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Goldman Sachs Weekly
May 1995 -- July 1996

Goldman Sachs

U.S. Economics Analyst

Wage Inflation: Already Visible and Apt to Keep Rising

- Although Chairman Greenspan has not indicated any great urgency in tightening policy, it is quite likely that the FOMC will boost interest rates in response to signs of rising wage inflation or the persistence of above-trend growth. We think upcoming data on employment costs, real GDP, the purchasing agents' survey, and employment conditions will set the stage for a rate hike at the August 20th FOMC meeting.

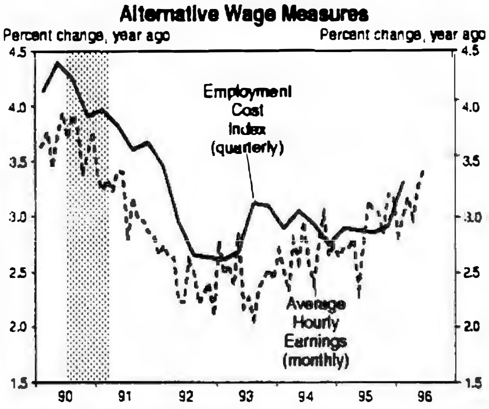
- Shifts in the mix of employment toward higher-paying jobs have already caused average hourly earnings and hourly compensation to accelerate. This acceleration has not been offset by increased productivity growth, which shows no correlation with any major measure of aggregate labor costs.

- Although the employment cost index shows only a hint of rising inflation in pay rates for given occupations, the rising trend in average hourly earnings gains points to a further pick-up. History also suggests that price inflation will rise when unit labor costs are rising faster than prices.

- June's durable goods orders and weekly gauges of retail spending in July have tilted to the soft side. But no change in our outlook for continued above-trend growth is yet indicated, especially in light of last week's plunge in jobless benefit claims.

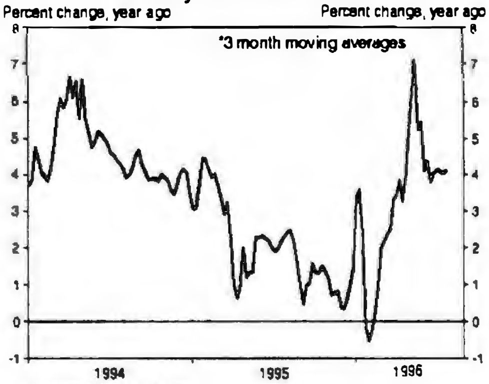
- June's $34.1 billion federal surplus supports our expectation of a $105 billion fiscal 1996 deficit, which in turn points to reductions in bill sales and perhaps in coupon auction sizes.

Alternative Wage Measures



Source: Department of Labor.

Weekly Chain Store Sales



Source: Mitsubishi Bank.

Trade Recommendations

- Maintain short position in June 1997 Euros, with a target of 93.10 and a stop on a close above 93.90.
- Maintain short position in September Treasury bond futures. Lower stop to a close above 110.16 (from

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July 26, 1996

112.00) and maintain a target of 102.00.

I. Weekly Wrapup

Economic and Market Overview

U.S. stock and bond markets have revealed lots of anxiety and little clear sense of direction in front of a flood of key economic data to be released in coming days. The stock market has been especially jittery, as investors have tried to balance signs of marginally slower growth with concerns about the sustainability of earnings — this despite the fact that most companies, including several high-profile technology firms, beat consensus estimates for second-quarter earnings. In the bond market, prices have been less volatile but have also lacked direction, as fixed-income investors appear to have moved to the sidelines pending several big economic reports.

Except for a plunge in last week's claims for jobless benefits, the latest data, while scant, have tilted in the direction of slower growth. For example, durable goods orders in June were a bit softer than expected, falling 0.8% overall and 0.2% outside the volatile defense equipment and civilian aircraft areas. Although this decline was concentrated in consumer goods, demand for such goods remains at a high level. In contrast, bookings for nondefense capital goods excluding aircraft, while up 1.3% in June, have been relatively lackluster since yearend. It remains unclear whether the softness in this sector reflects a falloff in computer prices, slower export growth, or a softening in domestic capital spending.

In the retail sector, snippets of activity were relayed to the market early last week through the Mitsubishi survey. Although the index rose only 0.3% during the week of July 20, the year-to-year increase remains high, at 4.1%. This is comparable to the year-to-year changes seen in 1994, when consumer demand was unquestionably strong. The same holds for sales of existing homes, which fell 2.3% in June but remain high in absolute terms.

Federal Reserve Policy

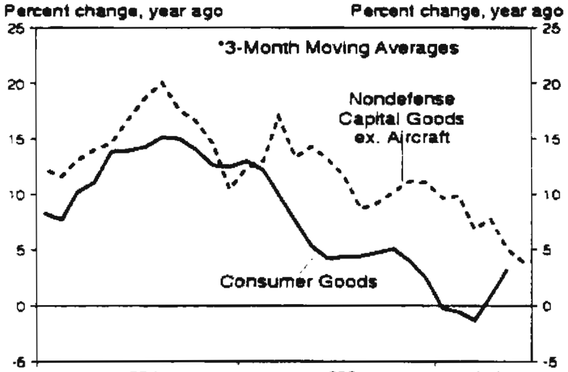
Although Federal Reserve Chairman Alan Greenspan did not convey a strong sense of urgency to boost interest rates at his Humphrey-Hawkins appearances, he did identify two issues that will bear heavily on the FOMC's policy deliberations in coming months. The first is whether wage inflation is picking up at a rate faster than productivity. In this week's center section, we review the recent behavior of wages and labor costs, reaffirming our conclusion that a modest increase in both wage and price inflation is on the horizon. Key to the Fed's assessment of this matter will be the employment cost index, due for release on July 30. We expect that further signs of acceleration will strengthen the hand of those FOMC members seeking to reverse last winter's precautionary easing.

The other issue is the sustainability of above-trend growth following last quarter's surge in real GDP, which we recently reestimated at 3.7% (annualized), down from 4.2%. By Chairman Greenspan's own assessment, the current quarter is critical because continued firm demand could set in motion a renewed cycle of inventory accumulation. The first glimpse of activity in the third quarter will be available in the next NAPM survey on August 1 and the employment report on August 2. Readings on vendor performance and on average hourly earnings will be critical.

Fiscal and Political Developments

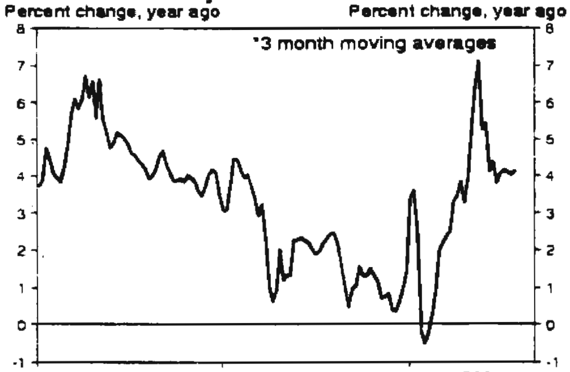
The U.S. Treasury posted a $34.1 billion surplus last month, capping a quarter in which revenues exceeded

Durable Goods Orders



Source: Department of Commerce.

Weekly Chain Store Sales



Source: Mitsubishi Bank.

expenses by more than $53 billion. These data fit with our estimate of a $105 billion full-year fiscal deficit, which would mark almost a $60 billion shrinkage from fiscal 1995. They also imply that the Treasury will slash its projected July/September quarter borrowing requirement on July 29, from $55-$60 billion to no more than $35 billion.

Not only is federal borrowing shrinking, but the modest remaining need is being substantially satisfied by strong central-bank purchases of new Treasury issues. In July alone, these institutions supplied more than $6 billion through "add-on" transactions at public securities auctions. If this pace keeps up, the current debt auction sizes imply an undesired swelling of the Treasury's cash balance by late September. Consequently, over the balance of this quarter debt managers are apt to pare weekly sales of short-term bills further, having already cut them from $29 billion to $26 billion. There may even be room to shave some new coupon issue sizes in this period.

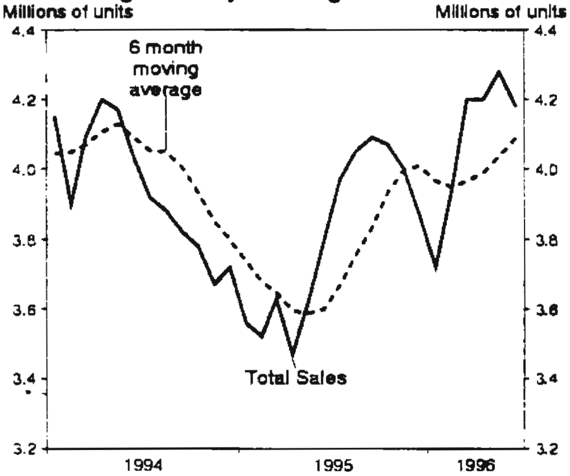
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

Short positions in June 1997 Eurodollar futures (currently 93.56) should be maintained through the coming spate of economic data releases, with stops left at 93.90. These reports will probably be firm enough to solidify prospects for a resumption of Fed monetary tightening next month. In particular, continued year-to-year acceleration in employment costs and a second consecutive sturdy monthly purchasing managers' survey would damage the Fed's confidence that GDP growth will slow soon and by enough to forestall upward pressure on wage inflation. With four FOMC meetings left between now and yearend, market participants will probably build in more tightening risk on a twelve-month horizon if an early rate hike arrives.

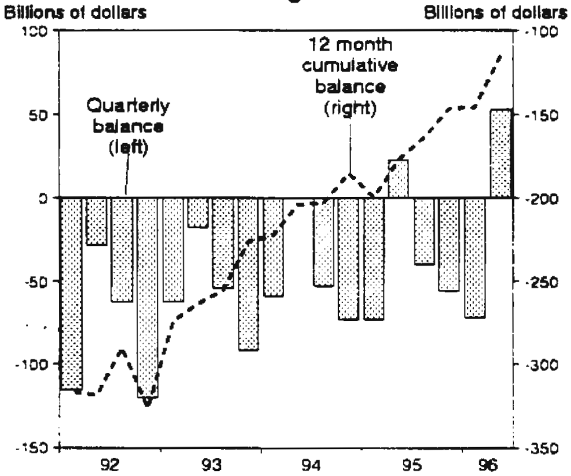
Similarly, we recommend holding on to shorts in September T-bond futures (now 108.14), but would lower the stop to 110.16 from 112.00. Bond yields typically rise following an initial Fed tightening, and the debt markets face a bulge in new long-duration Treasury coupon supplies between now and mid-August, which should weigh on prices.

Single Family Existing Home Sales



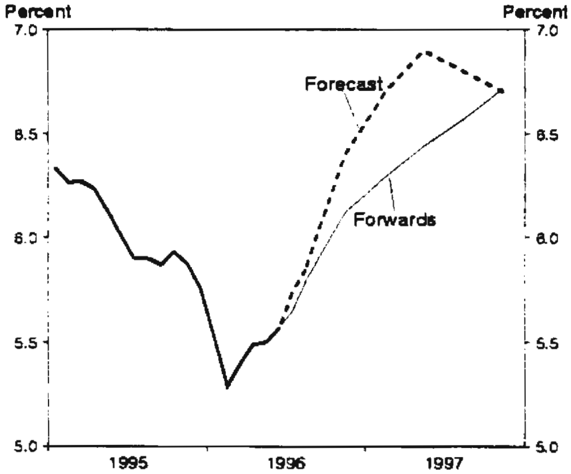
Source: Department of Commerce.

Federal Budget Balance



Source: Department of Treasury.

3-Month Libor Rate



Source: Federal Reserve Board, Wall Street Journal.

II. Wage Inflation: Already Visible and Apt to Keep Rising

All eyes in the U.S. financial markets will be trained on the second-quarter employment cost index when it is reported on Tuesday, July 30. This is because Federal Reserve Chairman Alan Greenspan indicated at the midyear Humphrey-Hawkins monetary policy hearings that signs of rising wage inflation could prompt the FOMC to boost short-term interest rates.

In his testimony, Mr. Greenspan was actually of two minds on the subject. On the one hand, he noted that a rise in wage inflation was not threatening if it reflected more rapid productivity growth. On the other hand, he surmised that the factors holding wage inflation down in recent years might be abating and termed the latest increase in the employment cost index "potentially worrisome." Which way Fed officials come down on this issue will obviously be of critical importance as they chart the future course of monetary policy.

Many market participants are not yet convinced that wage inflation is even rising. Anecdotal reports reveal little or no upward pressure, a conclusion supported by the benign behavior of prices and, at least until recently, the employment cost index. For these observers, all of this means that productivity is rising rapidly and that cyclically low unemployment need not signal an acceleration in labor costs.

In our view, such a conclusion is premature. The pattern of increases in aggregate measures of labor costs suggests that shifts in the mix of employment, toward better paying jobs, are causing both wages and total hourly compensation to accelerate. Gains in productivity are not keeping pace, with the result that the trend in unit labor cost increases has picked up.

Alternative Wage Measures

Source: Department of Labor.

And history strongly suggests that such cost increases will eventually wind up in higher inflation.

Alternative Labor Cost Measures . . .

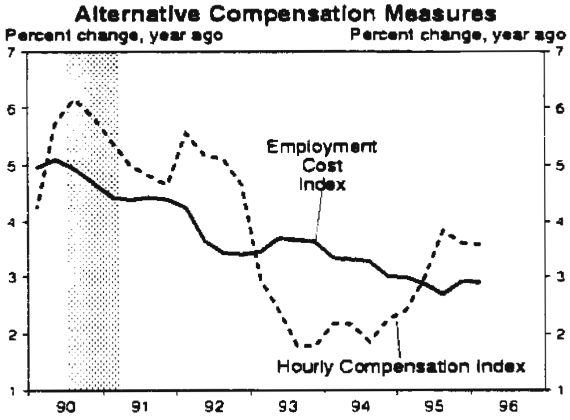
There are five aggregate gauges of labor costs that are commonly watched by financial market participants. Predictably, they convey different messages about whether and how much wage inflation has been rising recently:

1. **Average hourly earnings (AHE).** This measure, reported with the monthly employment data, is simply the total dollar value of payrolls divided by the total hours worked in that month. It is therefore affected by shifts in the type of work (toward higher- or lower-paying jobs) and in overtime. Thus, it is not a pure index of wage rates for given occupations and is often criticized by economists for this reason. Moreover, it covers only production and nonsupervisory workers — about 75% of the surveyed payrolls and probably less of the entire workforce — and excludes fringe benefits. Even so, these data provide the most timely readings on labor costs and do contain important information on how such costs are shifting. Over the past three years, they show a pronounced acceleration — from a cyclically year-to-year increase of 2.1% as of August 1993 to 3.4% as of June 1996.

2. **Employment cost index for wages (ECI-W).** This quarterly index standardizes by occupation and is therefore not affected by shifts in type of work or overtime. It also covers more workers than AHE. The private-sector wage index that is most comparable to AHE hit a year-to-year low of 2.6% in the first quarter of 1993. This gauge of the wage inflation trend then fluctuated in the 2.6%-3.1% range until the first quarter of 1996, when it rose to 3.3%.

3. **Employment cost index for total compensation (ECI-TC).** This index adds benefits to ECI-W and is also standardized by occupation. Because companies have been trimming benefit packages in recent years, this measure of labor costs does not even exhibit the faint upward trend discernible in the ECI-W. Its year-to-year low was 2.7% in the third quarter of 1995; as of the first quarter of 1996 it was up 2.9%.

Alternative Compensation Measures



Source: Department of Labor.

4. **Index of compensation per hour (HCI).** This measure is also comprehensive in its coverage of employees and forms of labor compensation. However, like AHE, it can accelerate or decelerate with shifts in the mix of employment and/or overtime. Accordingly, the nonfarm component of this index also shows a clear pattern of acceleration — from a year-to-year low of 1.8% in late 1993, to as much as 3.8% in the third quarter of 1995 and 3.6% as of the first quarter of 1996.

5. **Index of unit labor costs (ULC).** This measure adjusts the HCI for changes in output per hour, i.e. labor productivity, and thus shows how fast labor costs are rising per unit of output. If these costs are rising faster than output prices, then margins will be squeezed and price inflation will tend to pick up as companies attempt to defend those margins. In the nonfarm sector, the year-to-year increase in unit labor costs bottomed at 1.0% in the second quarter of 1994 (matching a similar figure for the fourth quarter of 1992). It has since moved up to 3.4% in the fourth quarter of 1994 and 2.5% in the first quarter of 1996.

. . . Show That The Stage is Set for Modestly Higher Inflation in Wages . . .

Given the large differences in the recent performance of these measures, it is not surprising that confusion reigns in the financial community regarding both the degree to which wages are rising or will be rising and the implications for price inflation. Yet, despite the differences, two clear conclusions can be drawn about the current and prospective state of wage inflation:

1. **So far, shifts in the mix of employment toward higher-paying jobs account for the lion's share of upward pressure on aggregate labor costs.** This is strongly implied by the contrast between the acceleration in AHE and the HCI and the stability of comparable components of the ECI. The fact that labor cost inflation is occurring in this form may also explain the lack of anecdotal evidence of wage inflation, inasmuch as such evidence would probably reflect mainly changes in wage rates paid for given types of labor. Significantly, the acceleration gap between the HCI and ECI-TC is bigger (almost 2 percentage points) than the between AHE and ECI-W (about 1 percentage point). This suggests that part of the shift toward higher-paying jobs represents an improvement in benefits. If so, companies may back off from efforts to trim benefits in a labor market now widely recognized as tight as they see workers shifting to more attractive benefit alternatives.

2. **A pick-up in wage inflation, defined as pay rates for given types of work, seems highly likely.** The ECI-W already hints at such a pick-up; moreover, the correlation between it and AHE is quite high, as shown in the table below. In fact, AHE is highly correlated with all of the labor cost measures, suggesting that its timeliness makes up for its shortcomings as a wage measure. Since 1980, 94% of a step-up in the rate at which average hourly earnings are rising has passed through to ECI-W within two quarters. Thus, last quarter's sharp increase in AHE — 3.7% at an annual rate — is cause for concern, especially with the unemployment rate at a 6-year low.

. . . And Probably in Prices

Of course, an increase in wage inflation need not lead to higher price inflation if it is accompanied by more rapid growth in productivity. In this case, the trend in unit labor costs, the primary determinant of price inflation, would remain steady. Barring such an offset, compression in profit margins could also

Correlations Among Alternative Labor Cost Measures (quarterly above diagonal, annual below diagonal)

	AHE	ECI-W	ECI-TC	HCI	ULC
AHE	100	87	86	71	51
ECI-W	97	100	94	71	51
ECI-TC	98	98	100	70	46
HCI	79	85	83	100	63
ULC	71	74	69	82	100

Legend:
AHE = Average Hourly Earnings
ECI-W = Employment Cost Index, Private Wages
ECI-TC = Employment Cost Index, Total Comp.
HCI = Index of Nonfarm Hourly Comp.
ULC = Index of Nonfarm Unit Labor Costs

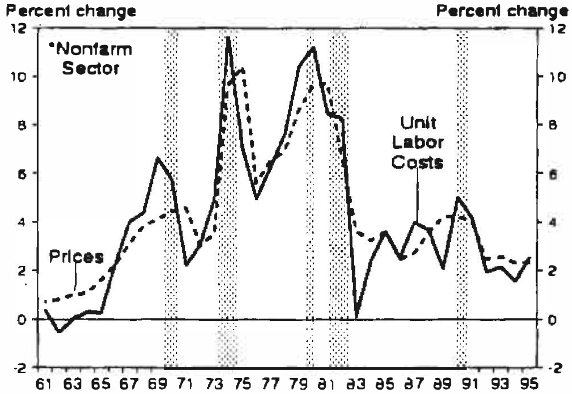
conceivably break the link between inflation in prices and labor costs. However, while both offsets are possible in principle, the recent behavior of labor productivity and the historical linkage between unit labor costs and price inflation do not provide strong encouragement that a modest increase in inflation can be avoided. The key points are these:

1. **The latest acceleration in hourly compensation has not been offset by enhanced productivity growth.** This is evident in the quickened pace of ULC increases, which roughly parallels the 2-point acceleration in the HCI. Thus, the shift to higher-paying jobs is not being matched by larger gains in productivity.

2. **Historically, the link between wage inflation and productivity growth has been quite loose.** In fact, all of the correlations between growth in productivity and changes in the four measures of wages and total hourly compensation are below 0.10, indicating virtual independence between productivity and hourly pay. Why such a weak link when productivity should have an important bearing on wage determination? This link is evidently offset by cyclical influences. As labor becomes more scarce, wages are bid up at the same time that businesses are hiring the marginal, less productive workers.

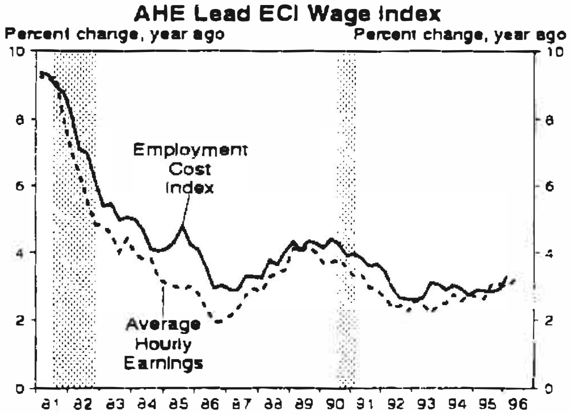
3. **The gap that has emerged between increases in unit labor costs and output prices points to a probable increase in price inflation.** In 1995, output prices and unit labor costs both rose about 2.5% in the nonfarm sector. Since mid-1995, year-to-year increases in unit labor costs have outpaced price inflation by 0.8 percentage points on average (2.9% versus 2.1%). This implies that profit margins are being squeezed, at least for the sector as a whole if not for individual companies. Historically, this has usually been a reliable signal for rising price inflation. In fact, prior to 1980, price inflation tended to rise as soon as ULC began to accelerate, even if prices were rising faster. The more competitive pricing environment of the 1980s and 1990s has broken this relationship down somewhat, but not yet to the point where companies passively accept lower margins in the face of rising labor costs. Although many analysts argue that pricing inflexibility will force discipline on labor costs, it seems unlikely that the U.S. economy will avoid a pickup in inflation altogether. Thus, we continue to expect the price inflation to trend slowly higher in response to the acceleration already underway in unit labor costs.

Unit Labor Costs and Prices



Source: Department of Commerce, Department of Labor.

AHE Lead ECI Wage Index



Source: Department of Labor.

Financial Market Implications

The increases we expect for wage and price inflation are quite modest by recent historical standards — about 0.5 percentage points per year for wages and hourly compensation and 0.3 points per year for prices. Nevertheless, evidence that inflation is drifting up on both the labor and price fronts will be disturbing news to U.S. bond and stock markets, as they grapple with the likely response by Federal Reserve officials.

Ed McKelvey

Goldman Sachs

U.S. Economics Analyst

Our Views Have Changed

Too Soon to Declare Victory Over Budget Deficits

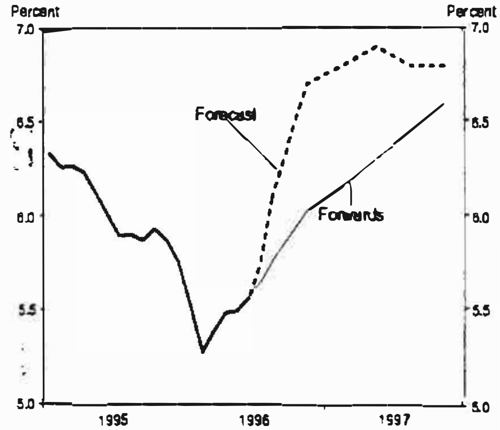
- Fed officials still expect economic momentum to slow, but see upside risks to this forecast and already regard incipient signs of wage inflation as "potentially worrisome." Thus, we continue to believe that the FOMC will boost interest rates by its August 20th meeting.

- At the same time, Chairman Greenspan's policy report did not indicate the sense of urgency now required to justify the 100-basis-point rise in interest rates we have been anticipating by yearend. We have therefore scaled this back to 75 basis points. However, we continue to expect that the funds rate will reach 6½% by mid-1997.

- Economic indicators remain strong for the most part, with industrial output and housing starts both rising in June. Even the large $10.9 billion trade deficit reported for May corroborates the strong trend in domestic demand, although it has caused us to reduce our estimate of second-quarter real GDP growth from 4.2% to 3.7%.

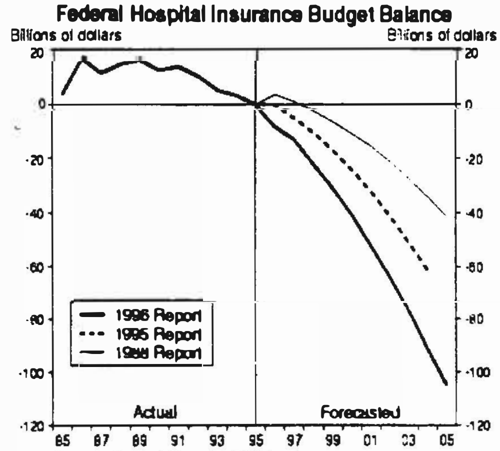
- Huge cuts in official deficit estimates underscore the favorable outturn for fiscal 1996, but should not be taken as an indication that longer-term budget problems have dissipated. Without material mandatory spending policy reforms, higher deficits seem virtually inevitable next decade and beyond, given the impact of demographics on healthcare and social security outlays, limited potential for fresh discretionary spending savings, and a likely stabilization in the corporate profit share of incomes.

3-Month Libor Rate



Source: Federal Reserve Board, Wall Street Journal.

Federal Hospital Insurance Budget Balance



Source: Annual Reports, FHI Trustees.

Trade Recommendations

- Close out short December Eurodollar futures position at 93.94, and open a short position in June 1997 Euros at 93.66, with a target of 93.10 and a stop on a close above 93.90.

- Our target for short sales of September Treasury bond futures above 109.16 was triggered this week. Stay short with a stop on a close above 112.00 and a target of 102.

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July 19, 1996

Goldman Sachs

I. Weekly Wrapup

Economic and Market Overview

Preannouncements of earnings disappointments in the technology sector, coupled with fears that the U.S. economy might be too hot or too cold, drove equity prices sharply lower early in the week. Bond yields edged down slightly during this period, as a number of market participants saw the turmoil in the equity market as evidence of softer-than-expected economic activity and/or an obstacle to near-term monetary tightening. Both the bond and stock markets then rallied following Chairman Greenspan's Humphrey-Hawkins testimony on Thursday as his remarks, while patently cautionary, did not reveal a pressing sense of urgency to boost interest rates right away.

