (southwestern United States) cultures. In each case, decline of the resource base, particularly soil degradation, precipitated a population crash and the decline of a complex civilization. More recently, the violent Rwandan conflict between Hutus and Tutsis could also have been related to resource competition. Between 1950 and 1994, advances in health care and agricultural practice raised real incomes but also increased fertility, resulting in a quadrupling of the population in Rwanda. By the 1980s conflicts over land had increased in severity, and may have precipitated civil war.

Implications. In modern times, technological progress, reduced fertility in the face of rising income, and the evolution of more effective resource management institutions—including well-defined property rights and international agreements to prevent “overgrazing of the commons”—have normally short-circuited the Malthusian dynamic. However, adaptive responses become more difficult when environmental degradation occurs gradually, when the payoff from environmental protection is long-deferred, and when cooperation on a large scale is needed—conditions that are all present, for example, in the case of global warming. Thus, Easter Island provides a cautionary tale about the possibility of Malthusian outcomes in the absence of appropriate institutions and effective policy responses.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

Beige Book: U.S. Economy Continues Its Excellent Performance. The economy continued to grow in all Federal Reserve districts and across most sectors, according to the Fed's latest summary of commentary on current economic conditions. The pace of growth varied across Federal Reserve districts, ranging from quite strong in the Northeast, much of the Midwest and the West Coast, to somewhat more modest in the Southeast and in the Dallas district. Growth was fueled by liberal consumer spending and by business investment in plant and equipment. The construction sector was very strong. Manufacturing was robust in several districts, notably Chicago, St. Louis, and Kansas City, but somewhat weaker in an arc from Dallas through Atlanta and Richmond. In agriculture, crop conditions were generally favorable, but prices were low. Oil and gas drilling continued to be slack, while output in other natural resource industries was generally stable. Seven districts reported some adverse effects from economic problems in Asia.

New Evidence on Family Structure and Educational Attainment. Numerous studies have found that living outside a traditional two-parent family has a negative effect on high school completion. However, a new study has found that the lower probability of high school graduation among children living with a divorced, separated, or widowed mother stems primarily from the reduced level of economic resources available to these families. (There were not enough never-married mothers in the sample to evaluate such families.) After taking economic status into account, living in with a divorced, separated, or widowed mother had little or no effect on the high school graduation rates of white males, white females, or black males. Such a family structure did have a slight negative effect on the educational attainment of black females, however, even after economic status was taken into account. Finally, the study found evidence that living in a mother-stepfather family slightly reduced the probability of high school graduation among all groups studied except black males. The author suggests that this effect may be attributable to the increased stress frequently associated with remarriage.

Homeownership Encourages Good Citizenship. Homeownership is strongly correlated with variables associated with good citizenship, according to a recent study. Controlling for factors such as age, race, gender, income, marital status, and having children, homeowners in the United States are 10 percent more likely than renters to work to solve local problems or know their local congressman by name. They are also more likely to know the identity of their school board head, vote in local elections, attend church, and join nonprofessional organizations. The study warns, however, that any judgment about the appropriateness of policies to encourage homeownership (including current tax policy) would require quantitative estimates of these homeownership benefits (which the study does not provide) as well as their costs, both in absolute terms (homeownership reduces mobility in the face of economic shocks) and relative to alternative policies to promote good citizenship.

INTERNATIONAL ROUNDUP

CBO Assesses Antidumping Actions Here and Abroad. U.S. antidumping law imposes duties on imports that are sold here below their estimated cost of production, or below their price in the seller's domestic market, when such "dumped" imports cause "material injury" to the competing U.S. industry. A recent study by the Congressional Budget Office finds that the United States has taken antidumping action against other countries far more than they have against us and that, unlike other industrialized countries, the United States substantially increased its antidumping activity over the 1979-95 period covered by the study. However, U.S. antidumping policy may be coming back to haunt U.S. exporters. Many developing countries that now find their protectionist policies increasingly restricted by WTO discipline are starting to follow the U.S. lead in imposing antidumping duties. However, evidence suggests that in general U.S. firms are not singled out in foreign antidumping cases: In 16 of the 18 countries for which data were available, the share of U.S. imports was higher than the share of antidumping actions taken against the United States. The report also concludes that the application of antidumping duties to upstream goods (those used as inputs in the further production of other goods) is high enough in some cases to disrupt markets and create a significant disadvantage to downstream users. In the United States, two-thirds of the products covered by active antidumping measures are upstream goods, with average duties ranging from 32 percent on intermediate goods to 52 percent on raw and processed materials.