The main message from the latest economic reports is that the U.S. economy continues to grow at an above-trend pace, so far without upward pressure on price inflation. Industrial output rose a sturdy 0.5% in June, capping a half year of nearly 5% annualized growth. While the gains early in this period were dominated by sharp increases in business equipment output, more recently they have spread to a broader spectrum of industries. In a parallel indication of proliferating industrial strength, the Philadelphia Fed's survey of business conditions reported a sharp further increase in its index for July, to 38.6%. Meanwhile, housing starts increased 1.3% in June, in yet another sign that activity in this sector remains resilient to recent financing rate increases.

The one gauge of economic activity implying slower-than-expected growth was the trade deficit. It jumped to $10.9 billion in May from an upward revised $9.6 billion shortfall in April. In the absence of any signs of offsetting inventory accumulation, the deterioration in trade revealed by these figures suggests that our 4.2% annualized estimate for real GDP growth in the second quarter is a bit too high; a figure in the 3½%-4% range now looks more realistic. At the same time, May's surge in imports does corroborate other evidence of strength in domestic final sales.

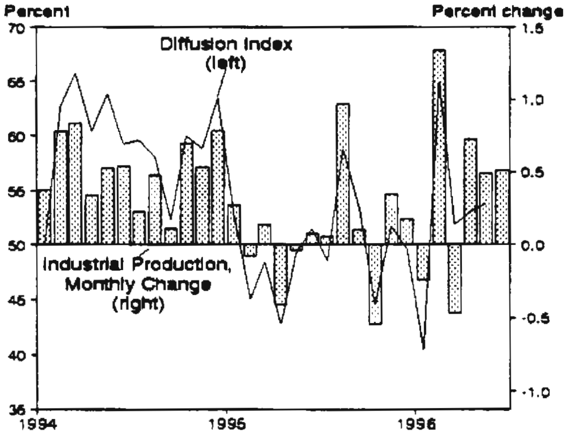
Retail prices remained calm in June, as the overall CPI rose only 0.1%. Although food prices jumped 0.7%, this was more than offset by a 2.2% drop in energy quotes. Meanwhile, the core index increased a scant 0.2%, marking the third consecutive month that it has been only 2.7% above the year-earlier level.

Federal Reserve Policy

In his midyear monetary policy report, Chairman Greenspan laid out the conditions that would induce the FOMC to boost interest rates. As expected, the focus of the Fed's attention will be on wage inflation, the incipient signs of which he termed "potentially worrisome." Moreover, while the FOMC continues to expect economic momentum to slow during the second half of 1996, officials clearly perceive the risks for GDP as skewed to the upside. The Chairman also expressed confidence that the Committee would attempt to act preemptively. Thus, with little evidence of a material slowing in economic momentum, it remains likely that the Fed will decide to increase interest rates by its August 20 meeting.

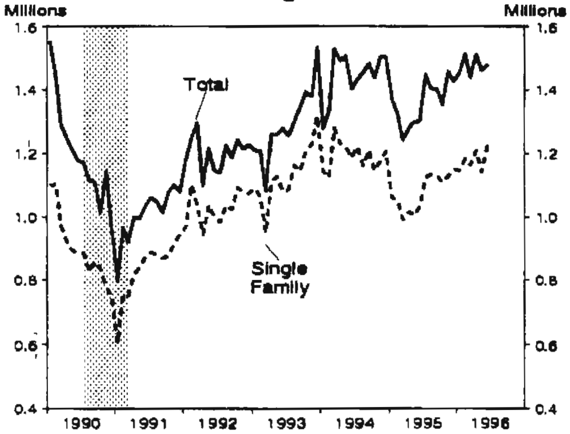
That said, it also seems clear that the Fed officials do not see the need for extraordinary moves, such as a quick 50-basis-point rate hike or a tightening in the midst of an election campaign. We have therefore

Industrial Production



Source: Federal Reserve Board.

Housing Starts



Source: Department of Commerce.

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scaled back the cumulative tightening we expect to see by yearend, from 100 basis points to 75. This would put the funds rate back to the 6% level that existed before the precautionary easing implemented between mid-1995 and early 1996. By mid-1997, we would still expect to see fed funds trading at 6½%.

Fiscal and Political Developments

Congressional Republicans have become openly restive about the disarray in Bob Dole's presidential campaign and his failure thus far to cut President Clinton's wide lead in the polls. These tensions are apt to remove some of the roadblocks currently standing in the way of pending legislation, as GOP members of Congress seek to build an independent case for their reelection by passing these bills and sending them on to the president for his signature.

The decision to remove Medicaid changes from the welfare reform bill is a case in point. By passing a welfare measure, Republicans hope to put President Clinton in a box, whereby signing the bill would create havoc within the Democratic party and a veto would hand the GOP a campaign issue. Another beneficiary of Republicans' determination to show legislative progress may be the Kassebaum-Kennedy health bill, which has been stymied by a dispute concerning medical savings accounts. It now appears that Senate Majority Leader Trent Lott may temper that provision in order to break the logjam.

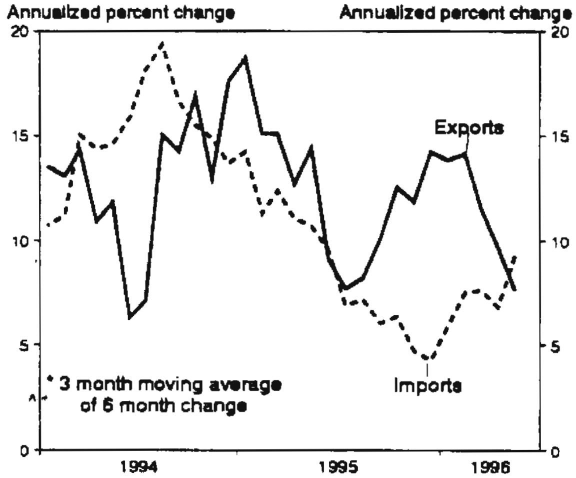
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ fromour longer-term interest rate forecast.

Our short trade on Treasury bonds was triggered on Thursday, when futures closed above 109.16. In our view, the market has become too sanguine about the prospects for tightening by the Federal Reserve. Continuing signs of economic strength are likely to induce a reassessment of this optimism, and currently favorable technical market conditions will probably be neutralized by heavy Treasury coupon supplies. We would maintain a target of 102.00 and a stop on a close above 112.00.

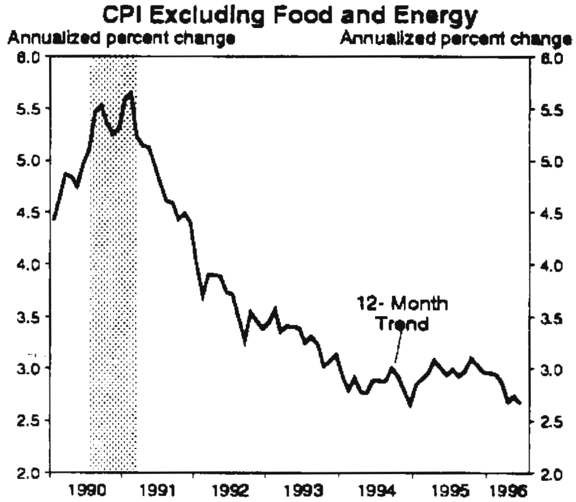
With the bulk of monetary tightening due on a 12-month horizon now likely to be compressed between Election Day and next spring, we would roll forward our short Eurodollar position, buying December contracts at 93.94 and selling June 1997 Euros at 93.66. This is especially desirable given the material compression in Euro calendar spreads this week.

Merchandise Trade



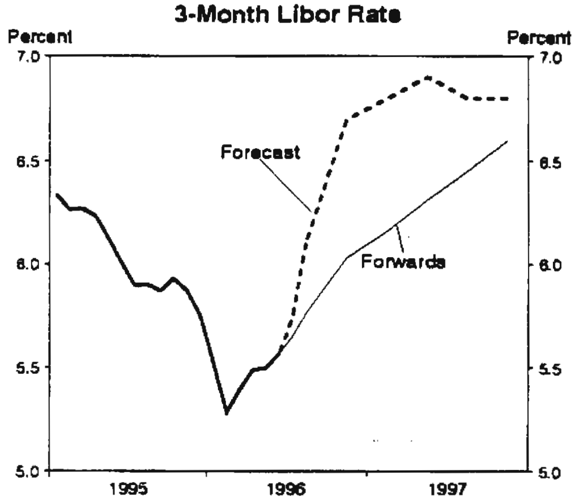
Source: Department of Commerce.

CPI Excluding Food and Energy



Source: Department of Labor.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

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II. Too Soon to Declare Victory Over Federal Deficits

The U.S. budget outturn this year has been far better than government officials and congressional analysts anticipated, primarily as a function of unexpected strength in personal income tax remittances. This will tempt financial market participants to conclude that the fiscal imbalances plaguing financial markets and politicians for most of the past two decades have finally been corrected in a durable fashion.

Such a conclusion, unfortunately, would be premature at a minimum and potentially very dangerous, in view of demographic and other factors that point to a significant and sustained upturn in the deficit as a proportion of GDP in the new millennium. An aging population will create strong pressures for added federal healthcare insurance and social security benefits, just as the generation of strong federal revenue growth will be hampered by prospective sluggishness in working-age population gains and a probable stabilization in the corporate share of total national income. Top politicians, meanwhile, have lately become more reticent about seeking further savings in discretionary accounts or major entitlement spending program reforms due to negative public reactions to those efforts in the fiscal 1996 budgeting process.

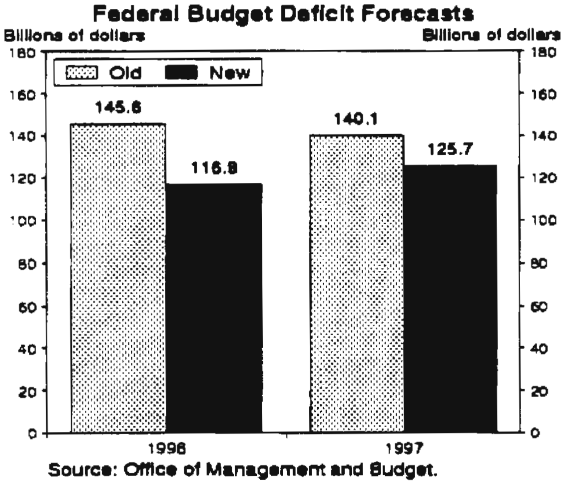
Current Budget Trends Remain Strikingly Favorable

Official estimators at last have recognized the degree of recent federal fiscal balance improvement. On July 16, the Office of Management and Budget (OMB) slashed its projections for the fiscal 1996 and 1997 budget deficits to $117 billion and $126 billion, respectively, which place the gap at 1.6% of estimated GDP for both years. This $43 billion cumulative downward revision essentially brings OMB's deficit forecasts into line with the outlook we have held for some time. Congressional Budget Office analysts will release a midyear update around the middle of next month, and they can be expected to present a similarly rosy short-term picture.

Even after these large forecast changes, federal estimators are probably still a bit too pessimistic about present budget circumstances. In light of the latest information — including cash data that suggest a huge June budget surplus to be reported on July 22 — we now expect the fiscal 1996 deficit to total only $105 billion. With solid economic expansion likely to be sustained through fiscal 1997, moreover, the deficit next year should rise only slightly, to around $115 billion. Relative to GDP, these would be the smallest back-to-back annual deficits since 1973-1974. The primary reason for favorable surprises in the budget outcome this year has been a much higher-than-expected volume of individual income tax payments, probably reflecting robust capital gains realizations during the steep U.S. equity and bond market advances in 1995.

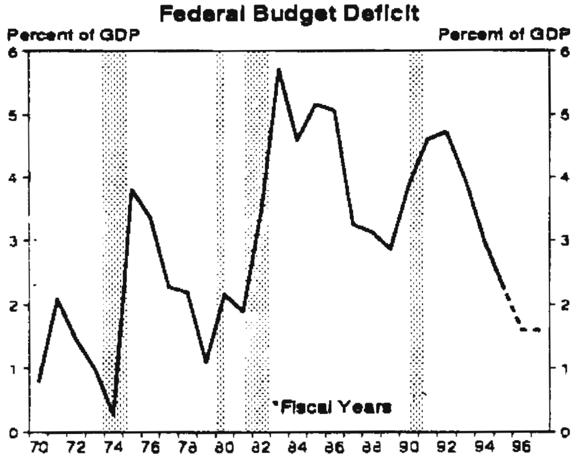
As a consequence of the federal deficit drop, net Treasury borrowing needs in the public markets are due to remain unusually light for another year or more. New-cash marketable borrowing should total $85 billion within the July/December 1996 period, fully one-third less than the average amount raised in that time frame over the prior five years. All of that borrowing need and more can probably be accomplished without boosting regular public debt auction sizes from their latest levels.

Federal Budget Deficit Forecasts



Source: Office of Management and Budget.

Federal Budget Deficit



Source: Department of Commerce, OMB.

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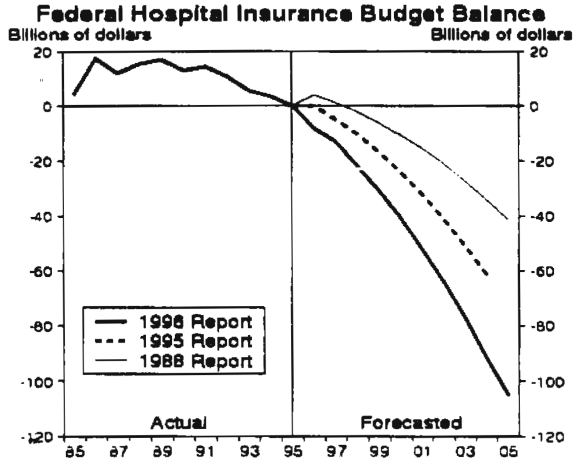
Mandatory Spending Projections Becoming More Ominous

All this hopeful news notwithstanding, financial market participants should not presume that the U.S. deficit is set firmly on a course toward elimination. To the contrary, demographic patterns and deteriorating prospects for other key budget variables as well as political developments over the past few quarters point to a renewed widening in the fiscal balance by late this decade, and highlight the risk of daunting fiscal shortfalls when the postwar baby boom generation begins to reach retirement age around fifteen years from now.

The most worrisome aspects of the long-range budget trends relate to mandatory federal spending programs, particularly Social Security and Medicare. The contribution of these areas to the overall budget balance will be heavily influenced by demographic shifts that threaten to explode government payment obligations and materially reduce growth in the number of workers paying taxes. If anything, the financial outlook for these areas has deteriorated over the past few years. Perhaps the clearest example comes from the latest report of the Medicare fund trustees, in which it was revealed that Federal Hospital Insurance Program disbursements exceeded income during 1995, two years earlier than had been expected. For fiscal years 1997-2004, the trustees now project a cumulative deficit in the fund of $391.3 billion, almost $150 billion higher than a year earlier. Thus, in just one year the FHI trust fund outlook worsened by more than it had in the prior seven, despite a slowing in medical cost inflation!

The actuarial outlook for Social Security is much better on a 10- to 15-year horizon, but it swiftly turns pessimistic thereafter. A rapid swelling of retirements is due after 2010, when the postwar baby boom generation first reaches age 65, driving up sharply the amount of expected benefit payments in subsequent years. Meanwhile, the sluggish birthrate during the 1960s and 1970s is projected to limit growth in payroll tax receipts in future years, so that the present annual surplus in Social Security accounts (which has been used to finance deficits in other government operations) will turn into a swiftly rising deficit. Unless major savings or revenue gains can be realized in other parts of the budget, this swing in Social Security finances will pass through to the overall government fiscal balance, causing the deficit to widen both absolutely and as a percent of GDP.

Federal Hospital Insurance Budget Balance



Source: Annual Reports, FHI Trustees.

Political developments since last fall do not provide much hope for prompt action to materially restrain outlay expansion in these entitlement programs. In the budget reconciliation bill passed but vetoed last fall, lawmakers proposed to slow the pace of increase in Medicare spending from the baseline projection of roughly 9% per year to just under 7% over the fiscal 1996-2002 time period, which would still be somewhat faster than official projections of nominal GDP growth. This plan was attacked by President Clinton and others as excessively harsh, and public support for GOP deficit reduction efforts subsequently evaporated. Not surprisingly, many lawmakers now shy away from further efforts at even relatively minor Medicare program changes.

Sources of Recent Deficit Savings May Run Dry

A second worrisome component of the long-range budget picture is the difficulty of squeezing meaningful further savings out of discretionary outlays. This spending in real terms already has been dramatically reduced, due to nominal caps imposed in the 1990 budget compromise and extended in 1993. The caps permitted virtually no increase in current-dollar spending between fiscal years 1991 and 1995, and lawmakers in the current Congress squeezed even more dollars out this year. Consequently, the size of the discretionary budget relative to GDP has shrunk by more than one-fourth in only six years, from 9.1% in fiscal 1991 to an estimated 6.7% next year.

Going forward, there are reasons to doubt that this relatively small budget segment (35% of total outlays in fiscal 1996) can provide much more in the way of savings. In the same way that the recent budget fight undermined support for changes in Medicare,

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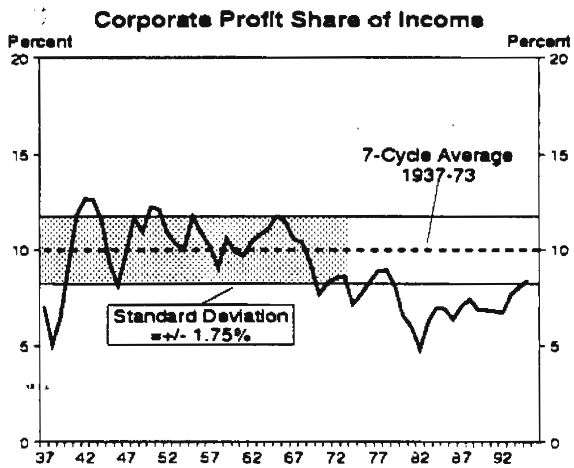
negative public reactions to lengthy shutdowns of some federal government operations during last fall and winter have made the congressional leadership anxious to avoid further confrontations over annual appropriations. This is evident in the willingness of GOP leaders to consider an automatic extension of current discretionary spending levels into early 1997 for areas where agreement with the Clinton Administration cannot be reached. Lawmakers may also be deterred from applying fresh pressure on these areas by the lack of obvious political benefits accruing from the unusuallly aggressive belt-tightening undertaken in 1995-1996, as well as reports of strains in some widely-supported parts of the federal infrastructure, such as air traffic safety and the national parks system.

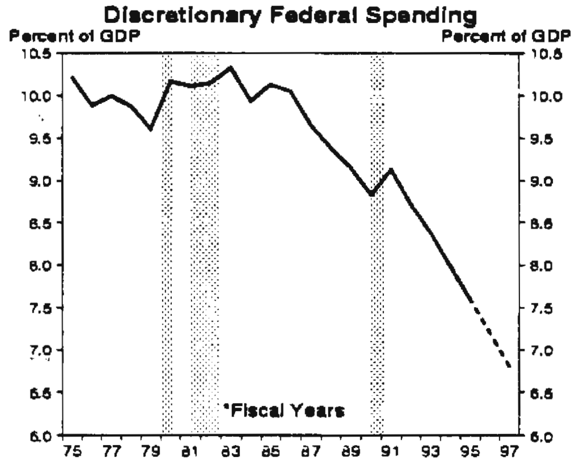
On the revenue side of the ledger, an important reason for persistently favorable outturns relative to forecast over the past several years has been the steady rise in the corporate profit share of national income. Since the average federal income tax rate is much higher for corporations than on households, this trend has had a major positive impact on overall revenue trends. The profit share of income, however, has reentered the range that prevailed for several decades prior to the decline that began in the early 1970s. Therefore, we expect a levelling off in the profit share (see *Profits and Labor: The Pendulum At Rest*, Jill Jacobs, June 1996), which should mean that total federal revenues will track more closely with rather than outpace GDP expansion in the years ahead.

Entitlement Reforms Crucial To Lasting Risk Premia Compression

If it could be determined that the stubborn imbalance in federal finances which developed about 20 years ago and expanded rapidly in the 1980s was close to genuine elimination, then it might be hoped that risk premia in U.S. financial markets could be permanently reduced, as fears of oppressive federal claims on private savings were alleviated. That would tend to boost valuations for long-duration assets and possibly the dollar exchange rate as well. Because of the points discussed above, however, such a conclusion in our view would be premature. In order to effect a durable change for the better in the U.S. fiscal balance, there will need to be substantial reforms to federal mandatory spending programs, which as presently structured will experience unsustainably rapid growth in the years ahead. It is to be hoped that the political leadership will be able to marshal popular support for such initiatives on an early timetable.



Source: Department of Commerce.



Source: Office of Management and Budget.

John Youngdahl

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Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 Jun	'96 May	'96 Apr	'96 Mar	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	239	365	191	158	233	203	Aug 2
Unemployment Rate (%)	5.3	5.6	5.4	5.6	5.5	5.6	
Index of Hours Worked (% ch)	1.8	0.1	-0.2	0.0	5.1	3.4	
Average Hourly Earnings (% ch)	0.8	0.1	0.3	0.3	3.7	3.4	
Producer price finished goods index (% ch)	0.2	-0.1	0.4	0.5	2.2	2.6	Aug 12
Excluding food and energy	0.2	0.0	0.1	0.1	0.7	1.6	
Consumer price index (% ch)	0.1	0.3	0.4	0.4	3.5	2.8	Aug 13
Excluding food and energy (% ch)	0.2	0.2	0.1	0.3	2.8	2.7	
Retail sales (% ch)	-0.2	0.8	-0.1	0.4	6.2	4.6	Aug 13
Excluding motor vehicles (% ch)	0.1	0.5	1.1	0.5	6.9	4.5	
Industrial Production (% ch)	0.5	0.5	0.7	-0.5	4.8	3.5	Aug 15
Manufacturing	0.6	0.3	1.1	-0.8	4.5	3.5	
Capacity utilization (%)	83.2	83.1	82.9	82.6	82.9	83.1	Aug 15
Manufacturing	82.0	81.8	81.8	81.3	81.8	82.0	
Housing Starts (annual rate, thousands)	1480	1461	1511	1439	1476	1445	Aug 16
Single-family	1225	1141	1209	1163	1178	1154	
Trade balance (billions, monthly)	--	-10.9	-9.6	-8.0	-8.5	-8.3	Aug 20
Merchandise	--	-16.9	-15.6	-14.4	-14.6	-14.3	
Factory Orders (% ch)	--	2.4	0.6	0.8	8.3	6.2	Aug 2
Durable Goods	--	4.2	-1.2	1.5	9.9	7.9	Jul 25
Personal Income (% ch)	--	0.4	0.5	0.4	5.6	5.5	Aug 2
Wages and Salaries	--	0.5	0.5	0.4	6.2	6.1	
Purchasing Managers' Index (%)	54.3	49.3	50.1	46.9	48.3	48.0	Aug 1
Consumer Sentiment U Mich (Feb 66=100)	92.4	89.4	92.7	93.7	91.0	91.2	Aug 2
Conference Board (1985=100)	97.6	103.5	104.8	98.4	98.4	99.1	Jul 30

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- Federal budget results from for June will show an outsized surplus, underscoring the rationale behind sharp downward revisions to deficit estimates by the Office of Management and Budget (July 22).
- Durable goods orders are likely to have risen modestly last month, primarily owing to a rebound in bookings for civilian capital items (July 25).
- Chairman Greenspan repeats his Humphrey-Hawkins policy testimony before the House Banking Committee (July 23). Although the substance of his remarks will not change, he may use the occasion to soften market responses to his initial appearance.

Economic Releases and Other Events

Date	Indicator	Estimate GS	Estimate Consensus	Last Report
July 22	Federal Budget Balance (June '96)	+$42.0 bn.	+$25.0 bn.	+$12.8 bn
July 25	Durable Goods Orders (June)	+0.6%	+0.4%	+4.2%
	Existing Home Sales (June)	Down	-2.0%	+1.4%

- Import and Export Prices (July 23)
- Greenspan Delivers Humphrey Hawkins Testimony to House (July 23)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	6.0	6.6	6.9
Forward	5.9	6.1	6.4
2 Yr T-Note	6.5	6.8	6.9
Forward	6.3	6.4	6.5
10 Yr T-Note	7.1	7.2	7.2
Forward	6.8	6.8	6.9

* As of Thursday close.

Key Nos. in the Business Outlook

	1996 Q1	1996 Q2	1996 Q3	1996	1997
Real GDP	2.2%	3.7%	3.4%	2.5%	2.9%
Ind. Production	2.4	5.5	5.5	3.0	5.0
CPI	3.2	3.8	3.4	3.1	3.4
Profits*	23.4	20.2	8.7	13.3	3.3
Unemployment	5.6	5.5	5.3	5.4	5.1

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Assessing the Monetary Policy Outlook

- The strong payroll employment report, which indicated that the economy is strong and wage pressures are beginning to increase, makes a 25-basis-point tightening by the August 20 Federal Open Market Committee very likely. Fed officials could move as soon as the first week of August following the employment cost index, NAPM, GDP, and payroll employment reports. However, given their revealed preference for only acting at formal meetings over the past two years, this makes it slightly more likely that they will wait until the August 20 meeting.

- A 50-basis-point tightening also appears unlikely. Each of the two times that Greenspan previously moved from an easing to a tightening mode, the first move was no more than 25 basis points.

- The initial response of the bond market to a tightening is likely to be negative. Bond investors have historically considered an initial tightening move as a sign that the economy is strong, inflation risks are rising, and more tightening steps will follow pushing up yields accordingly.

- The June weakness in retail sales is unlikely to foreshadow a sustained slowdown in consumer spending. With employment and income trends favorable and confidence high, consumer spending is likely to resume its upward trajectory this month.