Will Europe Be a Locomotive of Growth? Economic growth in the EU was 3.1 percent over the last four quarters, an increase from the 2.9 percent registered at the end of 1997, and not too far below the U.S. growth rate of 3.7 percent, according to preliminary estimates of first quarter GDP released this week by the EU Statistical Office. Inflation edged up slightly in April but remained low (1.6 percent at an annual rate). Some European commentators have suggested that these trends are an encouraging sign that a broad recovery is underway, but such proclamations may be premature. Almost half of this growth occurred between the first and second quarters of 1997 (growth in the second quarter was 5.7 percent at an annual rate). For the last three quarters, output in the EU has consistently grown at a pace closer to 2 percent at an annual rate, suggesting that a plateau has been reached. April unemployment numbers support this interpretation—unemployment stands unchanged from March at 10.2 percent, down only slightly from the April 1997 rate of 10.7 percent.

Oil Producers Make New Attempt to Raise Prices. Reacting to weak market conditions, the oil ministers of the three producers that initiated cuts this March in Riyadh—Saudi Arabia, Mexico, and Venezuela—agreed to further reductions of 450 thousand barrels per day in Amsterdam earlier this month. Estimates of global demand for the second quarter have been revised downwards by 510 thousand barrels per day to 73 million, due to weak demand among the OECD countries and in Asia. Since last October, there has been a cumulative downward revision of Asia's projected demand for 1998 of 750 thousand barrels per day due to the regional crisis.

RELEASES THIS WEEK

U.S. International Trade in Goods and Services

The goods and services trade deficit was \$14.5 billion in April; it was \$13.2 billion in March.

Housing Starts

Housing starts decreased 1 percent in May to 1.53 million units at an annual rate. During the first five months of 1998, housing starts were 6 percent above the same period a year ago.

Industrial Production and Capacity Utilization

The Federal Reserve's index of industrial production rose 0.5 percent in May following an increase of 0.3 percent in April. Capacity utilization rose 0.1 percentage point, to 82.2 percent.

Consumer Price Index

The consumer price index increased 0.3 percent in May. Excluding food and energy, consumer prices increased 0.2 percent.

MAJOR RELEASES NEXT WEEK

Advance Durable Shipments and Orders (Wednesday)
Gross Domestic Product (Thursday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1997	1997:3	1997:4	1998:1
Percent growth (annual rate)					
Real GDP (chain-type)	2.7	3.7	3.1	3.7	4.8
GDP chain-type price index	5.4	1.8	1.4	1.4	1.0
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.5	2.1	3.6	1.4	1.1
Real compensation per hour:					
Using CPI	0.6	2.2	1.8	3.1	3.7
Using NFB deflator	1.3	2.5	2.7	3.9	3.5

Shares of Nominal GDP (percent)					
Business fixed investment	10.9	10.5	10.7	10.6	10.7
Residential investment	4.5	4.1	4.1	4.1	4.2
Exports	8.2	11.8	11.9	11.9	11.5
Imports	9.2	13.1	13.3	13.2	13.1
Personal saving	5.3	2.8	2.6	2.9	2.7
Federal surplus	-2.7	-0.4	-0.1	-0.1	0.6

	1970- 1993	1997	March 1998	April 1998	May 1998
Unemployment Rate (percent)					
	6.7**	4.9**	4.7	4.3	4.3
Payroll employment (thousands)					
increase per month			82	302	296
increase since Jan. 1993					16010
Inflation (percent per period)					
CPI	5.8	1.7	0.0	0.2	0.3
PPI-Finished goods	5.0	-1.2	-0.3	0.2	0.2

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

FINANCIAL STATISTICS

	1996	1997	April 1998	May 1998	June 18, 1998
Dow-Jones Industrial Average	5743	7441	9037	9080	8813
Interest Rates (percent per annum)					
3-month T-bill	5.01	5.06	4.95	5.00	5.05
10-year T-bond	6.44	6.35	5.64	5.65	5.50
Mortgage rate, 30-year fixed	7.80	7.60	7.14	7.14	6.94
Prime rate	8.27	8.44	8.50	8.50	8.50

INTERNATIONAL STATISTICS

Exchange Rates	Current level June 18, 1998	Percent Change from Week ago	Year ago
Deutschemark-Dollar	1.793	-0.6	3.5
Yen-Dollar	137.6	-3.9	21.2
Multilateral \$ (Mar. 1973=100)	100.5	-1.2	5.2