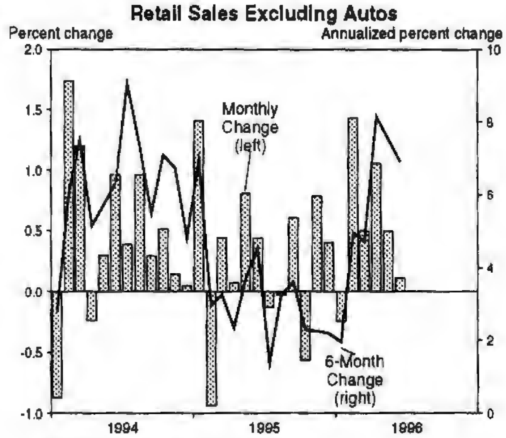
Fed Policy Moves Surrounding Political Nominating Conventions

			Fed Policy Change	
Year	Opening Days of Conventions		Date	Direction
1972	Jul. 10 (D)	Aug. 21 (R)	Aug. 3	Tightening
1976	Jul. 12 (D)	Aug. 16 (R)	Jul. 6	Easing
1980	Jul. 14 (R)	Aug. 11 (D)	Aug. 22	Tightening
1984	Jul. 16 (D)	Aug. 20 (R)	Aug. 30	Easing
1988	Jul. 18 (D)	Aug. 15 (R)	Aug. 9	Tightening
1992	Jul. 13 (D)	Aug. 17 (R)	Jul. 2	Easing
1996	Aug. 12 (R)	Aug. 26 (D)		

Initial Fed Tightening Bad for Bonds

		One Month Later		
Tightening Phase:	Initial Rate Hike:	3-Month Yields	2 Year Yields	30 Year Yields
Mar. 84 to Aug. 84	March 20, 1984	-5 bp	23 bp	17 bp
Apr. 87 to Sept. 87	April 8, 1987	11	101	77
Mar. 88 to Feb. 89	March 29, 1988	14	23	24
Feb. 94 to Feb. 95	February 3, 1994	37	56	50

Retail Sales Excluding Autos



Source: Department of Commerce.

Trade Recommendations

- We would remain short December Eurodollar futures, with a target of 93.40 and a stop on a close above 94.00.

- We would get short September Treasury bond futures at levels of 109.16 or above, with a stop on a close above 112.00 and a target of 102.

Contributors: Bill Dudley, Ed McKelvey
John Youngdahl, Jill Jacobs (212) 902-6807

Issue No: 96/28
July 12, 1996

Goldman Sachs

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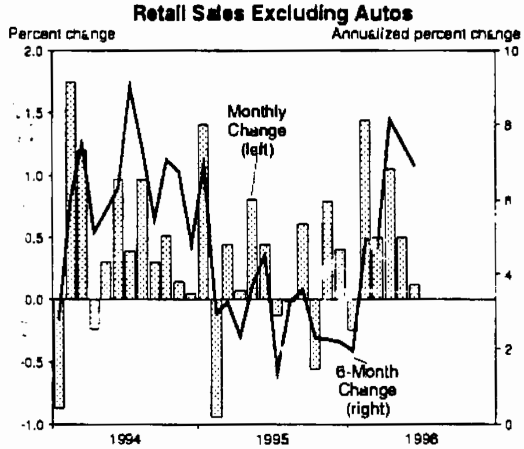

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I. Weekly Wrapup

Economic and Market Overview

The bond market rallied over the past week, recovering much of the losses following the July payroll employment report. Helping the markets were weaker retail spending figures for June and indications that Fed officials were not likely to proceed quickly or aggressively with a tightening of monetary policy.

Total retail sales slumped 0.2% in June, with a large drop in auto sales more than offsetting a small 0.1% advance in non-auto sales. The weakness in sales in June, however, was offset by an upward revision to non-auto sales in May to +0.5% from +0.3% previously.

The weakness in June sales is unlikely to foreshadow a sustained slowdown in consumer spending. Consumers are not betraying the sort of anxiety about job security or financial conditions that might presage a sudden retrenchment in their spending. To the contrary, the latest weekly and four-week average recordings on the ABC/Money Magazine consumer comfort survey are the most optimistic since summer 1989, and the more seasoned poll by University of Michigan researchers is also in buoyant territory.

A rise of 18,000 in the volume of weekly unemployment insurance filings during the week ending July 6 should be discounted. Seasonal adjustments to this series are especially difficult at the beginning of each quarter, and particularly in early July when major motor vehicle manufacturers close many production plants for annual model changes. Although producer prices rose by 0.2% both overall and excluding food and energy, core intermediate goods prices dropped by 0.1% indicating there is no meaningful rise in goods prices yet.

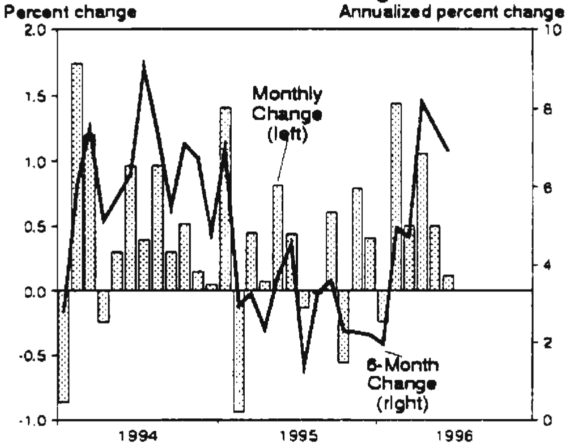
Federal Reserve Policy

We continue to expect a Fed monetary tightening to be initiated no later than the next FOMC meeting on August 20, pending clearer signals of central banker attitudes from Chairman Greenspan's midyear policy report next week. The chairman will probably use the coming hearing to prepare the politicians as well as financial markets for an unwinding of the accommodative steps undertaken during the sluggish economic period of 1995. Officials may still be holding to their expectation of a reversion to modest growth over the next few quarters, but in light of recent information on a number of key business sectors, they should view the risks to that forecast as being heavily skewed toward a stronger outturn. With the civilian unemployment rate already as low as it has been in a quarter century, and amid proliferating reports of tight labor supplies, these conditions present a clear danger that wage demands could accelerate to an uncomfortable degree if output expansion does not slow fairly soon. Our center section article this week discusses the Fed policy outlook in greater detail.

Fiscal and Political Developments

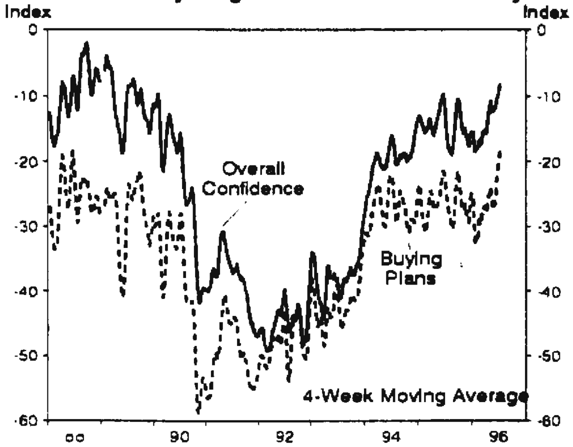
Passage of a minimum wage increase in the U.S. Senate by a lopsided margin makes it highly probable that such a rise will be enacted by the end of the summer. While some details still need to be ironed

Retail Sales Excluding Autos



Source: Department of Commerce.

ABC/Money Magazine Consumer Survey



Source: ABC/Money Magazine.

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out in a conference with the House, it is now clear that the Republican congressional leadership wishes to remove this issue as a point of contention in the coming national elections. It should be recalled that at least one senior Federal Reserve policymaker has expressed concern that a minimum wage hike will tend to increase the degree of upward employment cost pressure deriving from an unusually low national unemployment rate of 5.3%. Thus, this development could further enhance the already-high potential for monetary tightening to be resumed very soon.

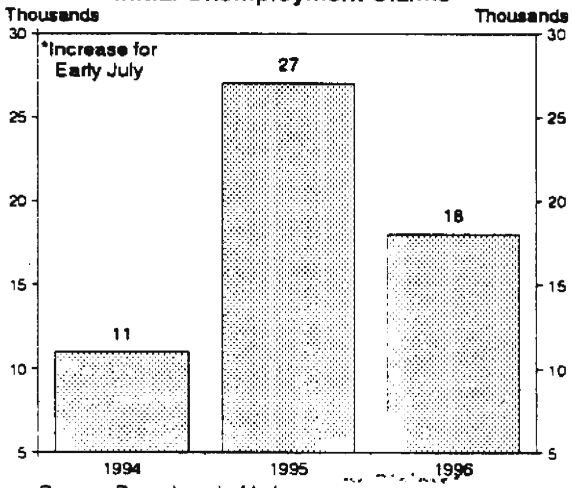
Richard Lamm, a former three-term Democratic governor of Colorado, has announced his candidacy for the presidential nomination of the fledgling Reform Party, founded by Ross Perot as a vehicle for promoting the main themes of his 1992 independent campaign. Should Lamm be chosen to carry the Reform banner, his presence in the race would probably cause more political trouble for President Clinton than for Bob Dole, the presumptive GOP nominee. Given his past prominence within the party, Lamm might attract support from Democrats who are disaffected with one or more aspects of the president's performance in office. In addition, the primary themes that Lamm likely will stress — a need for far-reaching revisions to mandatory spending programs such as Social Security and Medicare — will tend to bolster Republican criticisms of the Administration's behavior in the recent budget battle.

Market Outlook and Comments on Value

We would remain short December Eurodollar futures, with a target of 93.40 and maintaining a stop on a close above 94.00. If Chairman Greenspan takes a hardline implying that a tightening is imminent in his Humphrey-Hawkins testimony, then Eurodollar futures would price in more tightening.

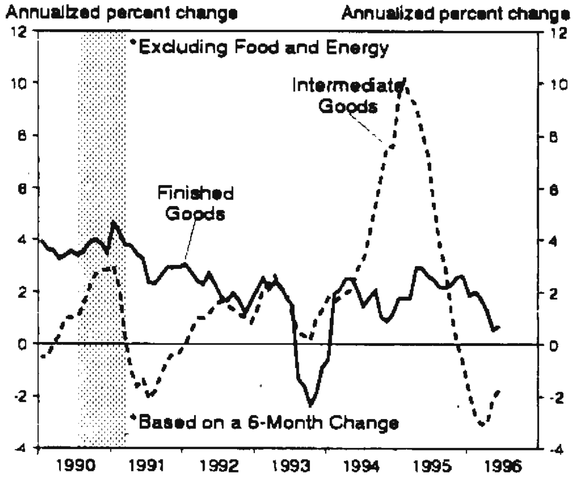
On bonds, we would look to get short September Treasury bond futures with levels at or above 109.16, with a target of 102.00, and a stop on a close above 112.00. Treasury bond yields typically move higher once the Fed begins a tightening cycle since investors take the Fed's decision as a signal that the economy is strong and inflation risks are rising. With a tightening of monetary policy likely soon, this is not a good time to be long Treasury bonds.

Initial Unemployment Claims*



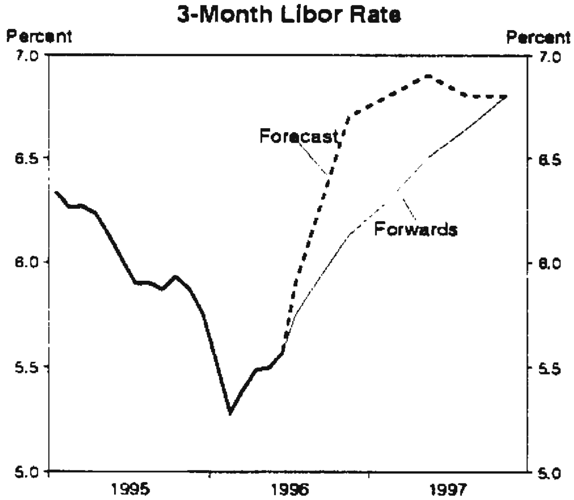
Source: Department of Labor.

Producer Price Index*



Source: Department of Labor.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

II. Assessing the Monetary Policy Outlook

The July payroll employment report called into question the FOMC's decision to keep monetary policy unchanged at the July meeting. Coupled with Chairman Greenspan's low public profile in the run-up to his July 18th Humphrey-Hawkins testimony, this has generated much uncertainty concerning the monetary policy outlook. Below we examine, in a question and answer format, some of the important issues concerning the conduct of U.S. monetary policy.

Q. When are Fed officials most likely to commence tightening monetary policy?

Federal Reserve officials will probably start to tighten by the August 20 Federal Open Market Committee meeting. The economic news has been and is likely to remain consistent with an economy that is growing above trend and that is beginning to generate wage inflation pressures.

A tightening move could occur as early as the first week of August. The monetary authorities will have much more information about the economy by then. In particular, the second quarter employment cost index, GDP, the National Purchasing Managers', and the household and payroll employment reports for July will all be released during the week ending August 3.

The fact that the last policy adjustment outside of a scheduled FOMC policy meeting occurred in April 1994 skews the odds slightly that Fed officials will wait until the August 20 meeting before acting.

Q. Is a 25- or 50-basis-point tightening move more likely?

Only a 25-basis-point tightening is likely at one time. Chairman Greenspan has a penchant for gradualism. Moreover, a more aggressive move would be somewhat inconsistent with the Fed's decision to keep rates unchanged at the July FOMC meeting.

If Fed officials became convinced that 50 basis points were needed, a different approach appears more likely: 25 basis points of tightening in early August following the July payroll employment report on August 2 and a further 25 basis points at the August meeting. This would probably be preferable to 50 basis points at the August 20 FOMC meeting because it would allow Fed officials to assess the impact of the first 25-basis-point move before proceeding with a second step.

Q. The Wall Street Journal published an article this week stating that Fed officials have shifted to a policy of "opportunistically" pursuing the goal of price stability. Does this imply that Fed officials will hold off from tightening this summer?

We don't think so for three reasons. First, although the staff study that motivated the Journal article is new (May 1996), the notion of an opportunistic pursuit of price stability has been a hallmark of Fed policy for some time. After all, inflation has been steady over the past year at a level above that consistent with price stability, yet Fed officials have eased, rather than tightened, monetary policy.

Second, there appears to have been no involvement by Federal Reserve officials in the publication of the story. In fact, in a story the next day in the Washington Post, Fed officials were cited as arguing that the study did not imply any shift in the conduct of monetary policy. Third, even if one believes that the paper accurately describes Fed policy, with the unemployment rate at 5.3% and wage pressures clearly more visible, there are plenty of good reasons to shift toward a tighter policy stance.

Q. Will the presidential conventions prove a barrier to tightening?

Historically, the Democratic and Republican presidential conventions have not been a deterrent to the Fed to any appreciable degree. As shown below, the monetary authorities have eased or tightened in each of the past six summer periods around the political convention season. In fact, Chairman Greenspan raised the discount rate by 50 basis points on August 9, 1988, just six days before the beginning

Fed Policy Moves Surrounding Political Nominating Conventions

			Fed Policy Change	
Year	Opening Days of Conventions		Date	Direction
1972	Jul. 10 (D)	Aug. 21 (R)	Aug. 3	Tightening
1976	Jul. 12 (D)	Aug. 16 (R)	Jul. 6	Easing
1980	Jul. 14 (R)	Aug. 11 (D)	Aug. 22	Tightening
1984	Jul. 16 (D)	Aug. 20 (R)	Aug. 30	Easing
1988	Jul. 18 (D)	Aug. 15 (R)	Aug. 9	Tightening
1992	Jul. 13 (D)	Aug. 17 (R)	Jul. 2	Easing
1996	Aug. 12 (R)	Aug. 26 (D)		

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of the Republican convention. The August 20 FOMC meeting falls right between the Republican and Democratic conventions, which means that the Fed's decision will not immediately be subject to a full critical examination by the convention speakers.

Q. What are the implications of the initial Fed tightening likely to be for the bond market and the shape of the yield curve?

Each of the last four episodes of a Fed shift from an easing to a tightening posture has been bad for bonds. As shown below, the yield curve tends to steepen, with the greatest damage occurring in the 2-year sector. Bond yields tend to rise rather than fall when the Fed begins to tighten for two reasons: First, investors take the Fed tightening as evidence that the economy is indeed strong and the inflation risks substantial. Second, investors revise upward their forecast of the future path of short-term rates. Because this is the primary determinant of bond yields, this upward revision tends to push bond yields higher. Even when monetary policy tightening is anticipated, the reality is worse than the forecast because it indicates that Federal Reserve officials are disturbed enough about the economic outlook to begin pushing up interest rates.

Initial Fed Tightening Bad for Bonds

		One Month Later		
Tightening Phase:	Initial Rate Hike:	3-Month Yields	2 Year Yields	30 Year Yields
Mar. 84 to Aug. 84	March 20, 1984	-5 bp	23 bp	17 bp
Apr. 87 to Sept. 87	April 8, 1987	11	101	77
Mar. 88 to Feb. 89	March 29, 1988	14	23	24
Feb. 94 to Feb. 95	February 3, 1994	37	56	50

Q. When the monetary authorities begin to tighten does this indicate a series of tightenings is likely?

Monetary policy tightenings typically occur in a series. In fact, the only instances of single tightening moves that have occurred since 1972 took place right in the middle of a series of easing moves.

Tightening series occur mainly for three reasons. First, the economy has a strongly trending element. Strong growth is typically followed by further strong growth, which provokes additional monetary policy tightening. GDP growth is positively correlated, indicating that when growth is strong, the momentum tends to persist. Second, it takes time for the effects of monetary policy tightening to first take hold and then become visible in the economic data. Thus, Fed officials often continue to tighten, when the goal of restraining the economy had, with the benefit of hindsight, already been accomplished. Third, the monetary authorities typically prefer a series of small steps rather than fewer larger steps because of uncertainty concerning the financial market response to tightening. A gradual approach minimizes the risk of the type of financial market turbulence that would turn monetary policy into an unduly blunt instrument.

As shown below, although there is a good deal of variation in terms of the number of consecutive tightening moves and the cumulative magnitude of tightening, the historical record is clear on one point: Over the past twenty-five years, Fed tightening has not stopped at 25 basis points.

Monetary Policy Tightening Sequences (1972-1995)

Number of Consecutive Tightening Steps	Frequency	Mean Federal Funds Rate Rise (Basis Points)	Range of Federal Funds Rate Rise (Basis Points)
>10	2	1,145	750 to 1,540
5 to 9	4	480	280 to 1,050
3 to 4	5	180	70 to 500
1 to 2	3	157	60 to 280

Q. What might one discern about Chairman Greenspan's intentions from his Humphrey-Hawkins testimony?

The choice Chairman Greenspan makes concerning the tone of his testimony at his July 18 Congressional appearance may be revealing. He could decide to lay the groundwork for monetary policy tightening by emphasizing that the economy is operating slightly beyond full employment, raising the risk of an inflation pickup, especially should the pace of economic growth not slow quickly. Or, conversely, he might argue that the inflationary risks are low, that wage gains need not have inflationary consequences, and that he is confident that the economy will slow quickly on its own without any intervention by the Fed. In that regard, he might stress the impact of the rise in bond yields and the appreciation of the dollar in retarding economic activity.

Which course he stakes out — or whether he even chooses a more ambiguous course between these two extremes — will be revealing. If he follows the cautionary approach, then a tightening at the August FOMC meeting, if not before, would be a foregone conclusion, and a 50-basis-point move could not be definitively ruled out. In contrast, if he is much more placid about the risks, then even a 25-basis-point tightening at the August meeting would not be a done deal.

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As always, given the Chairman's talent for being balanced and revealing little, the question and answer session may prove more informative than the prepared testimony. It is easier to scrub testimony clean of meaningful nuance; it is harder to avoid revealing one's true inclinations in the responses to questions, especially when the Senators will be probing to discern the Chairman's intentions.

Q. Will the Fed's Humphrey-Hawkins projections on GDP growth, CPI inflation, and unemployment shed much light on the Fed's intentions?

As part of his appearance before the Senate Banking Committee, Chairman Greenspan will also present the Federal Reserve's midyear policy review which will include updated projections for 1996 and initial projections for 1997. It is unlikely that these forecasts will reveal much for two reasons. First, the forecasts, which were compiled at the July 2-3 FOMC meeting, will not have incorporated the strong July payroll employment figures. Second, Fed officials will not want to imply a policy response by their forecasts. Thus, implicit in the projections will be a quick return to trend growth, a stable unemployment rate, and only a minimal rise in inflation. Our projections of the likely Fed forecasts are shown below. We anticipate that blandness will rule. Although the Fed projections may differ slightly from those shown below, we would be surprised by deviations that are larger than ¼ of a percentage point.

Humphrey-Hawkins Economic Projections

	Real GDP	CPI	Unemployment Rate
	(4th Quarter over 4th Quarter)		(4th Quarter Average)
February Federal Reserve Projection			
1996:	2% - 2 1/4%	2 3/4% - 3%	5 1/2% - 5 3/4%
Our Estimate of July Federal Reserve Projection			
1996:	2 1/4% - 2 1/2%	3% - 3 1/4%	5 1/4% - 5 1/2%
1997:	2% - 2 1/4%	3% - 3 1/4%	5 1/4% - 5 1/2%

Q. What is the major risk to the Goldman Sachs forecast, which calls for a 6¼% federal funds rate and 7.40% yield on 30-year Treasury bonds at yearend?

At this point, we are most nervous that Fed officials will be slower and less aggressive in tightening monetary policy than implied by our forecast. If Fed officials dawdle, this would probably have three major implications:

1. The economy would grow faster for longer, generating a greater rise in the inflation rate.

2. As a consequence, the ultimate magnitude of Fed tightening would be greater than implied by the 6½% peak in the federal funds rate that we have forecast for 1997. Under Taylor's rule, which has been a good descriptive guide to the Federal Reserve's behavior under Chairman Greenspan, a ½% climb in the inflation rate leads to a 75-basis-point increase in the federal funds rate target. Thus, a delay in tightening that were to lead to higher inflation could conceivably generate a significantly higher peak in short-term rates.

3. The yield on 30-year Treasuries would probably push well above the 7½% peak that we are currently projecting. If inflation and the trajectory of short-term rates were higher, that would reinforce the upward pressures on bond yields. Also, to the extent that Fed dawdling leads to a loss of foreign investor confidence, that also would be negative for the bond market both through the potential impact on the dollar, and more importantly, on the foreign investor appetite for Treasuries, which has been particularly strong over the past year.

Bill Dudley

Key U.S. Economic Data

	Latest Monthly Data '96 Jun	'96 May	'96 Apr	'96 Mar	6 Mo Trend	12 Mo Trend	Next Release
Nonfarm Payrolls (ch. thousands)	239	365	191	158	233	203	Aug 2
Unemployment Rate (%)	5.3	5.6	5.4	5.6	5.5	5.6	
Index of Hours Worked (% ch)	1.8	0.1	-0.2	0.0	5.1	3.4	
Average Hourly Earnings (% ch)	0.8	0.1	0.3	0.3	3.7	3.4	
Producer price finished goods index (% ch)	0.2	-0.1	0.4	0.5	2.2	2.6	Aug 92
Excluding food and energy	0.2	0.0	0.1	0.1	0.7	1.6	
Consumer price index (% ch)	--	0.3	0.4	0.4	3.8	3.0	Jul 16
Excluding food and energy (% ch)	--	0.2	0.1	0.3	2.7	2.7	
Retail sales (% ch)	-0.2	0.8	-0.1	0.4	6.2	4.6	Aug 13
Excluding motor vehicles (% ch)	0.1	0.5	1.1	0.5	6.9	4.5	
Industrial Production (% ch)	--	0.7	0.7	-0.5	4.4	3.2	Jul 16
Manufacturing	--	0.5	1.1	-0.8	4.3	3.3	
Capacity utilization (%)	--	83.2	82.9	82.6	82.9	83.1	Jul 16
Manufacturing	--	82.0	81.9	81.3	81.8	82.1	
Housing Starts (annual rate, thousands)	--	1434	1505	1439	1462	1466	Jul 17
Single-family	--	1130	1201	1163	1162	1136	
Trade balance (billions, monthly)	--	--	-8.6	-8.0	-7.6	-8.2	Jul 18
Merchandise	--	--	-14.7	-14.4	-13.7	-14.2	
Factory Orders (% ch)	--	1.9	0.2	1.7	7.9	6.3	Aug 2
Durable Goods	--	3.3	-1.8	2.6	8.2	7.7	Jul 25
Personal Income (% ch)	--	0.4	0.5	0.4	5.6	5.5	Aug 2
Wages and Salaries	--	0.5	0.5	0.4	6.2	6.1	
Purchasing Managers' Index (%)	54.3	49.3	50.1	46.9	48.3	48.0	Aug 1
Consumer Sentiment U Mich (Feb 66=100)	92.4	89.4	92.7	93.7	91.0	91.2	Jul 19
Conference Board (1985=100)	97.6	103.5	104.8	98.4	98.4	99.1	Jul 30

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- Business inventories for May are likely to be weak given the declines that already have been reported for manufacturing and wholesale inventories. A decline here just sets the stage for a bigger inventory rebound in the second half of the year (July 15).
- Consumer prices in June are likely to rise modestly, restrained by a moderate decline in gasoline prices (July 16).
- Industrial production gains will be restrained by weakness in auto production and a decline in utility output. Outside these areas, output should rise about ½% (July 16).
- The trade balance for May is likely to show improvement as exports rise and imports remain steady. Oil imports should rise holding up total imports (July 18).
- Chairman Greenspan testifies before the Senate Banking Committee (July 18).

Economic Releases and Other Events

Date	Indicator	Estimate: GS	Estimate: Consensus	Last Report
July 15	Business Inventories (May)	-0.2%	+0.2%	+0.4%
July 16	Consumer Price Index (June)	+0.2%	+0.2%	+0.3%
	Excluding Food & Energy	+0.3%	+0.2%	+0.2%
	Industrial Production (June)	+0.2%	+0.3%	+0.7%
	Capacity Utilization (June)	83.1%	83.3%	83.2%
July 17	Housing Starts (June)	+3.0%	-0.3%	-4.7%
July 18	Trade Balance (May)	-\$7.5 bn	-\$7.9 bn	-\$8.6 bn

- Homebuilders' Survey (July 16)
- Treasury Announcement: 2- & 5- Yr Notes (July 17)
- Philadelphia Fed Survey (July 18)
- Greenspan Humphrey-Hawkins Testimony (July 18)
- Consumer Sentiment - Preliminary (July 19)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	6.1	6.7	6.9
Forward	6.0	6.2	6.5
2 Yr T-Note	6.5	6.8	6.9
Forward	6.5	6.6	6.8
10 Yr T-Note	7.1	7.2	7.2
Forward	7.0	7.0	7.1

* As of Thursday close.

Key Nos. in the Business Outlook

	1996 Q1	1996 Q2	1996 Q3	1996	1997
Real GDP	2.2%	4.2%	3.4%	2.5%	2.9%
Ind. Production	2.3	5.4	5.5	3.0	5.0
CPI	3.2	4.3	3.4	3.1	3.4
Profits*	23.4	20.2	8.7	13.3	3.3
Unemployment	5.6	5.5	5.3	5.4	5.1

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Precious Few Signs of Slowdown

This issue of the U.S. Economics Analyst is in a holiday-abridged, four-page format. The center section and the tables of historical and forecast data have been omitted. Regular publication resumes with the next issue, dated July 12.

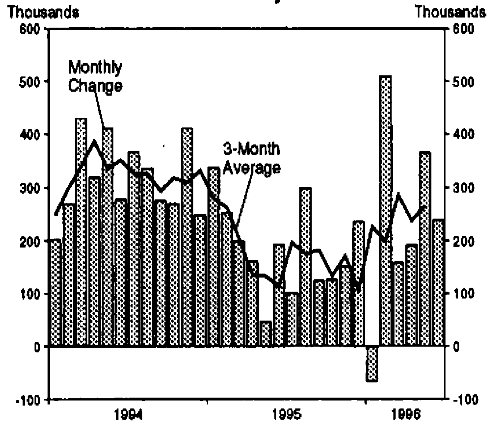
- June's blockbuster job market report calls into question consensus expectations of an abrupt second-half slowdown in economic growth. In addition to larger-than-expected payroll gains, outsized increases in hours worked and wages should fuel growth in personal incomes.

- U.S. households remain in a buying mood. Real outlays rose at least 3% at an annual rate in the second quarter despite a decline in motor vehicle sales in June from lofty May levels. Meanwhile, new home sales surged to a 10-year high in May.

- The latest industrial indicators are also upbeat. Factory inventories fell in May, while surging orders pulled the purchasing managers' index up 5 points to 54.3% in June — the first definitive sign of growth from this survey.

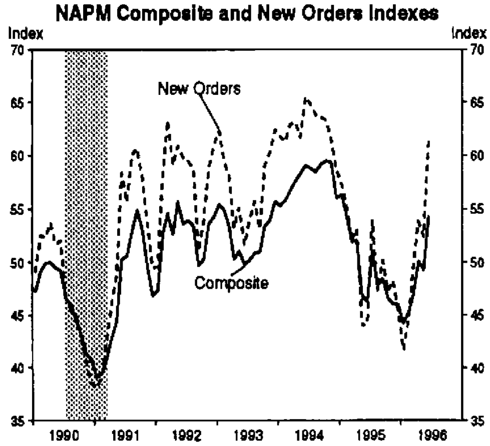
- Fed officials are unlikely to respond to the strong job report by tightening immediately. Instead, Chairman Greenspan is likely to use the upcoming Humphrey-Hawkins testimony as a forum to prepare Congress and the financial markets for future interest-rate hikes.

Nonfarm Payrolls



Source: Department of Labor.

NAPM Composite and New Orders Indexes



Source: National Association of Purchasing Managers.

Trade Recommendations

- Maintain short December Euro position, with a target of 93.40, and move stop to 94.00 from 94.20.

- Although we maintain our medium- and long-term negative view on Treasury bonds, we have no strong view on short-term trading positions at the present time.

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Issue No: 96/27
July 5, 1996

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The Dark Side of Demographics And Saving

- We have reduced our probability of a tightening in monetary policy at the July 2-3 FOMC meeting below 50%. While the economic news continues to justify such a move, Fed officials do not yet believe they have enough "smoking gun" evidence of an inflation threat in hand.

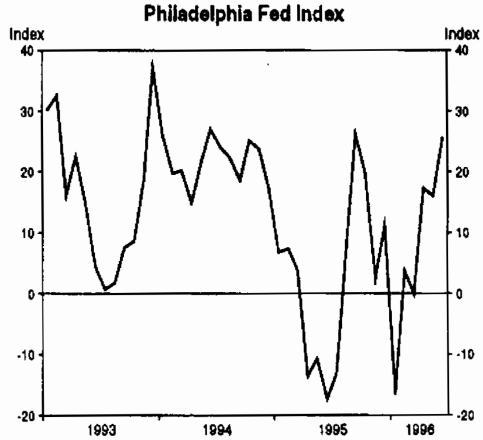
- U.S. economic activity remains robust, with the latest reports on foreign trade, Fed surveys of regional economic conditions, and confidence all upbeat. Only housing starts showed weakness in May, and the damage was not great.

- Outside the United States, there are also signs of unexpected strength — in Japanese GDP growth and German M3 growth. Signs of gathering economic strength in key industrial economies have outweighed indications that the Fed will stand pat, pushing U.S. rates slightly higher.

- Expectations of a demographically driven rise in personal saving are grossly overstated. Shifts in the age mix are too glacial and have offsetting effects, limiting the maximum increase in the personal saving rate to ½ percentage point over the next 10-15 years.

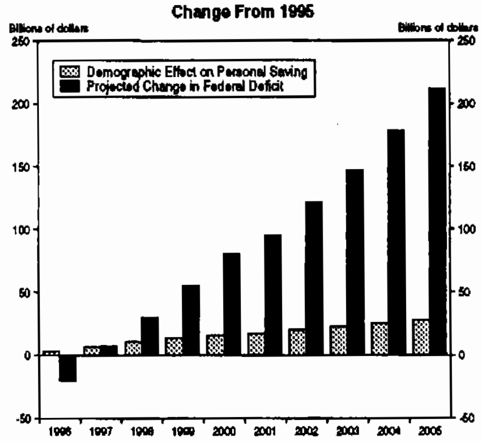
- This increase pales in comparison to projections of a secular rise in the federal deficit — also largely the byproduct of demographic trends. If not addressed, this increase in the government borrowing will swamp the contribution of demographics to personal saving.

Philadelphia Fed Index



Source: Federal Reserve Bank of Philadelphia.

Demographics: Saving versus Federal Budget Change From 1995



Trade Recommendations

- Stay short September Eurodollar futures, with a target of 93.75. Move stop to 94.25. Stay long December '96/December '97 Eurodollar futures calendar spread, with a stop at 55 basis points and a target of 100 basis points.

- Stay short September Treasury bond futures, with a stop on a close above 108.16 and a target of 102.00.

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June 21, 1996

Goldman Sachs

U.S. Economics Analyst

Our Views Have Changed

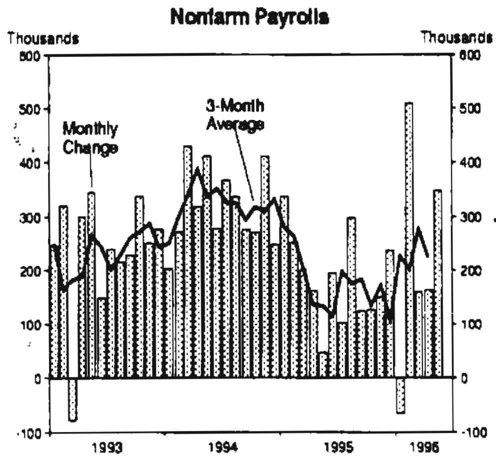
Bond Market Outlook: Cyclical Forces Dominant

- The large payroll gain in May coupled with the big upward revision to April reinforce our view that a cyclical rebound is underway. As a result, growth is likely to remain above-trend during the second half of the year, putting upward pressure on wages and forcing Federal Reserve officials to tighten monetary policy.

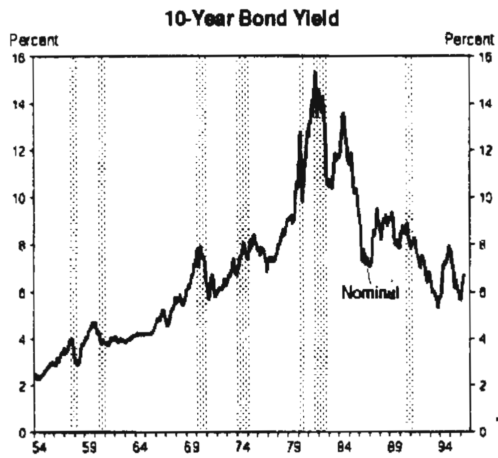
- As a result of the strong job gains as well as strength in consumer spending, we are revising our GDP forecast for the second half up slightly to an average annual growth rate of about 3% from 2.75% previously. Also, we now expect 50 basis points of tightening this summer, rather than 25 basis points and believe that the likelihood is slightly greater than 50% that Fed officials will tighten by 25 basis points in July.

- With respect to bonds, we now believe that 30-year Treasury bond yields are likely to trade in a 7%-7½% range over the remainder of the year and expect to test the high end of that range before yearend.

- The payroll figures should cause bond bulls to throw in the towel on the assertion that bond yields will fall due to favorable secular trends. We are bearish because we believe that over the short-run, cyclical trends usually dominate the longer-term secular factors. Second, the secular outlook is not as favorable as it once was, in part, because the appetite in Washington for further deficit reduction appears to be fading.



Source: Department of Labor.



Source: Federal Reserve Board.

Trade Recommendations

- Stay short September Eurodollar futures, with a target of 93.75. We would lower our stop to 94.35. Also, we would recommend implementing a calendar spread trade, being long Dec. '96 Euro futures and short Dec. '97 Euro futures at spreads below 70 basis points, with a stop at 55 basis points and a target of 100 b.p.

- We would use any rally in bonds to get short. We suggest reducing the price level for establishing short positions to 107.08 for September bond futures. Stops should be placed at 109.16, with a target of 102.00.

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Issue No: 96/23
June 7, 1996

I. Weekly Wrapup

Economic and Market Overview

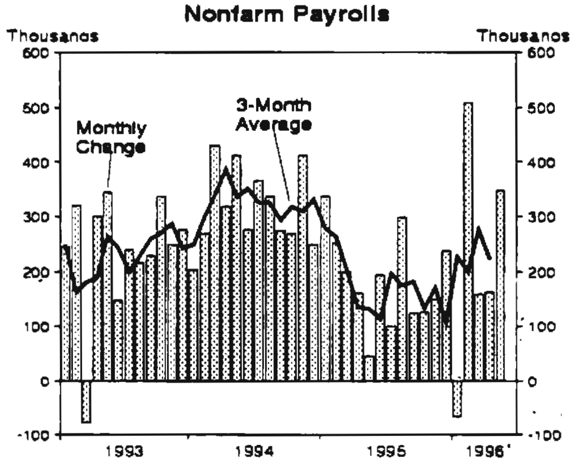
Weakness in several widely-followed commodity prices and efforts by senior Fed officials to present more neutral remarks on the business climate did temporarily foster a mild rise in U.S. bond prices. This price rally, however, was short-lived as the payroll figures for May (+348,000), coupled with upward revisions to April (now +163,000 from +2,000) showed that the economy is continuing to gather momentum. Total hours worked are trending up at a 3.5% annual rate this quarter, which is consistent with our 4.2% annualized real GDP growth estimate for the quarter.

The strong growth in employment and income have helped to support consumer outlays. U.S. manufacturers reported a strong rebound in deliveries of light vehicles last month, to a 14.0 million annual unit pace from 12.9 million during April. Over the past six months the adjusted annual selling pace for domestic cars and light trucks has been almost 8% above the year-earlier level, whereas assemblies declined in the interim. The resulting significant shrinkage in retail vehicle inventories is leading firms to lift output, a development that in the past has been a catalyst for sturdy advances in broad economic activity. Destocking also has persisted at factories; the national purchasing managers' survey indicates that manufacturing inventory liquidation was more widespread last month than at any time in over five years. With most industries seeing more orders – factory bookings excluding defense and aircraft rose 2.2% between January and April, and the NAPM new orders index stayed above 50% last month – it seems only a matter of time before companies become more willing to expand production to replenish stocks. For this reason, the downtick in the NAPM composite index, from 50.1% to 49.3%, should prove temporary.

Construction spending, meanwhile, shows no deceleration in response to higher mortgage rates. To the contrary, total outlays for building climbed 1.4% in April, and in real terms they are rising at a 13% annual rate. If sustained, this spending surge would directly contribute about 1.0% to annualized real GDP growth this quarter.

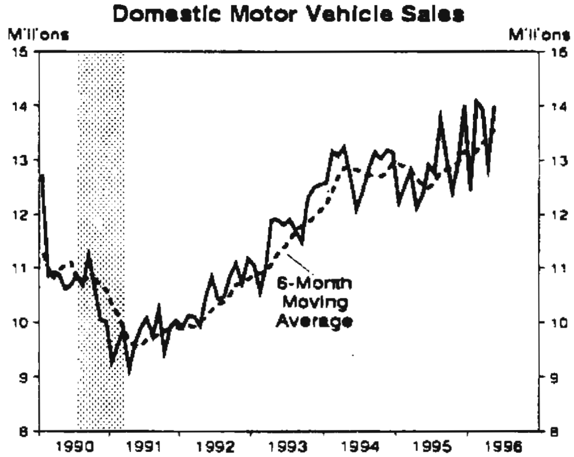
The strength of employment and outlays suggests that real GDP growth in the second half is likely to average around 3% annualized compared to our earlier forecast of 2.75%.

Nonfarm Payrolls



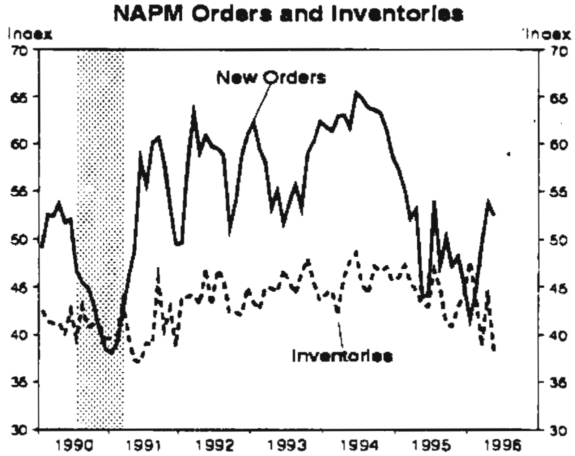
Source: Department of Labor.

Domestic Motor Vehicle Sales



Source: Department of Commerce.

NAPM Orders and Inventories



Source: National Association of Purchasing Managers.

Federal Reserve Policy

We now expect that Fed officials will raise their federal funds rate target by 50 basis points to 5¾% this summer and to 6.25% at yearend, up from our forecasts of 25 basis points and 6% earlier. In terms of timing, although Fed officials should raise the federal funds rate by 25 basis points at the July meeting, they could dawdle and wait until August, especially if forthcoming data on inflation are well-behaved and the evidence on outlays becomes more mixed. At this point, we believe the likelihood of a July tightening is only modestly above 50%.

If Fed officials dawdle, this is because they are still clinging to the hope that growth will slow to trend, around 2% annualized, during the second half of the year. The danger to financial markets is that the monetary authorities will be perceived as late in tightening monetary policy. If that were to occur, then we would expect bonds to trade especially badly and the yield curve to steepen further.

Fiscal and Political Developments

Differences between Republicans and Democrats on major budgetary issues are hardening in advance of the fall election campaigns, so fresh progress on deficit reduction this year is very unlikely. A second tally on the balanced budget constitutional amendment this week produced another failure, and that issue is now closed until at least 1997. Entreaties from the Administration to GOP leaders for a renewal of budget talks have been routinely rejected, and Senator Dole's imminent departure virtually ensures that budget summitry will not be resumed. The budget resolution to be adopted by Congress will very likely tie together reforms of Medicaid and welfare programs, a linkage that is strongly opposed by President Clinton and will therefore probably trigger a legislative veto. All other deficit reduction initiatives in the resolution would then be blocked for parliamentary reasons. Under these circumstances, it is very difficult to foresee much substantive action to further restrain federal spending growth over the short remaining life of this congressional session.

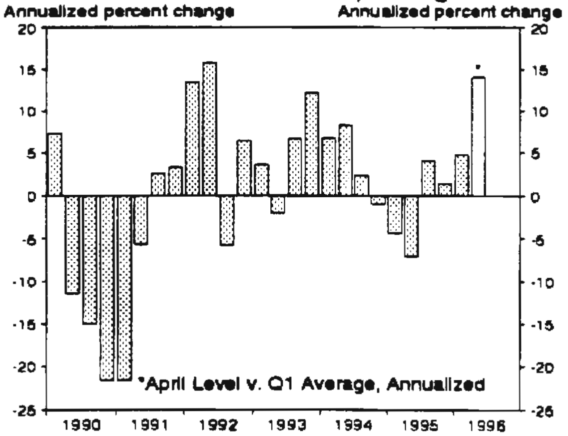
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

Given our revised forecast that calls for 50 basis points of tightening this summer, we would stay short the September Eurodollar future. Given the selloff and the increased likelihood of a tightening, we would move our stop down to 94.35 from 94.55 and would maintain our target of 93.75. Because there is some risk that Fed officials could dawdle, we would also implement a calendar spread in December Eurodollar futures, being long Dec. '96 and short Dec. '97 at a spread below 70 basis points. If the economy remains strong and the Fed is late in tightening, then the yield curve could steepen significantly and this calendar spread could widen. Our target is for a spread of 100 basis points and we would close out the trade if the spread were to narrow to below 55 basis points.

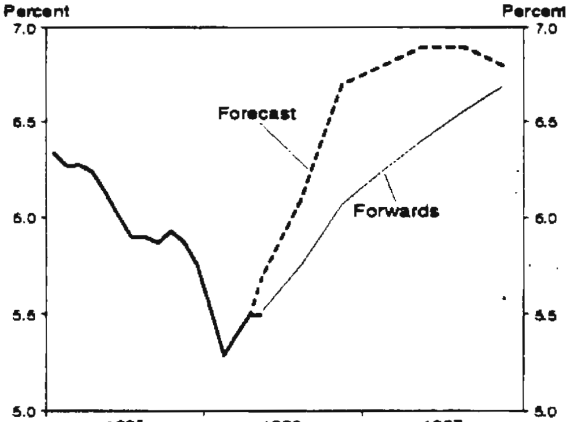
On September bond futures, we would get short if the market rallies above 107.08, with a stop of 109.16 and a target of 102.00. Any bond rallies are likely to be short-lived given the economy's strong forward momentum.

Real Construction Spending



Source: Department of Commerce.

3-Month Libor Rate



Source: Federal Reserve Board, Wall Street Journal.

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II. The Bond Market Outlook: Cyclical Forces Dominant

The bullish case for bonds has rested mainly upon two tenets:

1. Cyclical forces will remain quiescent: The pace of economic growth is likely to swiftly slow back to trend, keeping inflation from rising.

2. The long-term secular outlook for interest rates is favorable: Inflation is still trending downward and the combination of fiscal restraint and greater savings should cause real yields to decline.

We have disagreed with the first tenet for some time. Now we are increasingly getting nervous that the case for a continued favorable secular trend for interest rates is weakening as well. As a consequence, we remain bearish on the U.S. bond market. We expect that 30-year Treasury bond yields will now trade in a 7%-7½% range for the remainder of the year and are likely to test the upper end of that range this year.

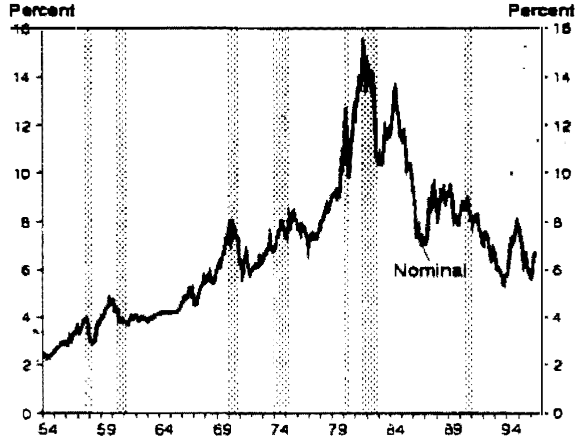
Moreover, we now believe that the risks to this forecast are skewed in the direction of even higher bond yields. A review of the 1967-1969 and 1987-1989 periods in which growth picked up following earlier growth pauses suggests that there is a risk of a much bigger rise in both short- and long-term rates than our forecast.

Cyclical Forces Usually Dominate

In assessing the path of long-term rates over the past forty years, two patterns are evident. First, there has been a broad secular downtrend in long-term interest rates since the early 1980s, which has reversed much of the secular uptrend that occurred from the late 1950s to the early 1980s. As shown in the accompanying chart, the peak in long-term rates that occurred toward the end of the 1982-1990 expansion was below both the peak reached earlier in the expansion and the peak of the prior expansion.

Second, within this broad secular trend there has been a strong cyclical pattern in each business cycle. Typically, bond yields have tended to decline following business cycle peaks and during the early stages of the business expansion. Conversely, as the business expansion has continued and the economy's excess slack has been exhausted, the cyclical trend in rates has been upward. With the economy currently at a relatively high level of resource utilization, this suggests a need to be cautious about bonds even if

10-Year Bond Yield



Source: Federal Reserve Board.

one still has a favorable assessment concerning the long-term secular trend.

The reason bond yields tend to rise toward the end of business cycles is straightforward. As the economy exhausts its excess capacity, inflation begins to drift higher. Fed officials respond to this development by tightening monetary policy. This helps to provoke a rise in bond yields as investors adjust their expectations about the future path of short-term rates.

In the current environment, we are only now just beginning to enter this cyclical phase. As we noted in last week's *U.S. Economics Analyst*, inflationary pressures are likely to gradually increase over the next year. Fed officials are likely to respond to economic strength and the updrift in inflation by tightening monetary policy, and the result is likely to be a further rise in long-term rates.

Secular Outlook No Longer Improving

A second reason to be more cautious about the bond market is the fact that the secular outlook is also becoming less attractive in a number of respects. First, the outlook for further fiscal restraint appears to have diminished. Although discretionary spending has been cut sharply over the past few years, entitlement spending remains unrestrained and is likely to soon dominate the fiscal outlook. As shown in the accompanying chart, the Congressional Budget Office projects that the budget deficit will begin to rise again next year if there is no entitlement reform and the rapid growth in entitlement spending persists.

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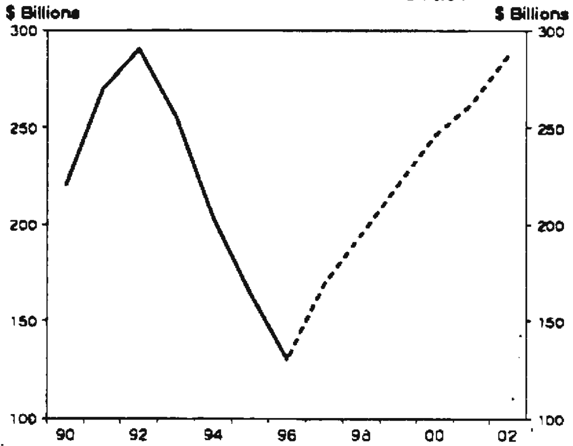
Moreover, the appetite among politicians to pursue further deficit reduction appears to be subsiding. Most significantly, Senator Dole is contemplating whether to endorse a broad-based tax cut as a key plank of his campaign. In addition, it is unclear that President Clinton, if reelected, would continue to have a strong appetite for deficit reduction in his second term. Finally, the fact that the deficit has already declined sharply removes some of the pressure for further deficit reduction.

The absence of further fiscal restraint would be a very important development. Without fiscal restraint, monetary policy would need to be tighter and real short-term rates higher. Such a shift would translate into higher bond yields as market participants revised upward their expectations concerning the future path of short-term interest rates.

Second, we would argue that some of the favorable secular trends cited by the bond bulls are either likely to be less powerful than anticipated or may not occur at all. For example, the magnitude of the rise in the household savings rate that is likely to be generated by the aging of the population and the shift of the baby-boomer generation into a higher-savings age group is likely to be very modest. As will be discussed more fully in a forthcoming *U.S. Economics Analyst*, we estimate that the rise in the household savings rate (as a percent of income) generated by the aging of the population will be no more than one-half to three-quarters of a percentage point over the next 10-15 years. Thus, any increase in the savings rate of households generated by demographics is likely to be modest and will hardly serve as the linchpin for dramatically lower bond yields in the years ahead.

In addition, we are not convinced that inflation is still on a secular downtrend despite the benefits of increased international competition in dampening price pressures. In our opinion, although the liberalization of trade can dampen inflation as trade becomes less restricted, ultimately inflation is mainly a monetary phenomenon. Thus, whether inflation becomes a problem or not depends critically on the future conduct of monetary policy. Because there are no guarantees that monetary policy will continue to be pursued with the same inflation-fighting vigilance as has been evident over the past 17 years, we have no strong opinion about whether inflation will continue to move lower on a secular basis or not.

CBO Baseline Deficit Forecast



Source: CBO. Department of Commerce.

One reason to be less than positive about the long-term inflation outlook is the fact that there is little political support for the Fed keeping monetary policy sufficiently tight to push inflation lower. If anything, the pressures for the Fed to pursue an easier monetary policy have been growing. Some market participants have argued, in fact, that the Fed has unnecessarily restrained the economy by keeping short-term interest rates too high. In addition, others are strongly pushing the view that the consumer price index overstates inflation by as much as 1 percentage point per year. If this results in changes to the calculation to the CPI, the reported inflation numbers will be lower, potentially obviating the need for Federal Reserve officials to tighten monetary policy in order to push the actual inflation rate down further.

Finally, we disagree with the notion that the U.S. economy must necessarily be returning to the days of the 1950s when both interest rates and inflation were much lower than currently. It strikes us that in the 1950s both interest rates and inflation were well-contained mainly because businesses, investors, and consumers were much more concerned about the risk of renewed depression rather than a rise in inflationary pressures. Moreover, it is easy to forget that the 1950s were marked by three recessions, which helped to keep inflation in check.

Instead, rather than a return to the environment of the 1950s being a foregone conclusion, what happens to interest rates and inflation over the next few years depends mainly on the decisions made by the monetary authorities. If monetary policy is kept too loose, inflation and then interest rates will rise. If policy is kept stringent, then the peaks in inflation and interest rates in the current cycle are likely to be well below the peaks reached during the last economic expansion that ended in 1990.

Equity Price Rise Has Negative Implications for Bonds

One secular development that could continue and that would be bad for bonds would be a further rise in equity prices. Equities have been in a bull market since 1982.

A strong equity market is negative for bonds in three ways. First, a strong equity market increases the demand for capital by reducing the cost of equity capital for U.S. businesses. All else equal, this must lead to an offsetting rise in interest rates.