International Comparisons ^{1/}	Real GDP growth (percent change last 4 quarters)	Unemployment rate (percent)	CPI inflation (percent change in index last 12 months)
United States	3.7 (Q1)	4.3 (May)	1.7 (May)
Canada	3.8 (Q1)	8.4 (Apr)	1.0 (Apr)
Japan	-3.7 (Q1)	4.2 (Apr)	0.3 (Apr)
France	3.4 (Q1)	12.0 (Apr)	1.0 (Apr)
Germany	3.0 (Q1)	^{2/} 7.6 (Mar)	1.3 (Apr)
Italy	2.8 (Q4)	12.1 (Jan)	1.8 (Apr)
United Kingdom	2.9 (Q1)	6.5 (Feb)	4.0 (Apr)

^{1/} For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

^{2/} Rate for former West Germany. Using OECD standardized unemployment data, the unemployment rate for unified Germany for March 1998 is 10.0 percent.

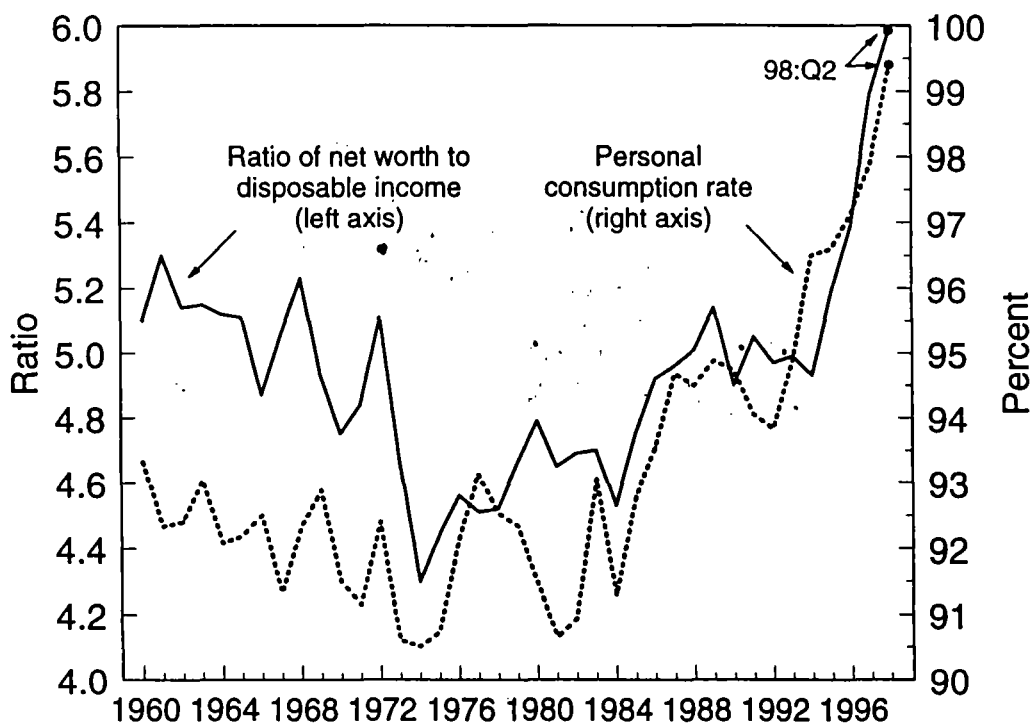
WEEKLY ECONOMIC BRIEFING OF THE PRESIDENT OF THE UNITED STATES

Prepared by the Council of Economic Advisers
with the assistance of the Office of the Vice President

August 7, 1998

CHART OF THE WEEK

Household Net Worth and the Personal Consumption Rate



The rise in the stock market over the past few years has increased household net worth and boosted the ratio of net worth to disposable income. This increase in wealth has reduced the need to save out of current income. As a result the proportion of income going to consumption has risen (and the personal saving rate has fallen).

CONTENTS

CURRENT DEVELOPMENT

GDP Revisions Show More Growth, Less Personal Saving	1
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SPECIAL ANALYSES