Second, a strong equity market tends to reduce the supply of savings, leading to additional upward pressures on interest rates. This occurs because a strong equity market boosts household net worth. With net worth soaring, households do not need to boost or maintain their saving rate to achieve the same net worth target. Although the so-called wealth effect is mild, it does push in the direction of lower savings and higher interest rates.

Third, the sustained rise in equity prices coupled with an increasingly volatile bond market is presumably narrowing the risk premium attached to equity versus bond investment. Although some of this narrowing occurs via higher equity prices, some also should occur via higher bond yields. After all, the upward pressure on equity prices is being exerted, in part, by monies flowing out of bonds into equities.

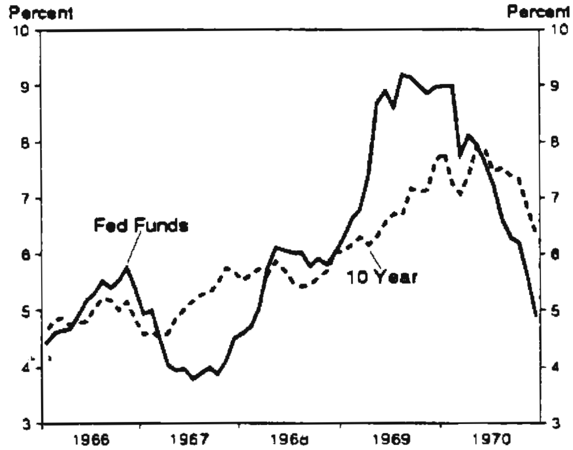
Historically, the stock market has always looked to the bond market for direction. However, given the strong secular rise in stock prices, bond market participants should recognize that the relationship also runs the other way. Strong equity prices reinforce the likelihood that higher interest rates will be needed to cool down the economy.

Past Cyclical Episodes Suggest the Need for Caution

The rebound in the economy after last year's growth pause is similar in form to the pattern of economic activity that unfolded in 1966-1967 and 1986-1987. After a period of weak growth and an easing of monetary policy, the economy recovered. In both cases, the interest rate environment turned hostile.

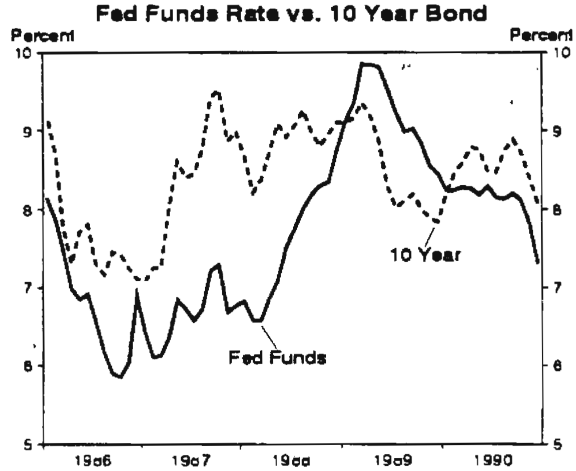
The performance of interest rates once the economy strengthened indicates that cyclical forces can be very

Fed Funds Rate vs. 10 Year Bond



Source: Federal Reserve Board.

Fed Funds Rate vs. 10 Year Bond



Source: Federal Reserve Board.

powerful in pushing interest rates higher when the economy has little slack. From the spring of 1967 to late 1969, the federal funds rate rose by about 500 basis points, and yields on 10-year Treasury notes rose by about 250 basis points. The rise in bond yields was even more violent in 1987, with yields on 10-year notes rising by nearly 300 basis points from the beginning of the year to the stock market crash.

Although we do not expect this type of vicious bear market to develop in 1996, we are growing more bearish, nevertheless. If the economy does not slow as widely expected, then a backup in bond yields similar in magnitude to the 1967-1969 experience could ultimately take place.

Bill Dudley

Goldman Sachs

Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 May	'96 Apr	'96 Mar	'96 Feb	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	348	163	158	509	225	195	Jul 5
Unemployment Rate (%)	5.6	5.4	5.6	5.5	5.6	5.6	
Index of Hours Worked (% ch)	0.1	-0.2	0.0	2.9	n.a.	2.7	
Average Hourly Earnings (% ch)	0.3	0.3	n.a.	n.a.	n.a.	3.4	
Producer price finished goods index (% ch)	--	0.4	0.5	-0.2	3.9	2.6	Jun 11
Excluding food and energy	--	0.1	0.1	0.1	1.3	1.8	
Consumer price index (% ch)	--	0.4	0.4	0.2	3.3	2.9	Jun 12
Excluding food and energy (% ch)	--	0.1	0.3	0.2	2.5	2.7	
Retail sales (% ch)	--	-0.3	0.5	2.1	8.0	6.0	Jun 13
Excluding motor vehicles (% ch)	--	0.4	0.5	1.4	6.8	4.6	
Industrial Production (% ch)	--	0.9	-0.5	1.2	3.9	2.6	Jun 14
Manufacturing	--	1.3	-0.8	1.3	3.9	2.7	
Capacity utilization (%)	--	83.0	82.5	83.1	82.8	83.2	Jun 14
Manufacturing	--	82.0	81.2	82.2	81.8	82.2	
Housing Starts (annual rate, thousands)	--	1519	1435	1514	1467	1417	Jun 18
Single-family	--	1214	1165	1183	1165	1127	
Trade balance (billions, monthly)	--	--	-8.9	-7.0	-8.0	-9.0	Jun 20
Merchandise	--	--	-14.8	-12.6	-13.4	-14.4	
Factory Orders (% ch)	--	-0.1	1.7	-1.5	3.1	5.5	Jul 3
Durable Goods	--	-1.9	2.6	-2.5	-0.6	6.7	Jun 26
Personal Income (% ch)	--	0.5	0.5	0.8	5.6	5.0	Jul 1
Wages and Salaries	--	0.5	0.5	1.1	4.8	4.7	
Purchasing Managers' Index (%)	49.3	50.1	46.9	45.2	46.9	47.3	Jul 1
Consumer Sentiment U Mich (Feb 66=100)	89.4	92.7	93.7	88.5	90.8	91.3	Jun 14
Conference Board (1985=100)	101.2	104.8	98.4	98.0	98.3	98.6	Jun 25

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- Both the producer price and consumer price reports for May should show lower overall inflation, but higher core price increases than in April. Gas prices are subsiding, holding down the overall increases. But the core readings should be boosted by higher tobacco and auto prices (June 11 and June 12).
- Retail sales for May are likely to show a big increase as auto sales rebounded sharply last month after weakening in April. Non-auto sales are also likely to be firmer. On balance, this report should demonstrate that consumer spending remains on a strong uptrend and that reports of the consumer's demise are very much exaggerated (June 13).
- Industrial production will be boosted by a continued increase in auto production as well as an increase in utility output (June 14).

Economic Releases and Other Events

Date	Indicator	Estimate GS	Estimate Consensus	Last Report
June 11	Producer Price Index (May)	+0.2%	+0.2%	+0.4%
	Ex Food and Energy (May)	+0.3%	+0.1%	+0.1%
	Consumer Installment Credit (April)	+$10.0 bil	n.a.	+$6.4 bil
June 12	Consumer Price Index (May)	+0.3%	+0.3%	+0.4%
	Ex Food and Energy (May)	+0.3%	+0.2%	+0.1%
June 13	Retail Sales (May)	+1.2%	+0.6%	-0.3%
	Ex Auto (May)	+0.6%	+0.4%	+0.4%
June 14	Industrial Production (May)	+0.6%.	+0.2%	+0.9%
	Capacity Utilization (May)	83.3%.	82.9%	83.0%
	Business Inventories (April)	+0.4%	+0.1%	-0.2%

- Atlanta Fed Survey (June 12)
- Consumer Sentiment - Prel. (June 14)
- Treasury Announcement - 1-Yr. Bill (June 14)
- Homebuilders' Survey (June 14)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	6.1	6.7	6.9
Forward	5.8	6.1	6.5
2 Yr T-Note	6.5	6.8	6.9
Forward	6.5	6.6	6.8
10 Yr T-Note	7.1	7.2	7.2
Forward	6.9	7.0	7.1

* As of Thursday close.

Key Nos. in the Business Outlook

	1996 Q1	1996 Q2	1996 Q3	1996	1997
Real GDP	2.3%	4.2%	3.3%	2.6%	2.8%
Ind. Production	2.7	6.5	6.3	3.4	5.1
CPI	3.2	4.2	3.4	3.1	3.4
Profits*	19.7	20.9	8.8	13.3	2.2
Unemployment	5.6	5.4	5.3	5.4	5.1

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Wages: Here Comes The Tortoise

- U.S. economic indicators continue to reveal remarkable underlying strength, confirming that monetary policy is not tight. In this context, cautionary comments by Fed officials have dealt a fresh blow to bond market sentiment.

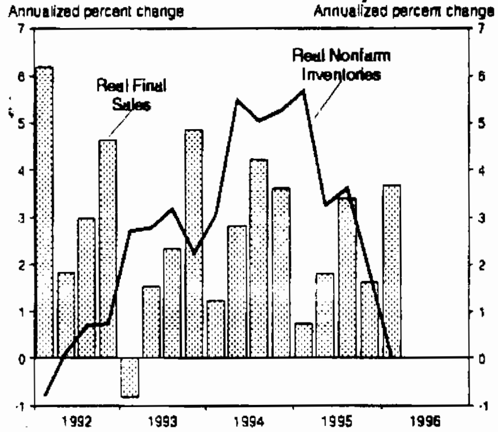
- Although real GDP rose less than previously estimated last quarter, growth in real final sales was stronger and nonfarm inventories were flat. Home sales were surprisingly sturdy in April, while anecdotal reports for May indicate a firming in industrial conditions and retail sales.

- These developments reinforce our view that the Fed will begin tightening policy this summer. Official remarks also imply that hiring and wage trends will be a major focus at the central bank.

- At 5.4% in April, the unemployment rate is a bit below the 5½%-6% range consistent with stable inflation. Wage inflation is already creeping up in response, although this pick-up is apt to remain slow because the GDP gap is currently small and likely to widen only gradually.

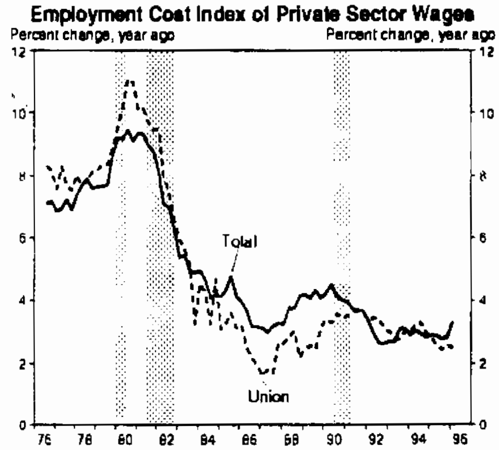
- This year's heavy collective bargaining calendar, featuring a renegotiation of the auto workers' contract, presents a one-sided risk on wages. Because union wages lag other wages, moderate contract settlements provide no reassurance that wage inflation will stabilize. On the other hand, generous settlements should be viewed as a confirmation of mounting wage pressures.

Final Sales and Nonfarm Inventory Growth



Source: Department of Commerce.

Employment Cost Index of Private Sector Wages



Source: Department of Labor.

Trade Recommendations

- Stay short September Eurodollar futures, with a target of 93.75 and a stop on a close at or above 94.55.

- We suggest reducing the price level for establishing short positions in Treasury bond futures to 110.00, September basis. Stops should be placed at 112.16, with a target of 105.00.

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I. Weekly Wrapup

Economic and Market Overview

Cautionary comments by several senior Fed officials, coupled with surprisingly upbeat housing statistics, have dealt a fresh blow to sentiment in the U.S. bond market. The almost unbroken string of firmer-than-expected reports since midwinter, spanning a broad range of final demand sectors, confirms that monetary policy is not currently restrictive. Realization of this has, in turn, gradually worn down confidence in the notion that U.S. economic growth cannot sustain an above-trend pace for more than a short period.

The latest housing data have been especially strong. Turnover of existing homes climbed another 0.5% in April, to 4.22 million units at an annual rate — the highest level since late 1993. Granted, these figures partly reflect settlements of transactions that occurred when mortgage rates were lower, but the same cannot be said for new home sales, which surged 6.7% in April to 776,000 annualized. As a result, the stock of unsold homes has sunk below a half year's supply, giving builders a strong incentive to start new units.

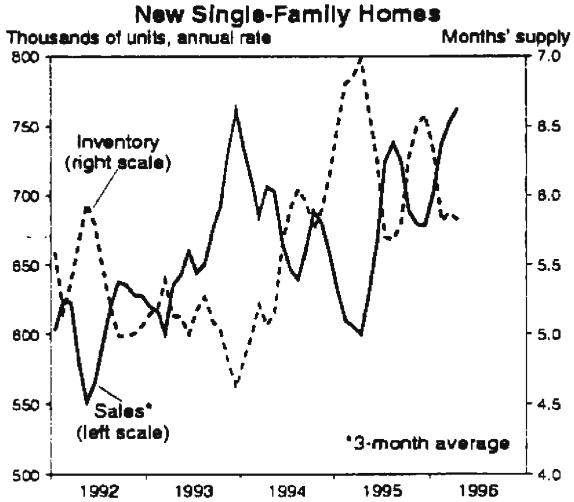
These real estate transactions should help fuel further gains in consumer spending in coming months, and households have both the will and the inclination to follow through. Consumer confidence poll results remain solid, and respondents are more upbeat about job availability than at any time since mid-1990. Meanwhile, personal income climbed 0.5% in April, extending the pattern of 5.5% or greater annual gains. Although real spending dipped 0.2% in April, this was probably due to the timing of the Easter holiday. Large gains in preceding months, coupled with huge increases in May's weekly sales indexes, continue to point to 3%-4% annualized second-quarter increase.

The downward revision to last quarter's real GDP growth (from 2.8% to 2.3% at an annual rate) was entirely the result of evidence that nonfarm business stockpiles were leaner than previously thought. Against a background of brisk sales, firms should now be inclined to end the disaccumulation process, so that inventories once again become a support for production. A further rise in the Chicago purchasing managers' index, to 53.0% in May, hints that this shift may indeed be occurring.

Federal Reserve Policy

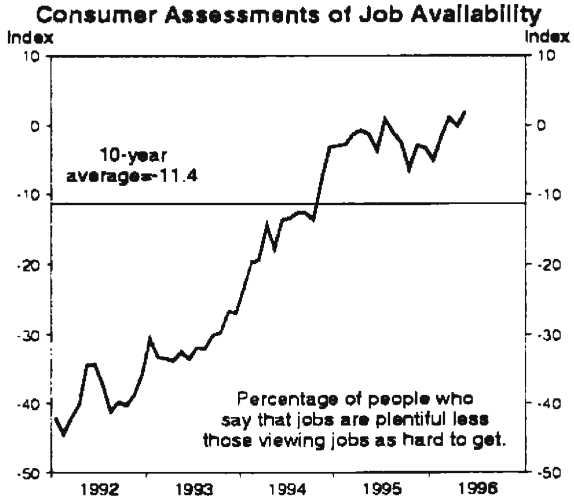
Only one week after their policy meeting, four senior Fed officials went public with shared perceptions that

New Single-Family Homes



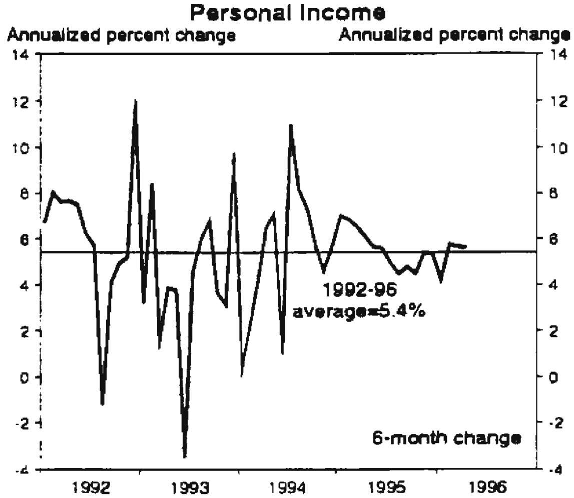
Source: Department of Commerce.

Consumer Assessments of Job Availability



Source: The Conference Board.

Personal Income



Source: Department of Commerce.

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economic growth could continue to outstrip long-run averages, potentially generating upward pressures on wages and prices. Boston district bank president Cathy Minehan was the first to voice these beliefs, but she was joined in short order by three colleagues: Robert Parry from San Francisco, Alfred Broaddus from Richmond, and Governor Susan Phillips. While Gov. Phillips is the only one of the four voting on the FOMC this year, it is nonetheless impressive that so many policy makers — especially a historical centrist such as Ms. Minehan — appear to be questioning their prior view that real GDP growth will slow materially in the second half of 1996.

These statements underscore the probability that by August a consensus will have formed at the Fed in favor of taking back at least a portion of the monetary easing that was adopted last December and January. In addition, given that the remarks have focused on tightness in labor supplies as cause for concern about prospective wage developments, the jobless rate should now be considered in the top tier of indicators central bankers will weigh in judging whether and how rapidly they need to move back toward restraint.

Fiscal and Political Developments

Senator Bob Dole, the presumptive Republican presidential nominee, is said to be seriously contemplating endorsement of a large personal tax cut as a key plank in his election platform. Among the options under consideration are a 15% across-the-board reduction in marginal tax rates, or a roll-back of the 1990 and 1993 tax increases to restore the original two-tier rate structure adopted in the Tax Reform Act of 1986. Either proposal would involve a sharp loss of expected federal revenues under traditional scoring rules, and hence, would raise doubts about how such a program could be consistent with the Senator's oft-stated commitment to achieving swift budgetary balance.

Financial market participants thus far have paid little notice to this issue, in contrast to four years ago when suggestions of fiscal stimulus by the presidential challenger caused sizeable asset price swings. No doubt this more relaxed attitude derives largely from the wide lead President Clinton currently enjoys over his rival in public opinion. If the race tightens, however, then more anxiety could develop about the dramatic change in GOP rhetoric regarding fiscal matters since the turn of the year.

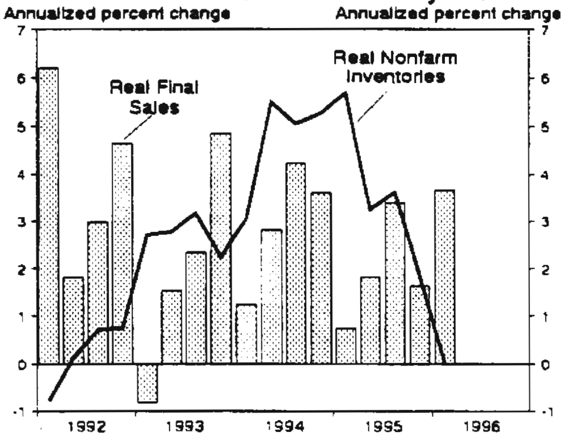
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

Indications of heightened concern among several Fed officials about inflationary risks have reinforced our belief that forward money-market rates take inadequate account of the likelihood that monetary tightening will be renewed starting next quarter, with August still the most probable timing for the first rate hike. Short positions in September eurodollar futures contracts therefore should be maintained, with a target of 93.75 and stops set at 94.55.

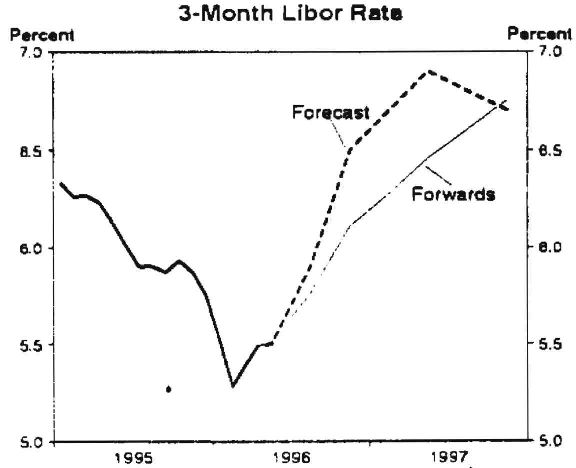
Moreover, now that these comments have been made, it will be more difficult for Treasury bond prices to mount a material rally in the near term, even though favorable technical conditions persist in the marketplace. We continue to favor a cautious approach to setting shorts in bond futures, but would lower the price trigger for such sales to 110.00 (September basis), with a stop at 112.16. A drop in the bond contract price to 105.00 still seems probable at some point.

Final Sales and Nonfarm Inventory Growth



Source: Department of Commerce.

3-Month Libor Rate



Source: Federal Reserve Board, Wall Street Journal.

II. Wages: Here Comes the Tortoise

In recent weeks, U.S. financial markets have breathed a collective sigh of relief about inflation. In one sense, this can be justified. The commodity price surge that gave rise to earlier fears never posed much of a threat, on its own, to the U.S. inflation outlook.

In a more fundamental sense, however, the market's relaxation about inflation will probably prove to be premature. This is because the U.S. economy has begun to grow at an above-trend rate at a time when supplies of labor are running short. As a result, wage inflation is likely to intensify; in fact, it has already begun. This, in turn, will put upward pressure on the rate at which unit labor costs, the main driver of inflation, are rising.

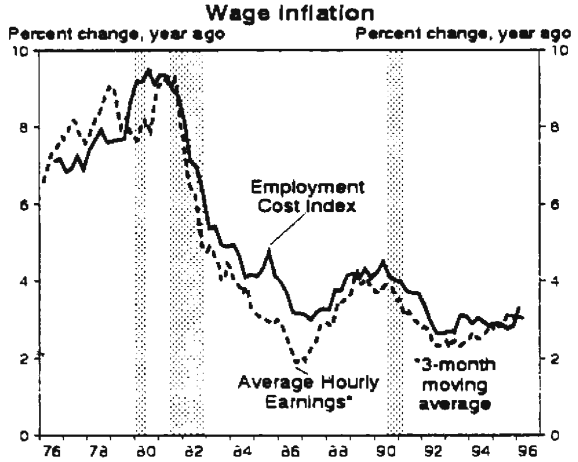
The situation calls to mind the fabled race between the tortoise and the hare. Unlike commodity prices, which tend to sprint ahead and then sleep for awhile, wage inflation is more likely to plod forward slowly, especially if output overshoots its potential by only a small margin, as we expect. Nor will it be the high-profile wage settlements, like this autumn's UAW contract negotiations, that give the most accurate read on wage inflation. In an economy where unions are small and still shrinking, and where contracts are set for several years, the terms of these settlements are more likely to follow rather than lead the myriad of wage deals cut day by day between other workers and their employers.

The upshot is that U.S. financial markets are at risk of discounting too heavily the slow but unmistakable pick-up in wage inflation that is already underway. In the end, they may be surprised to find that the tortoise of wage inflation has outdistanced the sleeping hare of commodity prices.

Moving Beyond Full Employment

The relaxed attitude about inflation that now pervades U.S. financial markets owes much to the false alarm sounded by the late 1993/1994 spurt in U.S. growth. Then, as now, real GDP rose at an unsustainable pace, and commodity prices moved sharply higher. During most of 1994, investors lived in fear of a surge in inflation, which never materialized because increases in labor costs remained subdued.

This time, however, labor markets are much tighter. In fact, we believe that the economy is beginning this latest round of growth with unemployment somewhat



Source: Department of Labor.

below the level consistent with stable inflation — that is, below the so-called NAIRU (Non-Accelerating-Inflation Rate of Unemployment). We base this conclusion on several observations:

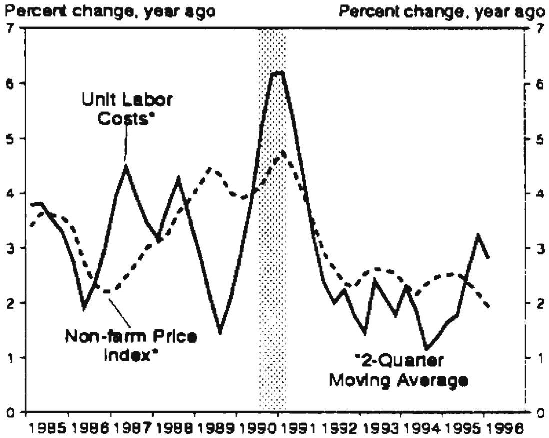
1. **For more than a year, the unemployment rate has hovered at the low end of the 5½%-6% range commonly estimated for the NAIRU.**[1] Over the past 18 months, the jobless rate has been in a tight 5.4%-5.8% range, averaging 5.6%. In April, it fell to the lower end of this band. By contrast, 7.1% of the work force was idle during the year preceding the late-1993 growth pick-up.

2. **Most measures of inflation have been stable over the last two to three years.** Year-to-year increases in the core index of consumer prices have stayed in a narrow 2½%-3% band since late 1993. The GDP-based price indexes have risen between 2¼% and 2½% per year for even longer.

3. **Increases in unit labor costs have begun to outpace inflation.** Since the middle of 1995, year-to-year increases in nonfarm unit labor costs have consistently exceeded year-to-year increases in prices of nonfarm output, which comprises about 85% of real GDP. Thus, worker compensation is rising fast enough, on average, to

[1] Although many observers assume that the NAIRU has declined sharply in recent years, there is little evidence to support this claim. Prof. Robert Gordon of Northwestern University, the foremost authority on this subject, estimates at most a 0.2-point decline, from 6% to 5.8%.

Unit Labor Costs and Prices



Source: Department of Commerce. Department of Labor.

cover inflation and productivity gains. This is a classic sign that excess supply of labor is turning into excess demand.

Only Gradual Wage Acceleration, For Now

Conditions are therefore ripe for a sustained pick-up in the rate at which labor costs are rising. Even so, this acceleration is apt to be gradual over the next year or so, for three reasons:

1. **A discernible pick-up in wage inflation requires a large overshoot of the NAIRU.** Increases in wage inflation of much less than 0.5 percentage points per year are often obscured by volatility in the data, as evidenced by the fact that few in the financial markets seem aware of the 0.3% per year acceleration in average hourly earnings that has been underway since 1993. Yet, previous research has indicated that the jobless rate must drop 1 percentage point below the NAIRU for a full year just to generate a pick-up of 0.5 or more per year in wage inflation. Our analysis confirms this rule for increases in both average hourly earnings over the past 30 years and the wage component of the employment cost index (ECI) over the past 15. Thus, if the NAIRU is currently between 5½% and 6%, unemployment would have to fall below 5% for a year — an event not seen in more than two decades — to precipitate a 0.5-point-per-year increase in wage inflation.

2. **The overshoot we anticipate is not this large.** Although the U.S. economy has already moved beyond full employment, the gap between actual GDP and the level consistent with stable inflation was only about ¾% last quarter by our reckoning and even less according to IMF and OECD estimates. This gap will widen gradually to about 2% by the end of 1997, at which time the jobless rate would hit 5%. Only then should the acceleration in wages approach 0.5% per year.

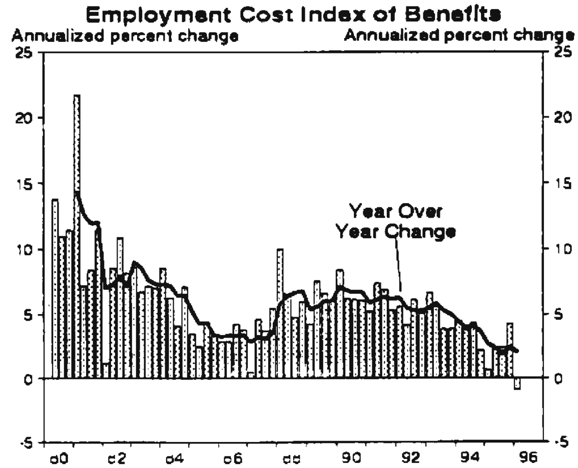
3. **Benefit inflation remains subdued.** Although base wage rates have already begun to accelerate, increases in total compensation per hour have been held in check by companies' efforts to trim benefit costs, especially for health care. This is a one-time phenomenon, as companies try to induce employees to switch from pay-for-service into managed-care plans. Thus, the deceleration in benefits precipitated by this shift is ultimately destined to stop. In the near term, however, it may persist and allow a continued deceleration in benefits to offset some of the wage acceleration.

On balance, these considerations point to annual increases in wage inflation of only about 0.3%-0.4% between 1995 and 1997, with compensation per hour possibly accelerating less rapidly. Of course, passage of the proposed hike in the minimum wage would boost labor cost inflation, but no more than ¼% per year and probably quite a bit less.

Don't Look to Collective Bargaining

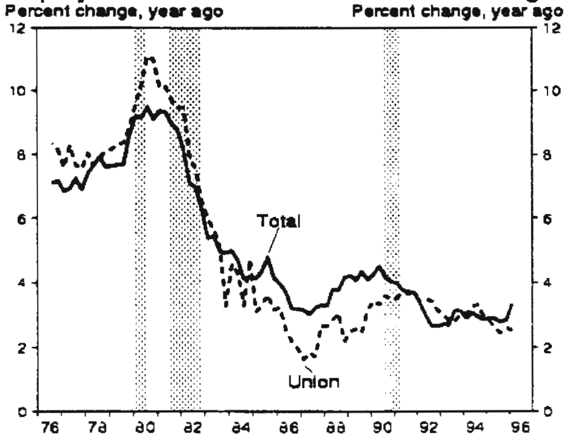
Investors seeking a clearer sense of direction in this murky situation will be tempted to find it in the outcome of this year's heavy collective bargaining calendar. Already, many have fingered this fall's impending renegotiation of the contract between the United Auto Workers (UAW) and the major auto manufacturers as a key bellwether of wage inflation.

Employment Cost Index of Benefits



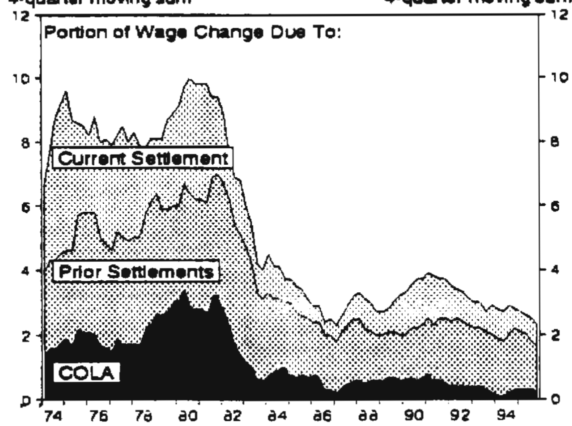
Source: Department of Labor.

Employment Cost Index of Private Sector Wages



Source: Department of Labor.

Wage Changes From Collective Bargaining Agreements



Source: Department of Labor.

The implicit reasoning is that the result of this high-profile negotiation will set the pattern for other deals.

Although this may be true for union negotiations, the historical record suggests that collective bargaining results do not provide good signals about future wage trends. Increases in the unionized component of the ECI have never led the overall wage index, and in recent years have been lagging by a widening margin. There are several reasons for this:

1. **The unionized sector is small and shrinking.** In 1995, only 15% of the workers on nonfarm payrolls were union members, and only 5% were covered by the large contracts (involving 1,000 workers or more) that normally get the attention required to set the pace for other agreements. As recently as 1979, in the heyday of wage inflation and union power, these figures were 24% and about 11½%, respectively.

2. **The tradition of multiyear contracting builds in a natural delay.** Unlike Europe, where labor contracts are renegotiated annually, U.S. contracts usually run two to three years — about half the length of an average business cycle. This means that unions are frequently in the position of trying to catch up to wage trends that emerge elsewhere in the economy.

3. **COLAs have lost their fizz.** To help minimize the lag between nonunion and union wages, most multiyear contracts years ago routinely included annual wage resets and automatic cost of living adjustments (COLAs). However, while many still provide for annual resets, the COLA has gone the way of the horse and buggy, accounting for only a negligible portion of recent unionized wage increases.

In essence, the risks are one-sided on upcoming union negotiations. If the UAW or some other high-profile contract settles on terms more generous than those now in effect, then this will be a sure sign that wage inflation has progressed to the point of infecting the unionized sector. However, in the more likely event that these contract terms remain roughly unchanged, it does not follow that wage inflation is a dead issue.

What, then, should investors focus on in asssessing future wage trends? The knee-jerk answer from most economists would be to watch the ECI, especially its wage component. This is unquestionably the purest index of wages, and also the one most trusted by Fed officials. For these reasons, last quarter's 1.0% jump in this index should be viewed with some trepidation.

However, the monthly readings on average hourly earnings published in each employment report, while inferior as an index of wage rates, have significant predictive value as well. Unlike the ECI, these data capture important shifts — notably any tendency toward higher-paying jobs and longer work hours — that will affect the composition of labor costs. Perhaps as a result, changes in the rate at which average hourly earnings are rising sometimes have foreshadowed turns in the more trustworthy ECI. Thus, the gradual upward trend already evident in average hourly earnings should give notice that wage inflation is on the move.

Ed McKelvey

Goldman Sachs

Key U.S. Economic Data

	'96 May	Latest Monthly Data '96 Apr	'96 Mar	'96 Feb	6 Mo Trend	12 Mo Trend	Next Release
Nonfarm Payrolls (ch. thousands)	--	2	178	631	170	143	Jun 7
Unemployment Rate (%)	--	5.4	5.6	5.5	5.6	5.6	
Index of Hours Worked (% ch)	--	-0.5	0.1	2.9	0.1	0.8	
Average Hourly Earnings (% ch)	--	0.6	0.2	0.1	2.8	3.1	
Producer price finished goods index (% ch)	--	0.4	0.5	-0.2	3.9	2.6	Jun 11
Excluding food and energy	--	0.1	0.1	0.1	1.3	1.8	
Consumer price index (% ch)	--	0.4	0.4	0.2	3.3	2.9	Jun 12
Excluding food and energy (% ch)	--	0.1	0.3	0.2	2.5	2.7	
Retail sales (% ch)	--	-0.3	0.5	2.1	8.0	6.0	Jun 13
Excluding motor vehicles (% ch)	--	0.4	0.5	1.4	6.8	4.6	
Industrial Production (% ch)	--	0.9	-0.5	1.2	3.9	2.6	Jun 14
Manufacturing	--	1.3	-0.8	1.3	3.9	2.7	
Capacity utilization (%)	--	83.0	82.5	83.1	82.8	83.2	Jun 14
Manufacturing	--	82.0	81.2	82.2	81.8	82.2	
Housing Starts (annual rate, thousands)	--	1519	1435	1514	1467	1417	Jun 18
Single-family	--	1214	1165	1183	1165	1127	
Trade balance (billions, monthly)	--	--	-8.9	-7.0	-8.0	-9.0	Jun 20
Merchandise	--	--	-14.8	-12.6	-13.4	-14.4	
Factory Orders (% ch)	--	--	1.5	-1.5	1.9	3.1	Jun 4
Durable Goods	--	-1.9	2.6	-2.5	-0.6	6.7	Jun 26
Personal Income (% ch)	--	0.5	0.5	0.8	5.6	5.0	Jul 1
Wages and Salaries	--	0.5	0.5	1.1	4.8	4.7	
Purchasing Managers' Index (%)	--	50.1	46.9	45.2	46.4	47.1	Jun 3
Consumer Sentiment U Mich (Feb 66=100)	89.4	92.7	93.7	88.5	90.8	91.3	Jun 14
Conference Board (1985=100)	101.2	104.8	98.4	98.0	98.3	98.6	Jun 25

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- The stronger tone of business reported by purchasing managers in Chicago and other major cities implies that the NAPM's composite index will move definitively into the above-50% region consistent with expanding factory output (June 3).
- Major retailers are due to report results for May, the first month of the year free of calendar and weather distortions. Sharp upward moves in the Johnson Redbook and Mitsubishi weekly indexes of retail activity point to solid gains in these chain store reports (June 6).
- Payrolls rose an estimated 200,000 in May, and April's negligible change is likely to be revised up as well. Coupled with large upward benchmark revisions to the level of nonfarm payrolls, such figures should underscore the tightness that now prevails in U.S. labor markets (June 7).

Economic Releases and Other Events

		Estimate		
Date	Indicator	GS	Consensus	Last Report
June 3	Leading Economic Indicators (Apr)	+0.4%	+0.2%	+0.2%
	Purchasing Managers' Index (May)	52.0%	51.0%	50.1%
	Construction Spending (Apr)	Down	+0.3%	+3.1%
	Domestic Vehicle Sales (May)	13.3 mil.	13.3 mil.	12.9 mil.
June 4	Factory Orders (Apr)	-0.8%	-0.9%	+1.5%
June 7	Nonfarm Payrolls (May)	+200,000	+160,000	+2,000
	Unemployment Rate (May)	5.4%	5.4%	5.4%
	Consumer Credit (Apr)	+$10.0 bil.	+$8.1 bil.	+$6.4 bil.

- 3- and 6-mo. T-bill auction (June 3)
- Chain Store Sales (June 6)
- Initial Unemployment Claims (June 6)
- Wholesale Trade Inventories (June 7)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.7	6.2	6.8
Forward	5.7	6.0	6.4
2 Yr T-Note	6.2	6.4	6.8
Forward	6.4	6.5	6.7
10 Yr T-Note	6.8	6.9	7.1
Forward	6.8	6.9	7.0

* As of Thursday close.

Key Nos. in the Business Outlook

	1996				
	Q1	Q2	Q3	1996	1997
Real GDP	2.3%	4.2%	3.3%	2.6%	2.8%
Ind. Production	2.7	6.5	6.3	3.4	5.1
CPI	3.2	4.2	3.4	3.1	3.4
Profits*	19.7	20.9	8.8	13.3	2.2
Unemployment	5.6	5.4	5.3	5.4	5.1

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Consumers Unlikely To Retard Growth

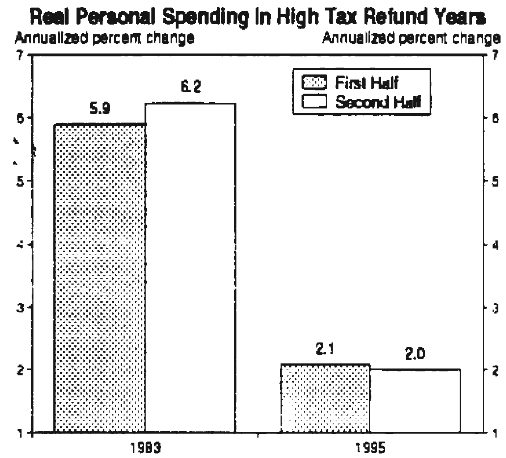
- Consumer spending is unlikely to slump when the tax refund season ends at midyear. Refunds have only a mild effect on the timing of spending decisions, but no discernible impact on the total..

- Moreover, consumer fundamentals remain excellent. Confidence and income growth are high, and declining jobless benefit claims suggest continued solid job growth. In this context, worries about consumer loan delinquencies are overblown given the large rise in household net worth spurred by the soaring stock market.

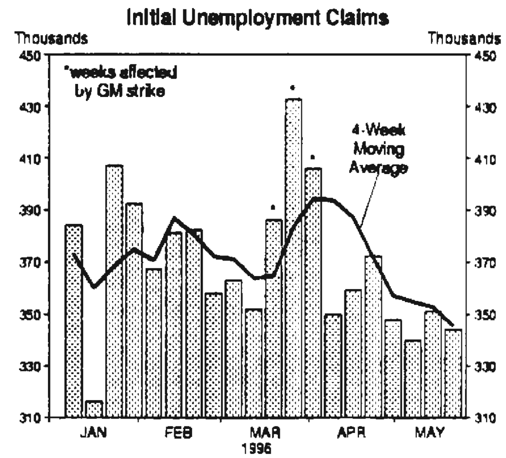
- A rise in inventory investment also will sustain growth. It is very unusual for the economy to slow sharply at a time when inventories are contributing positively to growth.

- As anticipated, Fed officials kept monetary policy on hold at their latest meeting. Moreover, given the lack of leaks or hints following the session, it seems unlikely that the FOMC moved to an asymmetric policy directive biased toward tightening.

- However, Fed tightening still appears likely by summer's end, probably at the August FOMC meeting. In this respect, the holdup in Greenspan's reconfirmation as Chairman is unlikely to be significant. Even if he is not reconfirmed soon, Mr. Greenspan will continue to serve as the acting FOMC chairman.



Source: Department of Commerce.



Source: Department of Labor.

Trade Recommendations

- We would remain short September Eurodollar futures, with a target of 93.75 and a stop on a close at or above 94.55.

- An unwinding of inflation fears related to commodity price pressures, stable monetary policy, and favorable technical conditions appear likely to push T-bond prices higher over the very near-term. We would look to take advantage of any bounce by getting short the June bond futures at 111.16, with a stop on a close above 113.00 and an objective of 105.00.

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May 24, 1996

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I. Weekly Wrapup

Economic and Market Overview

In the absence of much significant economic news, bond prices edged higher this week. The main drivers appear to be a further unwinding of commodity-related inflation fears and a belief by most market participants that monetary tightening is unlikely, at least before the fall elections.

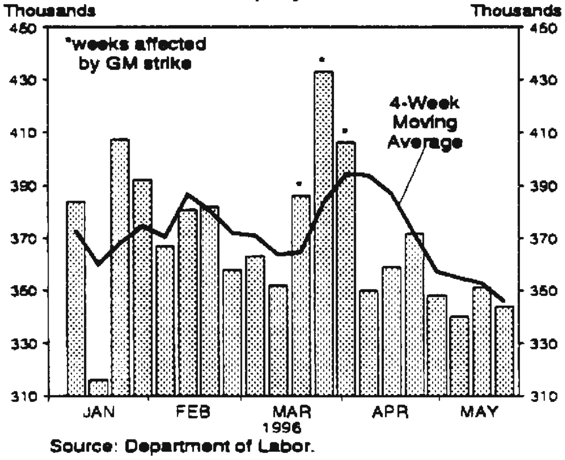
The week's scanty economic news was also mixed, although generally consistent with an economy that maintains strong forward momentum. The strongest such indication was the continued decline in initial claims for jobless benefits; they fell to 344,000 in the latest week and to 345,750 on a four-week average basis. In the retail sector, weekly chain store readings from Mitsubishi and the Johnson Redbook sent off conflicting signals, but the trends in both series remain strongly upward; our retail analysts also report an improving tone of business. In the factory sector, sharp drops in bookings for military hardware and civilian aircraft overcame a post-strike surge in auto shipments to drag durable goods orders down 1.9% in April. Outside these areas, orders rose an estimated 2%, with orders for durable consumer goods and industrial materials up about 4%. While bookings for nondefense capital equipment other than aircraft dropped 2.8%, large backlogs for such items should induce further production gains in coming months.

Federal Reserve Policy

As widely anticipated, the Federal Open Market Committee kept monetary policy unchanged at its May 21 meeting. Some of the Federal Reserve Bank presidents undoubtedly argued that the pick-up in economic growth and the resulting decline in unemployment posed an increased risk of inflation. However, this argument did not carry the day given the lack of observable inflation pressures outside of commodities and the fact that the Fed staff forecast anticipates a slowdown in growth later this year, which would help prevent overheating. The silence of Fed officials following the meeting suggests, though not definitively, that they did not move to an asymmetric policy directive biased toward tightening. If they had, such shift would probably be leaked or hinted at in order to prepare the markets for the possibility of a tightening at the next meeting. Most likely, policy will remain on hold until the August meeting. At that time, we would expect a modest 25 basis points increase in the federal funds rate. Of course, the timing and magnitude of future policy adjustments will be very sensitive to the pace of growth and any signs of impending inflation.

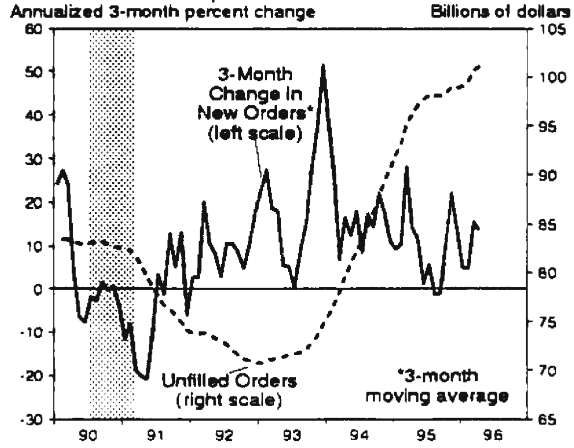
Alan Greenspan's reconfirmation as Federal Reserve Chairman (as well as the appointments of Alice Rivlin and Laurence Meyer to the Board) continues to be held up by Senator Tom Harkin (D-Iowa), who wants to debate on the Senate floor whether the Fed has been impeding growth by keeping monetary policy too tight. Although a break in this impasse is not yet in sight, we expect that Sen. Harkin will relent within the next month in exchange for some time on the floor. Even if the stalemate were to drag on, we do not believe that it has important implications for the conduct of monetary policy. After all, Mr. Greenspan is the acting chairman of the Federal Reserve even if his confirmation is held up. His seat

Initial Unemployment Claims



Source: Department of Labor.

Non-Defense Capital Goods Orders Ex Aircraft



Source: Department of Commerce.

as a Board member, which is not currently subject to confirmation, does not expire until 2006.

Fiscal and Political Developments

The budget deficit for fiscal 1996 appears likely to fall to around $120 billion from $163 billion in fiscal 1995. This decline is somewhat bigger than previously anticipated due to the large $72 billion surplus reaped in April, up sharply from $50 billion a year earlier. The surplus in April soared due to very strong personal income tax receipts of $108 billion, up $31 billion from a year earlier. The surge in tax receipts appears due mainly to a sharp rise in capital gains realizations. This has occurred because stock prices rose sharply in 1995 and because many mutual funds generated tax liabilities for their holders by selling stocks with large gains last year. Because the rise in tax revenues was due mainly to the strength of the stock market, we do not believe that this will exert a restraining influence on economic activity. Instead, the continued gains in equity prices are likely to spur increased spending as household net worth rises sharply. The so-called "wealth" effect is a mild one, but it does not have to be very large to lend significant support to consumer spending given last year's $2.6 trillion rise in household net worth.

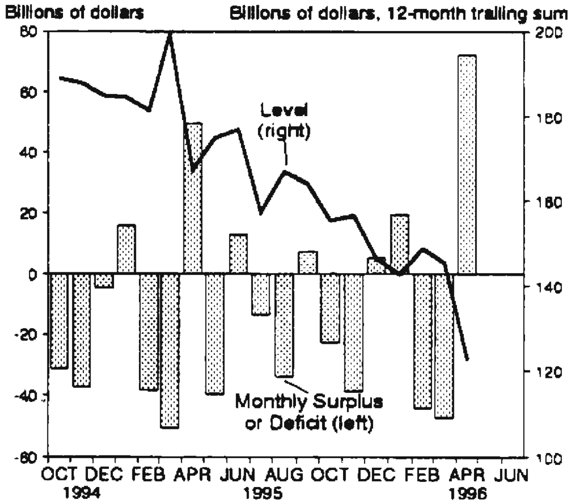
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

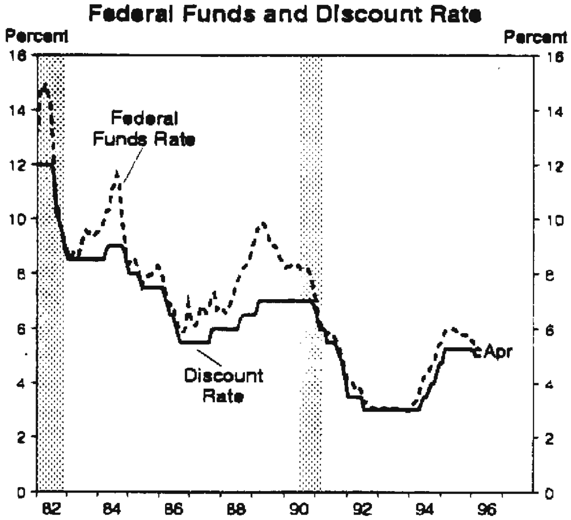
Although the short-end of the market has recovered somewhat in recent weeks, we remain bearish. The data continue to indicate that the economy is growing briskly. Expectations of a slowing in the second half of the year sharp enough to obviate the need for credit restraint are therefore apt to be disappointed. A tightening of monetary policy by the August FOMC meeting still appears likely. Thus, we would remain short September Eurodollar futures, with a target of 93.75 and a stop on a close above 94.55.

In terms of bonds, we expect that the market could push somewhat higher over the very near term. This reflects the good technical condition of the market, the realization that monetary policy is on hold for the time being, and the fact that the market earlier had been overwrought about the impact of commodity price pressures on U.S. inflation. Because we expect the economy to remain strong and the Fed to tighten, we would take advantage of any rally by getting short June bond futures above 111.16, with a stop on a close above 113.00 and an objective of 105.00.

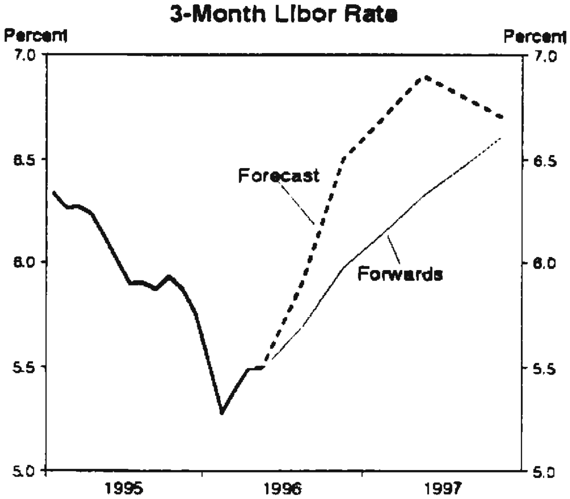
Federal Deficit



Federal Funds and Discount Rate



3-Month Libor Rate



Source: Federal Reserve Board, Wall Street Journal.

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II. Consumers Unlikely To Retard Growth

Many in the U.S. financial market community expect domestic economic growth to slow sharply in the coming months, primarily due to weaker personal spending gains. While they acknowledge the strength of household outlays so far in 1996, the consumption skeptics see this year's unusually hefty personal tax refunds as the main driving force. Moreover, many analysts suspect that similarly bloated tax payments paid earlier this quarter will soon constrain consumer activities, by compounding the perceived squeeze on household financial resources from historically high installment debt levels.

These arguments do not hold up well under scrutiny. While some slowing in consumption later this year does seem probable, the combination of firm real income gains, improved employment conditions, and buoyant confidence should outweigh the impact of net tax obligations in the determination of broad personal spending trends over the period ahead. At the same time, favorable prospects for an acceleration in nonfarm inventory building promise at least a partial offset to whatever slowdown in domestic sales may develop.

Personal Spending Is Off To A Strong Start This Year

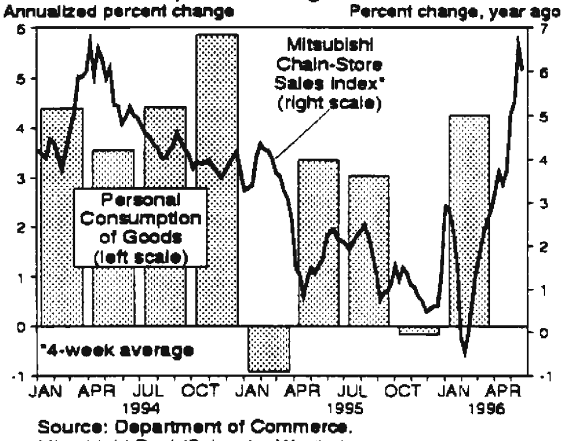
Real consumer spending growth has been remarkably brisk in early 1996. In its preliminary first-quarter GDP report, the Department of Commerce estimated a 3.5% annualized rise in total personal consumption for the quarter, including a 4.3% surge in outlays for goods. Both figures now appear too conservative, in light of substantial upward revisions to nonauto retail sales gains in February and March, which amounted to 0.6% cumulatively. The vast majority of those newly discovered purchases probably represent higher volumes; thus, it would not be surprising if updated GDP statistics due shortly showed annualized real growth rates of 4% and 5% for total consumption and spending on goods, respectively.

Meanwhile, signs are multiplying that the strength in household outlays has persisted into the spring. Although nominal retail sales excluding autos and gasoline climbed only 0.2% during April, this implies a respectable further increase in real terms, given that consumer prices for commodities other than food and energy actually declined 0.1% last month. In addition, the weekly index of chain-store sales compiled by Bank of Tokyo-Mitsubishi Bank/ Schroder Wertheim has displayed a sequential acceleration since the quarter began. Using four-week averages to smooth out volatility, the Mitsubishi sales index is currently displaying the largest year-to-year gains in two years. Our analysis has identified a meaningful correlation between fluctuations in this smoothed series and changes in nonauto retail sales during this decade.