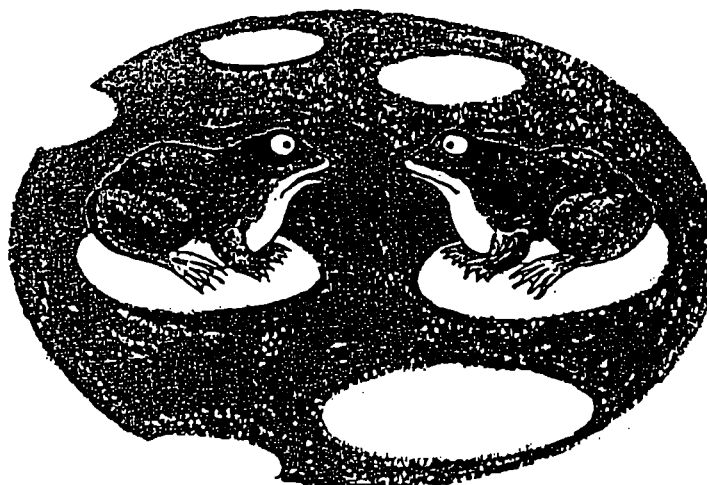
Conserving Species without Breaking the Bank	2
College Quality and Earnings	3

ARTICLE

More Work for Mom	4
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DEPARTMENTS

Business, Consumer, and Regional Roundup	6
International Roundup	7
Releases	8
U.S. Economic Statistics	9
Financial and International Statistics	10

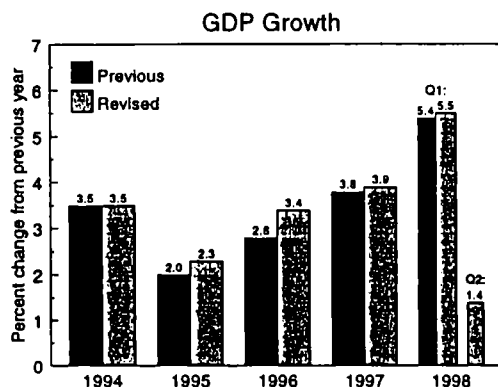


"So they hold this conference to figure out why we're becoming extinct, and guess what they have for dinner."

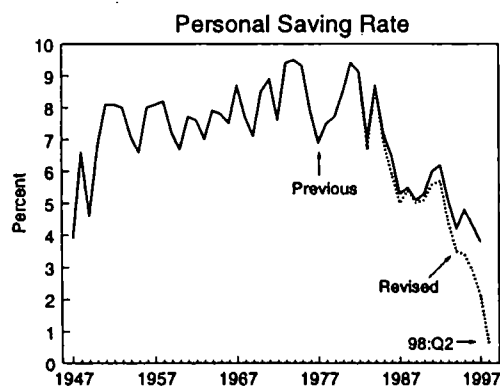
CURRENT DEVELOPMENT

GDP Revisions Show More Growth, Less Personal Saving

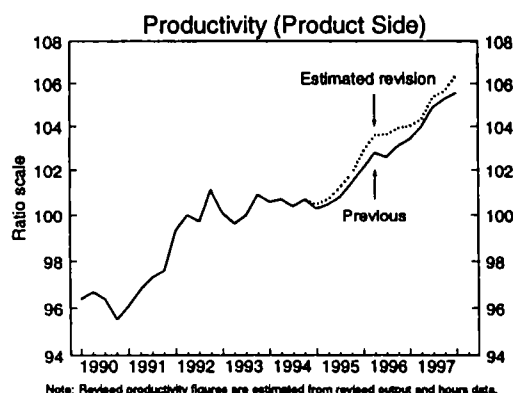
The latest annual revisions to the National Income and Product Accounts show that the economy grew faster than previously estimated over the past several years. The growth rate of real GDP was raised for each of the past 3 years (see upper chart); since 1993, real GDP has grown at a 3.4 percent annual rate—up 0.3 percentage point from the previous estimate.



Lower prices. About three-fourths of the upward revision to real GDP resulted from price revisions. The experimental geometric indexes scheduled to be incorporated into the consumer price index next January were used to deflate most parts of nominal personal consumption back to 1995.



A smaller statistical discrepancy. About one-fourth of the upward revision to output resulted from the use of more complete source data, which raised nominal GDP by \$31 billion in 1997. Gross domestic income, by contrast, was little changed, and the statistical discrepancy between income and spending was trimmed by \$30 billion.



Saving reallocated. Capital gains distributions by mutual funds, which had been erroneously included in personal dividend income, were shifted to undistributed corporate profits. This reduced personal saving by \$60 billion in 1997 but increased business saving by the same amount—with no net effect on national saving. Meanwhile the personal saving rate fell to just 0.6 percent in the second quarter (see middle chart).

Higher productivity. Because the upward revision to real output exceeds the upward revision to hours (announced 2 months ago by the Bureau of Labor Statistics), productivity is likely to be revised up (see lower chart). Since the last business-cycle peak, productivity appears to have grown at a 1.3 percent annual rate—0.1 percentage point higher than previously estimated.