Despite Doubts, Outlay Gains Should Persist

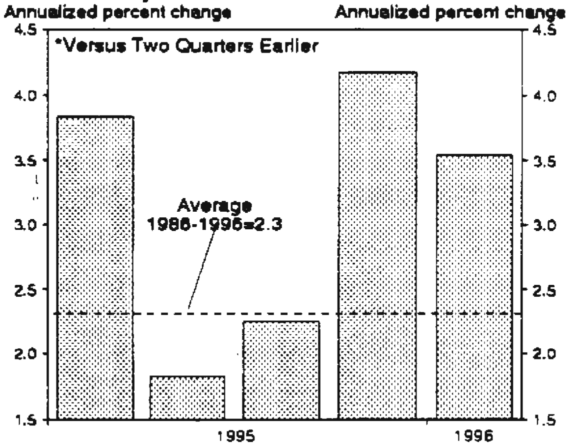
Notwithstanding this impressive forward momentum in consumer demand, considerable pessimism about its durability persists. One of the main sources of these doubts is a belief that household debt levels are oppressively high. We addressed this issue at some length several weeks ago and concluded that concerns about consumer debt burdens are exaggerated.

Consumption Strong So Far In 1996



Source: Department of Commerce. Mitsubishi Bank/Schroder Wertheim.

Sturdy Real Personal Income Gains



Source: Department of Commerce.

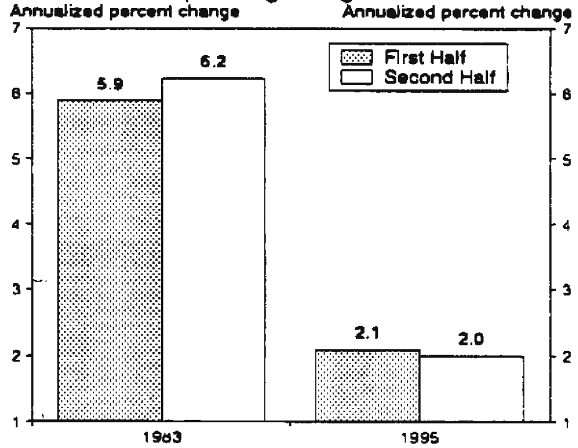
because they fail to take adequate account of the huge gains in household assets and net worth over the past year (*U.S. Economics Analyst*, April 5, 1996).

There are, however, two additional rationales frequently given for why consumer spending growth could slump in the second half of 1996. The first is a perception that household income growth will be inadequate to sustain even a moderate pace of expenditure increases. This notion is not supported by the latest official statistics, which in fact imply a relatively sturdy upward trajectory for personal incomes. Total nominal personal income has increased more than 5% at an annual rate over the three- and six-month intervals ending March (latest data available). Adjusting for 1.5%-2.0% annualized increases in the personal consumption chain-weight price index, this suggests a 3.0%-3.5% underlying real income growth path, which is well above the long-term average. As collateral evidence that households are reasonably comfortable with their current and prospective earnings, the major consumer sentiment indexes remain in lofty territory. In the Conference Board poll, respondents are reporting much-improved attitudes about job availability.

The other rationale for pessimism about consumption is that recent demand strength is believed to have been fueled largely by bloated personal income tax refunds. With the seasonal rebate period now ending, and with last month's tax settlements rising to a remarkably high level, it is said that U.S. households will lack adequate financial resources to sustain solid personal outlay increases much longer.

Spending statistics from earlier years in which either individual tax refunds or final settlements were outsized provide little support for the notion that these phenomena play much of a role in broad consumption behavior beyond the very short term. Prior to the current tax season, the largest recent year-to-year gains for individual tax refunds occurred in 1983 and 1995 — up 10.3% and 12.6%, respectively. In neither year did consumer spending decelerate to any material degree in the second half, after the refund influence had presumably dissipated. Similarly, while there were sharp increases in final tax settlements in the spring of 1987 and again in 1994, those payments did not seem to cause any more than a minor ripple in personal outlay volumes. Indeed, total consumption grew faster during the second quarter of those two years — the period in which the large tax payments were made — than in the four surrounding quarters!

Real Personal Spending in High Tax Refund Years



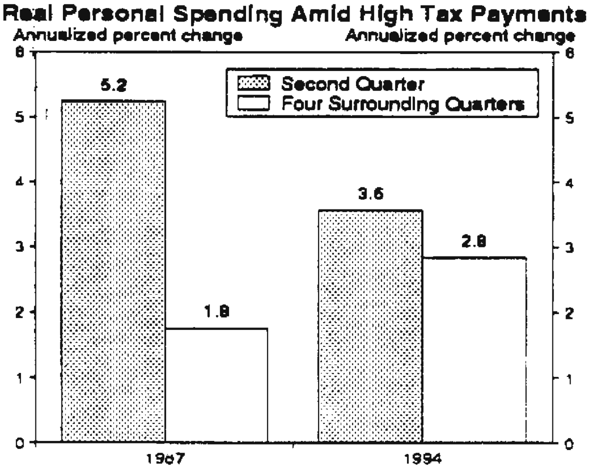
Source: Department of Commerce.

Inventory Upswing Should Preempt Sharp GDP Slowdown

The foregoing analysis is not meant to dismiss the potential for a moderation in the pace of household spending gains in coming months. To the contrary, our present forecast anticipates a softening in real personal outlay growth from what may approach 4% at an annual rate in the first half to 2.6% on average over the third and fourth quarters.

Even if such a pullback develops, however, there are a number of other factors that could mitigate or even completely offset its damping impact on overall GDP growth. One of these is a pickup in stockbuilding. Many U.S. goods producers adopted very cautious output strategies late last year, in an effort to eliminate inventory excesses that emerged when final demand for goods unexpectedly tailed off last

Real Personal Spending Amid High Tax Payments



Source: Department of Commerce.

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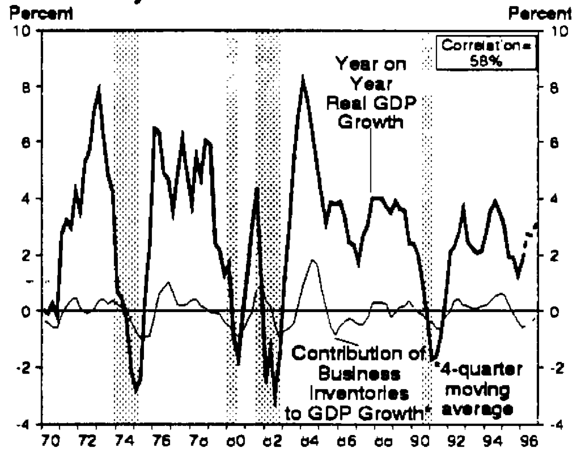
autumn. As a result of this restraint, as well as the rebound in consumer spending, nonfarm inventory accumulation has fallen to an unusually low point for an established business expansion period. The latest official estimates place nonfarm inventory growth over the past two quarters at 1.5% annualized, a figure that very likely will be revised down in view of the sharp liquidation of manufacturing and trade stocks just reported for March. By contrast, between 1960 and 1995 the two-quarter annualized growth rate for nonfarm inventories exceeded 4.5% more than 50% of the time during periods excluding recessions and the first two quarters of incipient recoveries. In only four previous episodes did stockbuilding thus measured fall below 1.5% at an annual rate, and in three of those cases — late 1975, late 1986, and early 1992 — a strengthening of overall economic activity shortly followed. The only exception was in late 1979/early 1980, when an extraordinary shift toward monetary restraint pushed interest rates up sharply and crushed domestic demand.

This analysis suggests that the rate of inventory accumulation will climb in coming months, marking a sharp change from the disaccumulation experienced over the last several quarters. Historically, inventory swings have been highly correlated with swings in broad economic activity, because they have knock-on impacts on personal and corporate income growth, which in turn have feedback effects on consumption and capital spending. Over the 1970-1995 period, for example, there was a 58% correlation between the four-quarter change in the inventory contribution to growth and year-to-year real GDP growth. Consequently, it is relatively rare for a major slowdown in overall GDP to develop at a time when inventory management shifts from being a hindrance to production to being a support, as now seems probable.

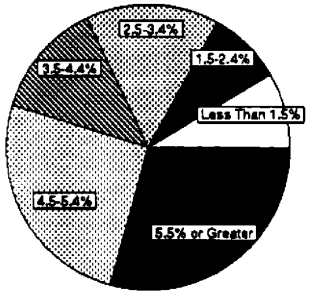
Inventory Contribution to Real GDP Growth



Source: Department of Commerce. Our Estimates.

John Youngdahl

Nonfarm Inventory Investment in Established Expansions*, 1960-1995, Two Quarter Changes, Annual Rate



Source: Department of Commerce. Our Calculations.
*Excludes Recessions and First Two Quarters of Growth Periods.

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Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 Apr	'96 Mar	'96 Feb	'96 Jan	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	2	178	631	-146	170	143	Jun 7
Unemployment Rate (%)	5.4	5.6	5.5	5.8	5.6	5.6	
Index of Hours Worked (% ch)	-0.5	0.1	2.9	-1.7	0.1	0.8	
Average Hourly Earnings (% ch)	0.6	0.2	0.1	0.3	2.8	3.1	
Producer price finished goods index (% ch)	0.4	0.5	-0.2	0.2	3.9	2.6	Jun 11
Excluding food and energy	0.1	0.1	0.1	-0.1	1.3	1.8	
Consumer price index (% ch)	0.4	0.4	0.2	0.4	3.3	2.9	Jun 12
Excluding food and energy (% ch)	0.1	0.3	0.2	0.3	2.5	2.7	
Retail sales (% ch)	-0.3	0.5	2.1	0.0	8.0	6.0	Jun 13
Excluding motor vehicles (% ch)	0.4	0.5	1.4	-0.2	6.8	4.6	
Industrial Production (% ch)	0.9	-0.5	1.2	-0.2	3.9	2.6	Jun 14
Manufacturing	1.3	-0.8	1.3	-0.2	3.9	2.7	
Capacity utilization (%)	83.0	82.5	83.1	82.4	82.8	83.2	Jun 14
Manufacturing	82.0	81.2	82.2	81.4	81.8	82.2	
Housing Starts (annual rate, thousands)	1519	1435	1514	1453	1467	1417	Jun 18
Single-family	1214	1165	1183	1146	1165	1127	
Trade balance (billions, monthly)	--	-8.9	-7.0	-9.9	-8.0	-9.0	Jun 20
Merchandise	--	-14.8	-12.6	-15.1	-13.4	-14.4	
Factory Orders (% ch)	--	1.5	-1.5	-0.2	1.9	3.1	Jun 4
Durable Goods	-1.9	2.6	-2.5	-0.6	-0.6	6.7	Jun 26
Personal Income (% ch)	--	0.5	0.8	0.1	5.5	5.2	May 31
Wages and Salaries	--	0.4	1.0	-0.2	4.9	5.0	
Purchasing Managers' Index (%)	50.1	46.9	45.2	44.2	46.4	47.1	Jun 3
Consumer Sentiment U Mich (Feb 66=100)	92.7	93.7	88.5	89.3	90.6	91.3	May 31
Conference Board (1985=100)	105.3	98.4	98.0	88.4	98.5	98.7	May 28

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- Although first-quarter real GDP growth is likely to be marked down slightly (May 30), the composition of this revision should accentuate the step-up in domestic demand growth and the slowing in inventory accumulation reported previously. Thus, the revision could regenerate bond-market worries about unsustainably strong growth.
- The Conference Board's index of consumer confidence is likely to decline modestly in May (May 28), reversing some of the sharp upward spike that occurred in April.
- New home sales in April (May 30) are likely to rebound after a sharp decline in March. However, we expect that housing activity will generally weaken over the remainder of the year as the rise in mortgage rates begins to make itself felt.
- The Chicago purchasing managers' report for May (May 31) will be scrutinized for an early read on the NAPM index the following Monday (June 3). Most likely, the Chicago index will rise further as automobile production continues to accelerate.

Economic Releases and Other Events

Date	Indicator	Estimate GS	Estimate Consensus	Last Report
May 28	Existing Home Sales (Apr.)	Down	-3.3%	+6.9%
	Consumer Confidence (May)	Down	101.0	105.3
May 30	Real GDP ('96 IP)	+2.4%	+2.7%	+2.8%
	Chain Wt. Price Index ('96 IP)	+2.5%	n.a.	+2.5%
	New Home Sales (Apr.)	Up	+3.4%	-7.6%
May 31	Personal Income (Apr.)	+0.5%	+0.4%	+0.5%
	Personal Consumption (Apr.)	+0.4%	+0.1%	+0.6%

- Chicago Pur. Mgr. Survey (May 31)
- Univ. of Mich. Consumer Sentiment (May 31)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.7	6.2	6.8
Forward	5.6	5.9	6.3
2 Yr T-Note	6.2	6.4	6.8
Forward	6.2	6.3	6.5
10 Yr T-Note	6.6	6.9	7.1
Forward	6.7	6.8	6.9

* As of Thursday close.

Key Nos. in the Business Outlook

	1996 Q1	1996 Q2	1996 Q3	1996	1997
Real GDP	2.8%	4.2%	3.3%	2.6%	2.8%
Ind. Production	2.7	6.5	6.3	3.4	5.1
CPI	3.2	4.2	3.4	3.1	3.4
Profits*	20.6E	20.9	8.8	13.3	2.2
Unemployment	5.6	5.4	5.3	5.4	5.1

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Monetary Policy Is Not Tight (Part II)

- We reaffirm our conclusion that U.S. monetary policy is not tight. Buoyant credit-sensitive activity, evident most recently in April's housing start surge, belies claims that real rates are too high to permit strong growth, while the slump in M1 reflects rising use of sweep accounts.

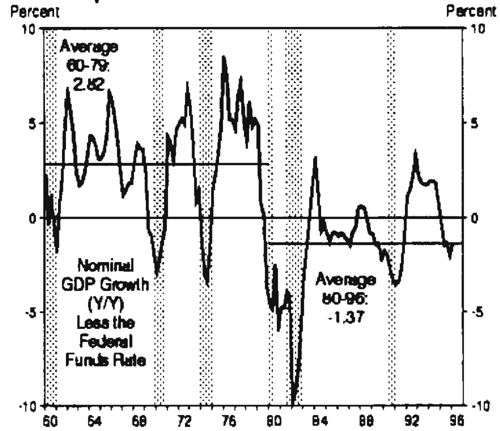
- Nor should much weight be given to the fact that the federal funds rate now exceeds GDP growth, given structural changes implying higher real rates and slower potential growth. Claims that bond vigilantes make monetary policy irrelevant are also flawed.

- The FOMC will almost certainly not change policy at its May 21 meeting. It could adopt an intermeeting directive biased toward raising rates, however.

- Favorable reports on consumer prices and labor productivity have assuaged inflation worries in financial markets. However, the potential for inflation to drift gradually higher should not be dismissed given uniformly strong reports on economic activity in areas as diverse as retail sales, industrial production, housing starts, and international trade.

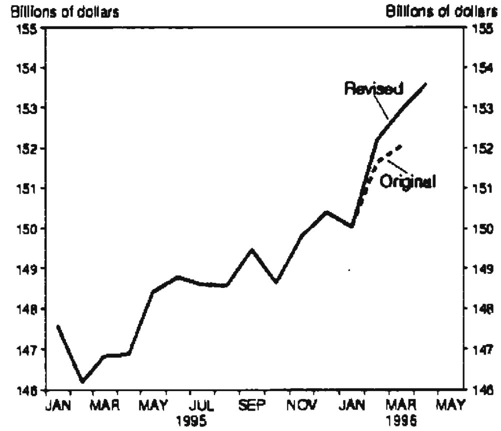
- Senator Dole's decision to step down reduces still further the already small chance of a multiyear reduction in the federal deficit.

Gap Falls For GDP - Federal Funds Rate



Source: Department of Commerce, Federal Reserve Board.

Nonauto Retail Sales



Source: Department of Commerce.

Trade Recommendations

- We would remain short September Eurodollar futures, with a target of 93.75 and a stop on a close at or above 94.55.

- For now, we would be neutral on long-term Treasuries, looking to get short should the market bounce further. We have raised the level at which we would get short the June bond futures to 111.16 from 110.00, with a stop on a close above 113.00 and an objective of 105.00.

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Issue No: 96/20
May 17, 1996

I. Weekly Wrapup

Economic and Market Overview

Prices of U.S. stocks and bonds rose early in the week as fears of an imminent rise in inflation receded. In April, consumer prices mimicked the behavior of finished goods producer prices, with the overall index advancing 0.4% but the core index inching up only 0.1%. By this latter measure, the underlying trend of U.S. inflation remains below 3%. Labor cost pressures also eased in the first quarter, as a 2.6% annualized increase in nonfarm productivity held the annualized increase in this sector's unit labor costs to just 0.6%.

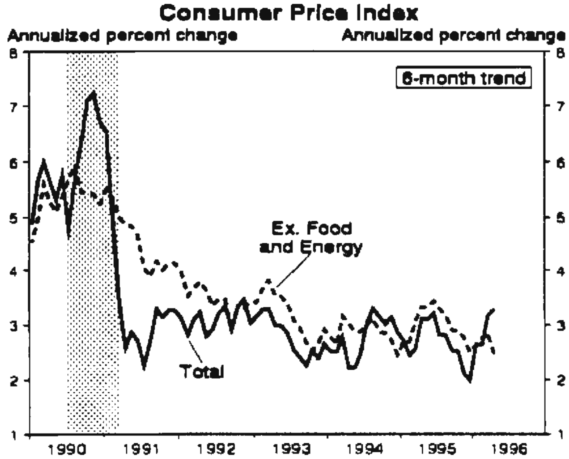
In contrast, reports on recent economic activity have uniformly revealed unexpected strength. Retail sales of goods other than autos rose 0.4% in April, from a level that was 0.6% higher than originally reported. This implies that growth in real consumer spending was stronger in the first quarter than the 3.5% initially estimated by the Commerce Departement, and that spending began the second quarter on an even firmer note. Likewise, the first quarter's trade drag proved smaller than originally thought, as revisions to the February trade deficit (now $7.0 billion compared to $8.2 billion originally) more than offset a wider-than-expected $8.9 billion deficit in March. Despite the widening in the deficit in March, longer-term trends in export and import growth point firmly to a resumption of trade balance improvement this quarter.

On the production side of the economy, housing activity continues to be surprisingly strong. Starts of new units jumped 5.9% in April, and builders continue to report favorable assessments of current conditions. Meanwhile, industrial output rose 0.9% in April. Although this bounce was largely due to the end of the General Motors strike, manufacturing output outside motor vehicles was up 0.3%. Since December, the last reading relatively clean of weather and strike distortions, manufacturing output has risen at a 4.7% annual rate. With inventories of nonauto goods flat in March, this trend is likely to persist.

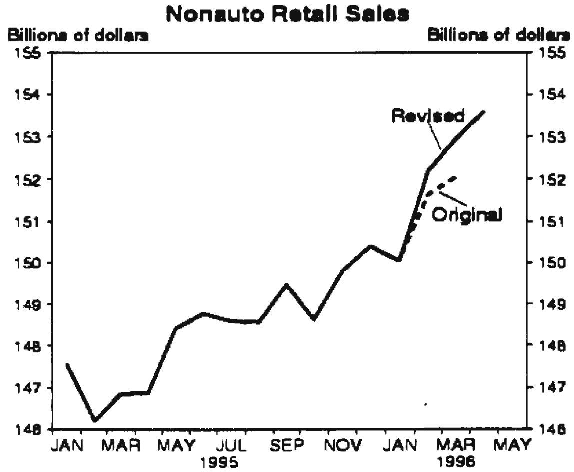
All in all, the latest data indicate that real final sales rose even faster in the first quarter than the 3.3% annual rate now on record, and the chances are high that the 2.8% growth rate for real GDP will be pushed up above 3% as well. We also remain comfortable that growth in the second quarter will be above 4% at an annual rate.

Federal Reserve Policy

Against this backdrop, the discussion at the May 21 Federal Open Market Committee meeting promises to be a lively one. The last statements reported before the blackout on public commentary surrounding FOMC meetings went into effect on May 14 revealed a predisposition to leave interest rates unchanged. However, these same sources expressed reservations about the possibility of a pickup in wage inflation and the wisdom of the last easing step undertaken in January. This is consistent with previous reports that several FOMC members — mostly regional bank presidents — now regret having acquiesced to this decision. They could succeed in pushing the entire committee to adopt a directive biased toward higher interest rates in the intermeeting period. Although such a decision would be largely symbolic, given the



Source: Department of Commerce.



Source: Department of Commerce.

committee's propensity to change rates only at formally scheduled meetings, it would mark the first step in a policy shift and could signal to financial markets — formally in early July if not leaked beforehand — that the central bank sees the current upswing in growth as a threat to the stability of inflation if it persists much longer.

Fiscal and Political Developments

Although Senator Dole had widely been expected to relinquish his day-to-day duties as Majority Leader, his decision to resign from the Senate altogether came as a surprise. It reduces still further the already small chance of a bipartisan agreement steering the federal deficit to zero by 2002. In the near term, Senate Republicans will be distracted by a leadership contest to replace Mr. Dole; once that is settled, it is unlikely that his successor will have the stature, the moderate philosophical leaning, and the negotiating skills needed to bridge the gulf between President Clinton and House Republicans. A more limited agreement on the fiscal 1997 budget remains probable, however, as neither side wants to risk the public approbation resulting from confrontational tactics on the eve of a presidential election.

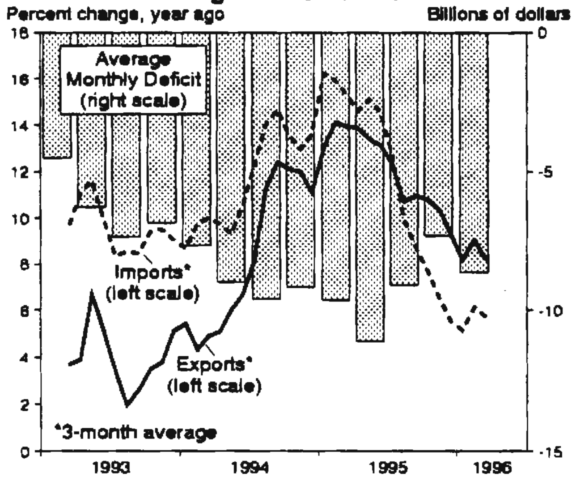
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

We remain bearish on the short-end of the curve. Although the inflation data have been good, other economic reports suggest that the economy is now rebounding smartly. Thus, we continue to believe that Fed officials will decide to tighten monetary policy by late summer to reduce the risk of the economy gradually overheating. As a result, we would remain short September Eurodollar futures, with a target of 93.75 and a stop on a close above 94.55.

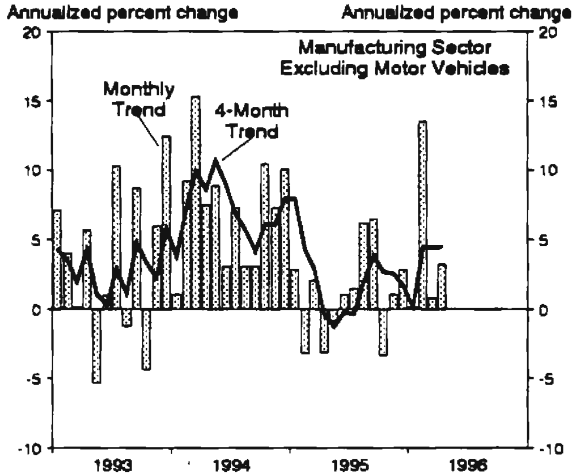
In terms of bonds, we would get short June bond futures above 111.16, with a stop on a close above 113.00 and a objective of 105.00. We have raised the level at which we would get short from 110.00 to 111.16 on June bond futures. This reflects the market's willingness to ignore evidence of economic strength. The good technical condition of the market is due, in part, to seasonal factors including heavy tax receipt inflows and the Treasury's large interest payment on May 15.

Foreign Trade Balance



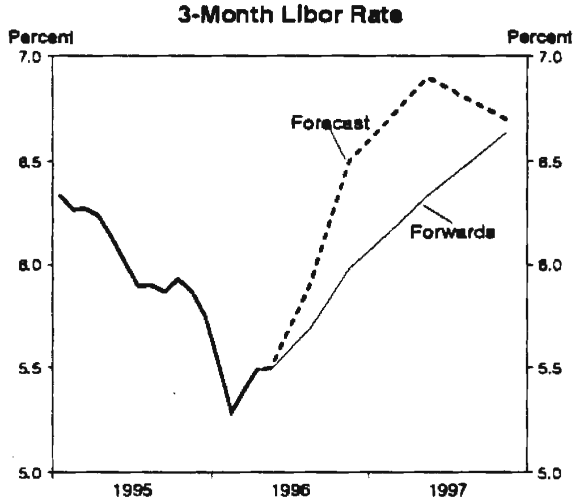
Source: Department of Commerce.

Industrial Production



Source: Federal Reserve Board.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

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II. Monetary Policy Is Not Tight (Part II)

Two months ago we argued that monetary policy is not tight (see the *U.S. Economics Analyst*, March 22, 1996). Since that time, the performance of the economy has generally been consistent with that judgment. Here we again look at this subject, weighing the evidence and extending our analysis to consider whether the gap between the growth rate in nominal GDP and the federal funds rate is a useful indicator of monetary policy and examining the role of so-called "bond market vigilantes." We continue to conclude that there is little convincing evidence that monetary policy is tight. We also conclude that the vigilantes have not displaced the monetary authorities in adjusting monetary conditions and acting as a speed governor on the economy.

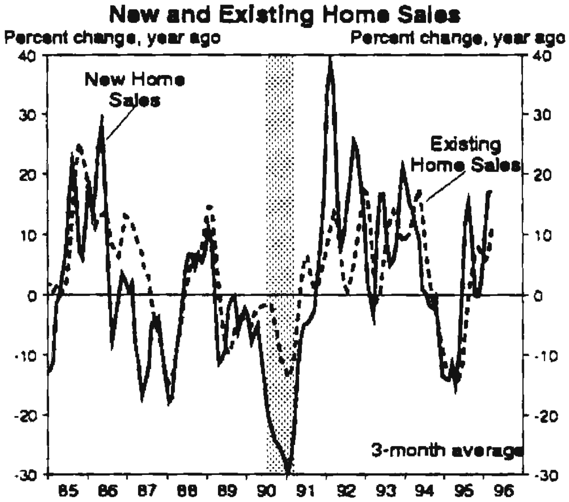
A correct assessment of the current stance of monetary policy is critical in determining the trajectory of economic growth and interest rates. If policy is tight currently, then there is no need to be worried about implications of the current rebound in economic activity for inflation and interest rates. The rebound will clearly be temporary as the tight monetary policy regime pulls the U.S. economy back to earth. If, in contrast, monetary policy is not tight, then the rebound in economic activity will not necessarily fade quickly. Instead, the growth momentum will persist, the economy will move even further beyond full employment, inflation pressures will begin slowly to develop, and Fed officials will respond by tightening monetary policy.