SPECIAL ANALYSIS

Conserving Species without Breaking the Bank

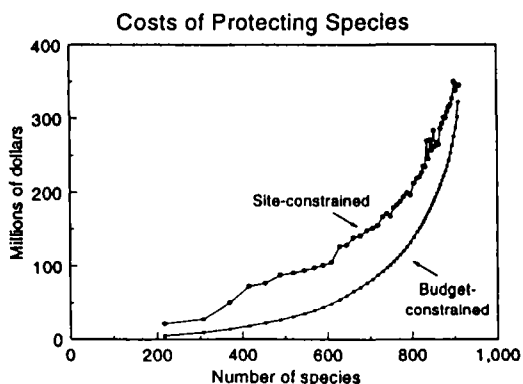
The Endangered Species Act prohibits actions that may lead to the extinction of species and requires the government to implement recovery plans that will restore healthy populations. However, protecting all species is currently beyond the means of both public and private conservation agencies. What is the best way to use limited resources to achieve conservation benefits?

Selecting priority areas. A recent study by conservation biologists indicates that the vast majority of domestic species on the endangered species list can be protected by targeting a small number of high-priority areas. This study implicitly assumes that the cost of setting aside land for conservation is the same in all areas. The priority areas that were selected, however, include some of the most expensive land in the United States (including Hawaii and much of coastal California). The same number of species could be protected at lower cost by taking land costs into account.

A cost-effective conservation strategy. A recent economic study illustrates this point. It treats a listed endangered species as protected if it occurs in at least one county where a biological reserve site is established. For simplicity, reserve sites in all counties are assumed to be the same size. Using data on the occurrence of listed species and the per acre land value by county, the study assesses the number of species protected and the total cost of choosing different sites for biological reserves under two different protection strategies:

- site-constrained, where the objective is to choose sites that cover the maximum number of species, given that a fixed number of sites will be chosen.
- budget-constrained, where the objective is to choose sites that cover the maximum number of species given a fixed budget.

Findings. The chart shows that the budget-constrained strategy protects listed species at far lower cost than the site-constrained strategy. (Costs are illustrative and



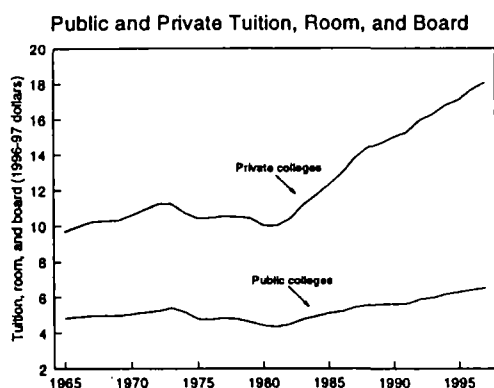
the chart also illustrates how the total costs of species protection rise slowly at first under the cost-effective strategy, but eventually rise very sharply.

assume 1,000 acres are set aside for each protected site.) For example, the costs of covering approximately half of the listed species under the budget-constrained approach are about a third those under the site-constrained approach. By choosing sites that are one-sixth as expensive, on average, the budget-constrained approach has twice as many reserve sites, protects as many species, and still costs far less than the site-constrained approach. The

SPECIAL ANALYSIS

College Quality and Earnings

Increased educational quality (in the form of smaller class size) appears to improve educational outcomes among young children. Two recent studies suggest that quality matters at the other end of the educational spectrum as well: attending a high-quality 4-year college enhances graduates' earnings over and above effects related to students' individual characteristics.



College tuition is high and variable. Tuition (including room and board) varies substantially among 4-year colleges, averaging roughly \$7,300 at public institutions and \$18,000 at private colleges. Many of the elite schools cost \$25,000 or more. College costs have been increasing since 1980, especially among private institutions (see chart).

Quality matters. A new study of 3,100 men finds that attending a higher-quality college leads to greater earnings than attending a lesser-quality institution. The study measured school quality using indicators such as SAT scores of incoming students, share of faculty with Ph.D.s, applicant rejection rate, faculty-to-student ratio, and spending per student. It found that after adjusting for individual characteristics (such as performance on standardized tests, parental education, parental family structure, and various characteristics of the student's high school), men who attended colleges in the top fifth of the quality ranking earned 13 percent higher hourly wages than those who attended colleges in the bottom fifth.

These results were confirmed by a second study, which found that attending elite private colleges increases wages. Moreover, this study found that around age 24, the wage advantage associated with attending an elite private college was lower for students who graduated in the late 1970s (a 9 percent wage advantage relative to attending a bottom-ranked public school) than in the mid- to late 1980s (a 20 percent wage advantage). This finding is consistent with earlier studies showing that disparities in wages have risen over this period among workers with the same years of education, experience, and race.

Implications. The effectiveness of educational spending continues to be debated. Although more spending *per se* may not improve student performance, new studies have demonstrated that smaller class sizes and other quality improvements are associated with better academic performance and future labor market outcomes. In the case of colleges, however, a question remains whether improved school quality raises graduates' wages because it raises their productivity or simply because employers *assume* that graduates with prestigious degrees are worth more.

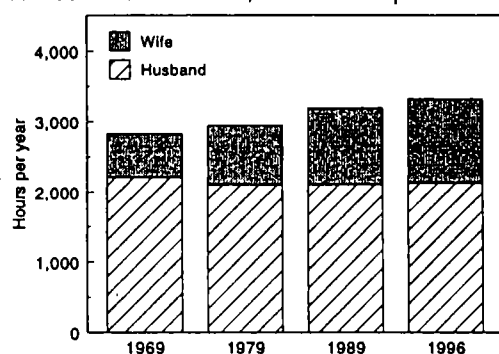
ARTICLE

More Work for Mom

Many American families spend more time working for pay than their counterparts did 30 years ago. All of the increase is due to increased hours among women—wives and single mothers.

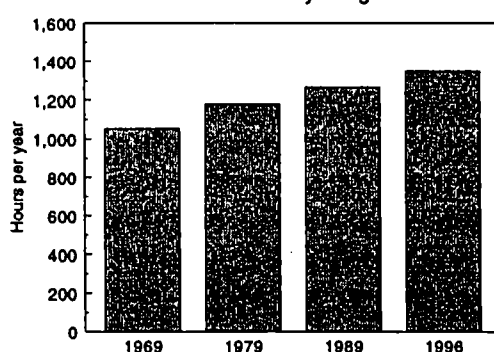
Trends. Average annual hours of work increased for both married-couple and single-parent families between 1969 and 1996. The increase was 496 hours

Annual Hours of Work, Married-Couple Families



(18 percent) for two-parent families (see upper chart) and 297 hours (28 percent) for single-parent households (see lower chart). In 1996, wives in married-couple families worked almost twice as many hours as their 1969 counterparts, and their increase more than accounted for the rise in hours worked among such couples. (To put these numbers in context, a person working full-time year-round would work about 2,000 hours per year.)

Annual Hours of Work by Single Parents



More weeks or longer weeks? For wives and single parents, the increase in annual work hours reflects both more weeks worked per year (including fewer women not working at all) and more hours of work per week. For husbands, the number of weeks worked has declined slightly, while the usual number of hours worked per week has remained relatively constant.

Where are the effects greatest? Although the basic trends are similar across a wide range of family types, the following two groups experienced especially large effects:

- **The highly educated.** For married couples with a college-educated husband, average annual hours of work increased 644 hours (23 percent)—more than twice the increase for couples in which the husband had a high school diploma or less. In both cases, the increase came from the wives. For single parents with a college degree, annual hours of work rose by 321 hours (20 percent), compared with 165 hours (16 percent) for single parents with a high school diploma or less.
- **Parents of young children.** For single parents with a child under age 3, annual hours of work increased by 405 hours (55 percent), compared with 260 hours

(23 percent) for single parents without a young child. For married couples, hours of work increased by 557 hours (21 percent) for families with a child under age 3, compared with 467 hours (16 percent) for families without a young child. This result is not surprising, since mothers of young children worked less than mothers of older children 30 years ago and therefore had more room to increase their hours.

Implications. More work in the market means fewer total hours available for child care, work in the home, and leisure. Changes in family size and structure complicate any assessment of how this change in work hours has affected the amount of time parents have available to spend with each child. On the one hand, a rising share of single-parent families and increased time in the labor market among married-couple families may mean less *total* time available for child care. On the other hand, a reduction in the average number of children per family would tend to increase parental time *per child*. In addition, working parents may spend less time on housework and leisure in order to reclaim time with their children.

BUSINESS, CONSUMER, AND REGIONAL ROUNDUP

Housing Affordability Index Remains High. Despite a small drop in the second quarter, housing affordability conditions remain near their highest sustained levels since the early 1970s, according to the National Association of Realtors (NAR). The NAR composite Housing Affordability Index stood at 131.1 in the second quarter, 6.1 points higher than a year ago. The index measures housing affordability factors (mainly home prices and mortgage rates and terms) relative to median family income. The current level means that half the nation's households have at least 131.1 percent of the income needed to afford a median-priced resale home (costing, coincidentally, \$131,100). The NAR calculates that families with \$30,000 of income can afford a house priced at \$115,000 and those with \$60,000 can afford a house priced at \$230,000. In the second quarter, an increase in the median existing-home price offset a modest increase in family income and a slight decline in mortgage interest rates.

CBO Assesses Impact of Generic Drugs. Between 1984 and 1996, the proportion of prescription drugs sold in the United States accounted for by generic drugs rose from 19 to 43 percent, according to a recent study by the Congressional Budget Office. Switching to generics saved consumers \$8 to \$10 billion at pharmacies in 1994. CBO found three main causes for the growth in generic sales. First, the 1984 Hatch-Waxman Act made it easier and less costly for manufacturers to market generic drugs. Second, drug-substitution laws have allowed pharmacists to dispense a generic drug when a brand-name drug is prescribed. Third, government and private health plans have substituted generic for brand-name drugs. The Hatch-Waxman Act also contained patent-extension provisions to address the issue of incentives to develop new brand-name drugs, which could be eroded by increased generic entry. The CBO study concludes that since 1984, the expected returns from marketing a new drug have declined by about 12 percent, or \$27 million in 1990 dollars. Although probably not enough to make drug development unprofitable on average, this decline may have made some specific projects unprofitable. Although some pharmaceutical industry representatives have called for further patent-term extensions, CBO concludes that policies to speed up the FDA drug approval process without sacrificing the safety and efficacy of drugs would be much more beneficial to both the pharmaceutical industry and consumers, because that would bring new drugs to market sooner rather than delay the introduction of a generic.

Infants' Health Is Now Less Dependent on Family Income. The intergenerational transmission of health inequality has been reduced over the twentieth century, according to a new study. The relationship between a newborn's weight and its parents' income has weakened, as has the relationship between a mother's height, which is dependent on her own nutritional status during her growing years, and her newborn's weight. Although birth weights at the turn of the century were quite similar to today's birth weights, turn-of-the-century infants quickly lost ground relative to today's infants, as their risk of death in the first 10 days of life was much higher. The author attributes the change to improved obstetrical and medical knowledge, particularly in infant nutrition.

INTERNATIONAL ROUNDUP

New Study Compares Public Pension Systems among the G-5. A recent study concludes that the cost of public programs for the elderly is expected to increase significantly as a share of GDP in every G-5 country except the United Kingdom, as the proportion of the population over 65 continues to grow relative to the population aged 15 to 64. Several factors make the United Kingdom different. Over time, the basic flat rate pension of their two-tier pension system has declined, and workers now have the option of switching out of the earnings-based second tier into private pension programs. In addition, public health care costs in the United Kingdom are expected to increase less than in other G-5 countries, in contrast to the United States, which has the largest projected increase in such costs. As a result of this reduction in public spending on pension and health care programs, the United Kingdom will not face the same financing problems as the other G-5 countries. Despite the impact of privatization on the U.K.'s pension costs, the study notes a number of problems. If large numbers of workers suffer low or negative returns on their investments, for example, democratically elected governments may face pressure to compensate them for their losses.

Do High Asian Saving Rates Reflect Cultural Differences? Economists remain unsure exactly why some countries save so much more than others. Most explanations based on differences in the economic environment (such as social security systems, tax incentives, and land and housing prices) have been largely unsuccessful at explaining the observed variation. As a result, many have suggested that saving differences stem in part from cultural differences rather than strictly economic differences. But a recent study of U.S. immigrants found that although the saving patterns of immigrants differed substantially by country of origin, immigrant saving patterns did not match up with the country-of-origin saving patterns. In particular, immigrants from countries with high national saving rates, such as Japan, Korea, and Taiwan, did not seem to have higher saving rates than the other immigrants in the authors' sample. Of course, immigrants may differ in important ways from those who remain at home.

Southeast Asian Governments Undertake New Measures to Support Recovery. The governments of Malaysia and Thailand have each formulated plans to support their weakening financial systems and promote economic recovery. Malaysia's plan calls for a \$5 billion bond issue for the purposes of bank recapitalization, stabilizing the currency within a band set by a trade-weighted basket of currencies, increasing foreign reserves, reducing dependence on the dollar for trade, and adopting a balanced interest rate policy. The government has also recently announced several fiscal and monetary measures to revive the Malaysian economy, which local analysts expect to contract by 3 percent this year. Such measures include a \$1.25 billion infrastructure fund to revive infrastructure projects that were deferred last year and the reduction of statutory reserve requirements by the Central Bank of Malaysia, from 10 percent to 8 percent. Details of the Thai plan are being withheld pending the outcome of ongoing negotiations with the IMF.

RELEASES THIS WEEK

Employment and Unemployment

****Embargoed until 8:30 a.m., Friday, August 7, 1998****

In July, the unemployment rate was unchanged from June at 4.5 percent. Nonfarm payroll employment rose by 66,000.

Leading Indicators

In June, the composite index of leading indicators decreased 0.2 percent following a decrease of 0.1 percent in May.

NAPM Report on Business

The Purchasing Managers' Index decreased to 49.1 percent in July from 49.6 percent in June.

MAJOR RELEASES NEXT WEEK

Productivity (Tuesday)

Retail Sales (Thursday)

Industrial Production and Capacity Utilization (Friday)

Producer Prices (Friday)

U.S. ECONOMIC STATISTICS

	1970- 1993	1997	1997:4	1998:1	1998:2
Percent growth (annual rate)					
Real GDP (chain-type)	2.7	3.8	3.0	5.5	1.4
GDP chain-type price index	5.4	1.7	1.1	0.9	0.8
<u>Nonfarm business (NFB) sector:</u>					
Productivity (chain-type)	1.5	2.1	1.4	1.1	N.A.
Real compensation per hour:					
Using CPI	0.6	2.2	3.1	3.7	N.A.
Using NFB deflator	1.3	2.5	3.9	3.5	N.A.
Shares of Nominal GDP (percent)					
Business fixed investment	10.9	10.6	10.7	11.0	11.1
Residential investment	4.5	4.0	4.1	4.2	4.3
Exports	8.2	11.9	12.0	11.6	11.3
Imports	9.2	13.1	13.2	13.1	13.2
Personal saving	5.2	1.5	1.2	0.9	0.4
Federal surplus	-2.7	-0.3	0.0	0.7	N.A.
	1970- 1993	1997	May 1998	June 1998	July 1998
Unemployment Rate (percent)	6.7**	4.9**	4.3	4.5	4.5
Payroll employment (thousands)					
increase per month			328	196	66
increase since Jan. 1993					16322
Inflation (percent per period)					
CPI	5.8	1.7	0.3	0.1	N.A.
PPI-Finished goods	5.0	-1.2	0.2	-0.1	N.A.

**Figures beginning 1994 are not comparable with earlier data.

New or revised data in **boldface**.

Employment and unemployment data **embargoed until 8:30 a.m., Friday, August 7, 1998.**

FINANCIAL STATISTICS

	1996	1997	June 1998	July 1998	Aug. 6, 1998
Dow-Jones Industrial Average	5743	7441	8873	9097	8578
Interest Rates (percent per annum)					
3-month T-bill	5.01	5.06	4.98	4.96	4.90
10-year T-bond	6.44	6.35	5.50	5.46	5.44
Mortgage rate, 30-year fixed	7.80	7.60	7.00	6.95	6.94
Prime rate	8.27	8.44	8.50	8.50	8.50

INTERNATIONAL STATISTICS

Exchange Rates	Current level August 6, 1998	Percent Change from Week ago	Year ago
Deutschemark-Dollar	1.768	-0.5	-5.9
Yen-Dollar	144.6	1.5	21.9
Multilateral \$ (Mar. 1973=100)	101.1	0.2	-0.3

International Comparisons "	Real GDP growth (percent change last 4 quarters)	Unemployment rate (percent)	CPI inflation (percent change in index last 12 months)
United States	3.5 (Q2)	4.5 (Jul)	1.7 (Jun)
Canada	3.8 (Q1)	8.4 (May)	1.1 (Jun)
Japan	-3.7 (Q1)	4.2 (Apr)	0.1 (Jun)
France	3.4 (Q1)	12.0 (Apr)	1.0 (Jun)
Germany	3.0 (Q1)	² 7.6 (Apr)	1.2 (Jun)
Italy	2.5 (Q1)	12.4 (Apr)	1.8 (Jun)
United Kingdom	2.6 (Q2)	6.4 (Mar)	3.7 (Jun)

U.S. unemployment data **embargoed until 8:30 a.m., Friday, August 7, 1998.**

1/ For unemployment data, rates approximating U.S. concepts as calculated by the U.S. Department of Labor, Bureau of Labor Statistics.

2/ Rate for former West Germany. Using OECD standardized unemployment data, the unemployment rate for unified Germany for April 1998 is 10.0 percent.