The Economy's Message: Policy Is Not Tight

In assessing monetary policy, the most straightforward method is to examine the performance of the interest-rate sensitive sectors and the dollar. If policy were tight one would expect to see weakness in housing activity, auto sales, and a strengthening dollar.

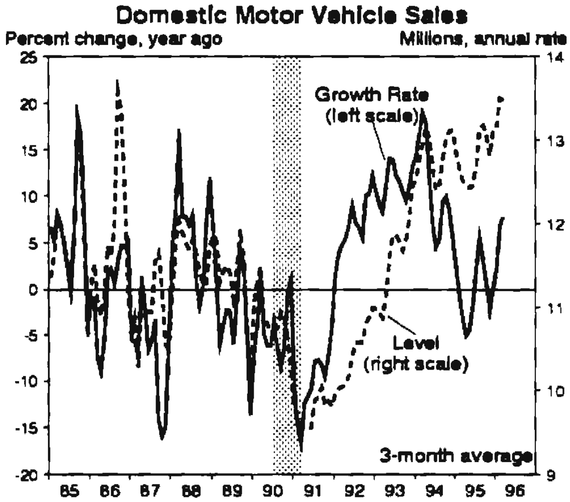
These areas do not show the type of performance consistent with a tight monetary policy regime. For housing, the 3-month moving average of new homes sales has increased by 17.1% compared to 12 months ago, and housing starts, as evidenced by April's 5.9% gain, continue to rise. Existing home sales have shown a similar uptrend. Similarly, on a 3-month moving average basis, motor vehicle sales have climbed 7.7% over the past year. Even the dollar's performance provides little evidence of a tight monetary policy regime. Despite its recovery from

New and Existing Home Sales



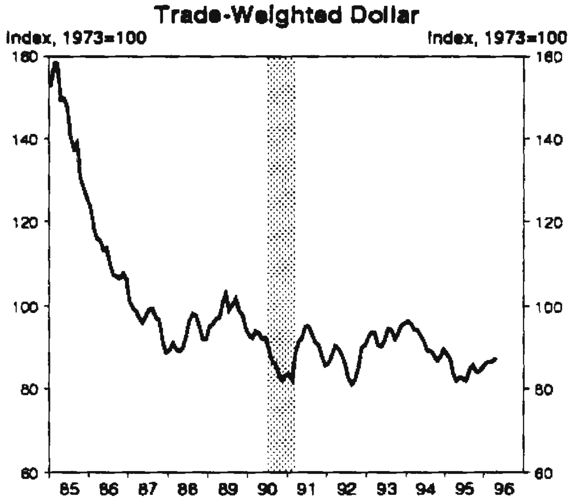
Source: Department of Commerce.

Domestic Motor Vehicle Sales



Source: Department of Commerce.

Trade-Weighted Dollar



Source: Federal Reserve Board.

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Table 1: Housing and Autos Fall Before Cycle Peaks

Economic Expansion Periods	Housing Starts Magnitude of Change	Housing Starts Duration (months)	Motor Vehicle Sales Magnitude of Change	Motor Vehicle Sales Duration (months)
May 54-Aug 57	-32.8%	31		
Apr 58-Apr 60	-21.1	13		
Feb 61-Jan 70	-24.0	74	-4.4%	14
Nov 70-Nov 73	-28.6	12	-15.3	6
Mar 75-Jan 80	-31.2	19	-17.8	19
Nov 82-Jul 90	-39.0	77	-21.8	46
Average Decline Before End of Business Cycle	-29.5%	38	-14.8%	21

Monthly data use 3-month moving averages.
Source: University of Michigan, Department of Commerce.

its trough in the spring of 1995, on a trade-weighted basis the dollar is still slightly below its yearend 1994 level. Moreover, in the case of the dollar, the mild strength that has been exhibited probably is more reflective of monetary accommodation elsewhere than stringency in the United States.

The improvement of the interest rate sensitive sectors is striking, especially given the fact that the auto and housing sectors typically peak well before the end of the business cycle and decline substantially before the onset of recession. As shown in the accompanying table, over the six prior business expansions, housing starts have declined by about 30% before the onset of recession. For motor vehicles, the average decline from its own cycle peak during the four most recent expansions has been about 15%.

The Weak Case that Monetary Policy is Tight

Three arguments are typically cited why monetary policy is currently tight:

1. *Weakness of M1 and the monetary base.*

This is not compelling because M1 and the monetary base have fallen due to the spread of sweep accounts at commercial banks and weakness in the demand for currency, which mainly reflects developments abroad. Sweep accounts temporarily move funds from other checkable deposits to savings deposits, thereby taking monies out of M1 and lowering reserve requirements and the monetary base. But this shift has no macroeconomic consequence. In fact, the broader monetary aggregates, M2 and M3, continue to grow relatively quickly.

Table 2: Potential GDP Growth Has Fallen

	1960s	1970s	1980s	1990s
Productivity Growth	2.9%	1.9%	1.1%	1.0%
Labor Force Growth	1.7	2.7	1.7	1.1
Potential GDP	4.6	4.6	2.7	2.1

Source: Our calculations.

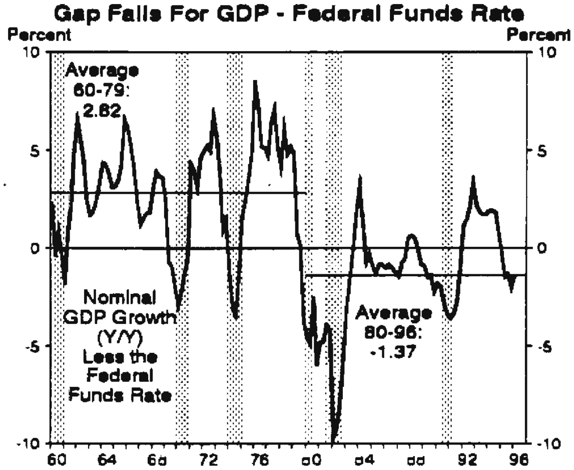
2. *The real federal funds rate is high.*

Currently, the real federal funds rate is about 2½%, slightly above its 1960-1995 average of 2%. We reject the idea that this signifies tight monetary policy for three reasons. First, the difference is minor relative to the variability of the real federal funds rate over the past thirty-five years. The standard deviation is 2.3 percentage points, which is huge relative to the one-half percentage point gap between the current real rate and the long-term average. Second, the conclusion is very sensitive to the time period chosen. For example, over the 1980-1995 period, the average real federal funds rate is 3.3% compared to 0.9% during the 1960-1979 period. Third, the later period may be the more appropriate one for comparison purposes. In particular, the domestic savings pool is smaller today than in the 1960s and 1970s, and the U.S. is much more dependent on foreign capital. Together, these three reasons suggest that the real federal funds rate is a very imprecise measure of the stance of monetary policy.

3. ***The nominal GDP growth rate is below the nominal federal funds rate.***

We reject this standard mainly because a given gap doesn't mean what it used to. That is because two developments have been shrinking this spread over time. First, the potential GDP growth rate has fallen significantly over the past 20 years. This implies a lower average nominal GDP growth rate, holding inflation constant. For example, in the 1960s and 1970s, potential real GDP growth averaged more than 4% per year, compared to about 2% currently. Second, as discussed above, there is some evidence that the real equilibrium federal funds rate has increased over time.

Gap Falls For GDP - Federal Funds Rate



Source: Department of Commerce, Federal Reserve Board.

As a result, over the 1980-1995 period, the gap was -1.4% as real GDP growth was generally below the real federal funds rate. This compares to the 1960s and 1970s, when real GDP growth exceeded the real federal funds rate by a substantial margin, resulting in an average gap of 2.8%.[1]

Thus, a negative gap is not unusual, but instead now should be considered the norm. Because growth tends to be slower and the real equilibrium interest rate higher, a negative gap is no longer a good indicator of a stringent monetary policy.

The gap between the nominal GDP growth rate and the nominal federal funds rate is also suspect as a guide to policy because it more reflects the strength or weakness of the economy at any particular point in time, rather than the stance of monetary policy. To see this, consider that the size of the gap explains very well the contemporaneous real GDP growth rate. The bigger the gap, the stronger the current pace of economic activity. In contrast, the gap has no explanatory power in predicting the real GDP growth in the future. If the gap were a good measure of monetary stringency or easiness, then one would expect the gap to have some relationship with growth one year ahead. After all, if policy is tight currently, then one would expect growth to be lower one year later when that tight monetary policy had time to act. But no such causal relationship is evident.

Support for the gap as an indicator of monetary stringency is likely to go the way of the yield curve, which was cited as evidence that policy was tight earlier this year before the yield curve steepened. In the first quarter of the year, the federal funds rate averaged 5.4% compared to annualized nominal GDP growth in the quarter of 5.0%. In the second quarter, a further pickup in growth combined with temporary commodity price pressures appears likely to push up the annualized nominal GDP growth rate above 7%. At that point, the nominal GDP growth rate will be well above the nominal fed funds rate. This will signify very little, but at least should help to lay to rest the idea that the gap between nominal GDP growth and the nominal federal funds rate is a good guide to the stance of monetary policy.

Bond Market Vigilantes and the Role of the Fed

Some argue that "bond market vigilantes" make the stance of monetary policy increasingly irrelevant. According to this argument, because the vigilantes push bond yields up when the economy threatens to overheat, this tightens monetary conditions sufficiently so that the Fed does not have to act.

While we would be the first to argue that a rise in bond yields effectively tightens monetary conditions, all else equal, we do not agree with the conclusion that bond market vigilantes eliminate the need for central bankers to adjust monetary policy. The fallacy of the bond market vigilante story is that bond participants generally push up bond yields precisely when their expectations about the future path of short-term rates changes and they start to expect short-term rates to rise in the future. To argue that short-term rates do not need to rise because the bond market vigilantes have pushed long-term rates up requires that the vigilantes don't understand that the rise in long rates eliminates the need for higher short-term rates. It means that the bond market vigilantes have to be irrational in the sense that they consistently price in monetary policy tightening that does not occur.

Although the bond market often gets it wrong, it strains credibility to believe that bond market participants would consistently overreact. Instead, one would expect that market participants would learn quickly from their past mistakes. Under such circumstances, the average degree of tightening expected and the average tightening that was actually implemented would tend to converge over time. The idea of bond market vigilantes obviating the need for Fed tightening makes good copy for the financial press, but is bad economic analysis because it requires a consistently irrational market response over time.

Bill Dudley

[1] We can use either real or nominal variables because inflation falls out when calculating the gap.

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Key U.S. Economic Data

	Latest Monthly Data '96 Apr	'96 Mar	'96 Feb	'96 Jan	6 Mo Trend	12 Mo Trend	Next Release
Nonfarm Payrolls (ch. thousands)	2	178	631	-146	170	143	Jun 7
Unemployment Rate (%)	5.4	5.6	5.5	5.8	5.6	5.6	
Index of Hours Worked (% ch)	-0.5	0.1	2.9	-1.7	0.1	0.8	
Average Hourly Earnings (% ch)	0.6	0.2	0.1	0.3	2.8	3.1	
Producer price finished goods index (% ch)	0.4	0.5	-0.2	0.2	3.9	2.6	Jun 11
Excluding food and energy	0.1	0.1	0.1	-0.1	1.3	1.8	
Consumer price index (% ch)	0.4	0.4	0.2	0.4	3.3	2.9	Jun 12
Excluding food and energy (% ch)	0.1	0.3	0.2	0.3	2.5	2.7	
Retail sales (% ch)	-0.3	0.5	2.1	0.0	8.0	6.0	Jun 13
Excluding motor vehicles (% ch)	0.4	0.5	1.4	-0.2	6.8	4.6	
Industrial Production (% ch)	0.9	-0.5	1.2	-0.2	3.9	2.6	Jun 14
Manufacturing	1.3	-0.8	1.3	-0.2	3.9	2.7	
Capacity utilization (%)	83.0	82.5	83.1	82.4	82.8	83.2	Jun 14
Manufacturing	82.0	81.2	82.2	81.4	81.8	82.2	
Housing Starts (annual rate, thousands)	1519	1435	1514	1453	1467	1417	Jun 18
Single-family	1214	1165	1183	1146	1165	1127	
Trade balance (billions, monthly)	--	-8.9	-7.0	-9.9	-8.0	-9.0	Jun 20
Merchandise	--	-14.8	-12.6	-15.1	-13.4	-14.4	
Factory Orders (% ch)	--	1.5	-1.5	-0.2	1.9	3.1	Jun 4
Durable Goods	--	2.5	-2.5	-0.6	0.1	3.7	May 24
Personal Income (% ch)	--	0.5	0.8	0.1	5.5	5.2	May 31
Wages and Salaries	--	0.4	1.0	-0.2	4.9	5.0	
Purchasing Managers' Index (%)	50.1	46.9	45.2	44.2	46.4	47.1	Jun 3
Consumer Sentiment U Mich (Feb 66=100)	92.7	93.7	88.5	89.3	90.6	91.3	May 31
Conference Board (1985=100)	105.3	98.4	98.0	88.4	98.5	98.7	May 28

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- The FOMC meets on Tuesday, May 21. Officials appear predisposed to keep short-term rates unchanged, although they could adopt a directive biased toward tightening. Minutes from the March meeting (to be released Friday, May 24) will offer more insight into the FOMC's assessment of the sustainability of current economic momentum and risks of inflation.
- Large swings in bookings for defense equipment (down), commercial aircraft (down), and motor vehicles (up) will make April's durable goods report trickier than normal to read. Beneath these volatile categories, orders probably registered solid increases (May 24).
- The surge in final settlements on 1995 tax liabilities already evident in the daily Treasury cash statistics strongly suggests that April's federal surplus will easily surpass last year's $49.7 billion record (May 21).

Economic Releases and Other Events

Date	Indicator	Estimate GS	Estimate Consensus	Last Report
May 21	Federal Budget Balance (Apr. '96)	+$61.0 Bil.	n.a.	+$49.7 Bil.
May 24	Durable Goods Orders (Apr.)	-0.2%	n.a.	+2.5%

- FOMC Meeting (May 21)
- Import and Export Prices (May 22)
- Kansas City Fed Survey (May 22)
- Treasury Announcement: 2- & 5-yr Notes (May 22)
- March FOMC Minutes (May 24)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.7	6.2	6.8
Forward	5.6	5.8	6.2
2 Yr T-Note	6.2	6.4	6.8
Forward	6.1	6.3	6.5
10 Yr T-Note	6.8	6.9	7.1
Forward	6.7	6.8	6.9

* As of Thursday close.

Key Nos. in the Business Outlook

	1996 Q1	1996 Q2	1996 Q3	1996	1997
Real GDP	2.8%	4.2%	3.3%	2.6%	2.8%
Ind. Production	2.7	6.5	6.3	3.4	5.1
CPI	3.2	4.2	3.4	3.1	3.4
Profits*	20.6E	20.9	8.8	13.3	2.2
Unemployment	5.6	5.4	5.3	5.4	5.1

* Excluding inventory profits; adjusted for depreciation distortions

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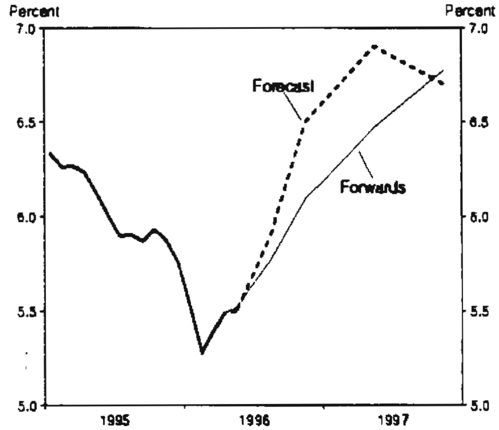
U.S. Economics Analyst

Our Views Have Changed

The Profit Share of Income: Harmony Restored?

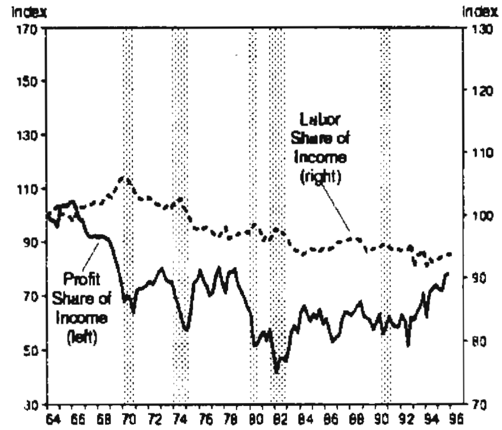
- The strength of demand coupled with signs that wage inflation is beginning to creep up have caused us to make some modest changes to our GDP and interest rate forecasts.
- We are raising our second quarter real GDP growth estimate to 4.2% from 3.2%, previously.
- We expect the Fed to tighten monetary policy a bit more quickly than before, with 25 basis points of tightening by late summer, and the fed funds rate rising to 6% by yearend. We also expect bond yields to rise slightly more quickly, with 30-year Treasury bond yields moving above 7% on a sustainable basis around midyear.
- The profit share of income in the U.S. has climbed sharply since 1982. However, this rise should not be considered an aberration. The rise just brings back the profit share of income to the "normal" level of the 1960s.
- Going forward, further gains in the profit share appear unlikely. Many of the forces that have pushed the profit share up such as corporate restructuring and import penetration appear to be fading and offsetting forces, such as wage pressures, are increasing. This implies that future profit gains are likely to slow to be more in line with nominal GDP growth. Of course, S&P 500 earnings growth will be stronger as share buybacks and the leverage inherent in operations abroad boost earnings per share.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

Income Shares Since 1964



Source: Department of Commerce.

Trade Recommendations

- We would remain short September Eurodollar futures, with a target of 93.75 and a stop on a close at or above 94.55.
- We believe that long-term Treasuries are likely to trade in a range. We would look to get short the June bond futures above 110.00 with a stop on a close above 111.00 and long below 107.24, with a stop on a close below 106.24.

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Issue No: 96/19
May 10, 1996

I. Weekly Wrapup

Economic and Market Overview

The strength of real private final sales in the first quarter GDP report (up 4.6% at an annual rate), evidence that the inventory adjustment process is ending, and signs of incipient wage pressures have caused us to change our economic growth and interest rate projections modestly. We now are projecting real GDP growth of 4.2% in the second quarter, up from 3.2% previously; that Fed officials will push up their federal funds rate target to 6.0% by yearend, from our previous 5.75% forecast; and that 30-year T-bond yields will climb above 7% on a sustainable basis around midyear. Full details of our GDP and interest rate forecasts are contained in our April/May *Pocket Chartroom*.

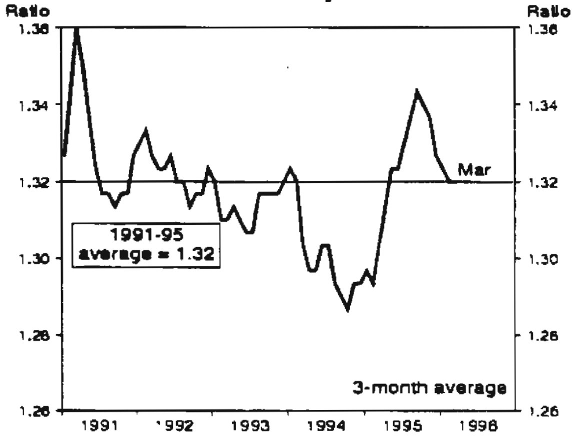
Bond yields have moved little over the past week, starved for fresh information about business activity and pricing conditions. Reduced variability in prices, coupled with the prospect of a huge government coupon interest payment on May 15, enabled market participants to absorb $33 billion of Treasury note sales without difficulty.

Private and official data as well as anecdotal surveys continue to suggest above-trend economic growth in the near term. Wholesalers trimmed inventories for the second consecutive month in March, by 0.1%, marking the first back-to-back declines of any magnitude since the expansion's earliest days in mid-1991. The inventory-to-sales ratio in this sector has now reversed all of the prior year's rise. Reduced wholesale stocks leave a bit more room for domestic output growth this quarter and next, especially if goods demand sustains the solid upward trend that emerged during the late winter. In that regard, strength in the weekly surveys of chain-store sales results is encouraging, whereas the weak year-to-year increase in their aggregate sales for April seems to be mostly a function of a much earlier Easter this year. Moreover, the four-week average of initial jobless benefit claims hit a nine-month low in early May. This is consistent with other evidence of strengthening employment and income gains.

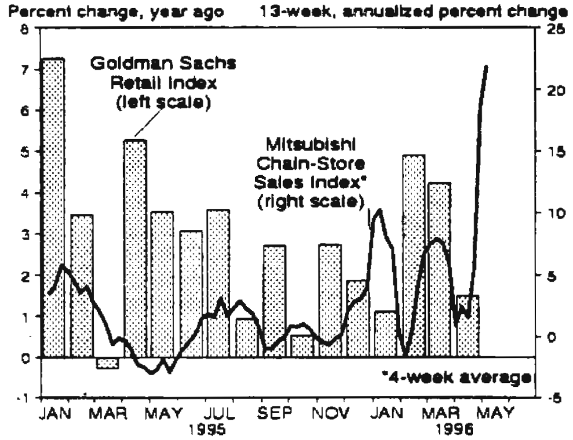
Recent commodity price spikes notwithstanding, it is too early to expect a clear inflation upswing to have developed. Soaring energy costs were responsible for roughly three-fourths of last month's 0.4% increase in producer prices for finished goods; excluding food and energy, finished producer goods quotes were up just 0.1% on the month and 1.8% annualized over the past year. On the same core basis, intermediate goods declined by 0.2%, the seventh consecutive monthly decline, and have been weaker since last October than in any comparable period in the 22-year history of the index. Inflationary pressures are likely to build over the next year as unit labor costs accelerate and squeeze corporate profit margins, but this is a slow process that is now in only its early stages.

Federal Reserve Policy

With only a week and a half remaining before the May 21 Federal Open Market Committee meeting, it seems clear that a solid majority prefers to wait for more information before considering an interest rate change. A growing minority, however, probably will soon begin laying the rhetorical foundation for renewed monetary tightening later this year. It is conceivable that this group will be sufficiently large



Source: Department of Commerce.



Source: Goldman Sachs. Mitsubishi Bank/Wertheim Schroder.

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and vocal at the next meeting to gain adoption of a formal policy bias toward credit firming, though normally such a decision would not become public for another six weeks. The primary rationale for greater credit restraint would be to preempt a buildup in wage pressures at an advanced stage of the business cycle. For this reason, those who lean toward higher rates can be expected to emphasize tightening labor supplies and the risk that resources will become increasingly scarce if economic growth remains on an above-average path.

Fiscal and Political Developments

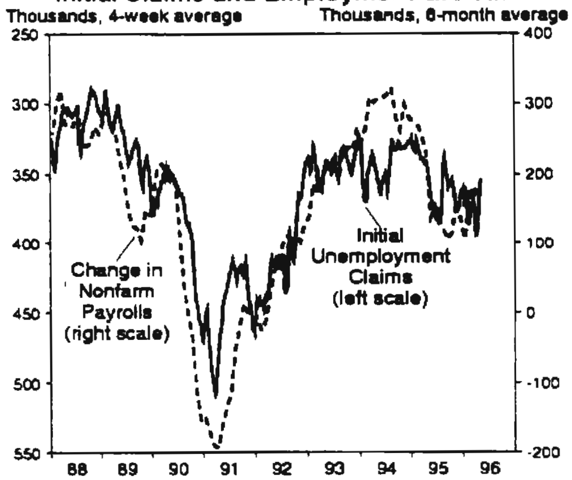
Republican leaders have unveiled their latest plan for balancing the federal budget by fiscal 2002. As anticipated, they intend to break the fiscal legislative process this year into a few pieces, beginning with a bill covering welfare and Medicaid, which they aim to complete within a month. Medicare and taxes — two highly charged topics — will be held back, and might not even be addressed seriously if the first package is vetoed. Meanwhile, the Clinton Administration's strategy is to be relentlessly upbeat about the prospects of a broad, deficit-eliminating budget deal if only the GOP would return to face-to-face bargaining with the president. These calls for renewed summitry will probably go unheeded, as most Republican leaders still perceive the White House as somewhat disingenuous on this subject and don't wish to get trapped into another unfruitful talkathon.

Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

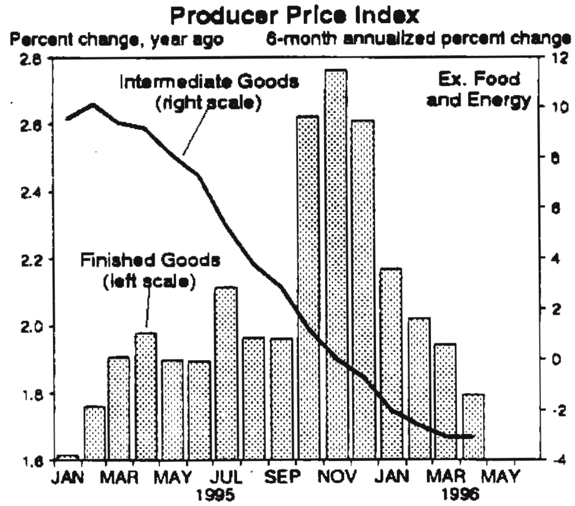
We continue to be bearish on the short-end of the curve as we believe that Fed officials will be forced to tighten monetary policy more quickly and aggressively than expected. However, a policy move at the May 21 FOMC meeting is very unlikely. As a result, we would remain short September Eurodollar futures, with a target of 93.75 and a stop on a close above 94.55. In contrast, we believe that the long end is likely to trade in range for awhile. That is because the economic news following the April retail sales report is likely to be more ambiguous than the data of the past few weeks. As a consequence, we would look to get short the June bond futures above 110.00, with a stop on a close above 111.00 and long below 107.24, with a stop on a close below 106.24, which is the low close of the recent sell-off.

Initial Claims and Employment Growth



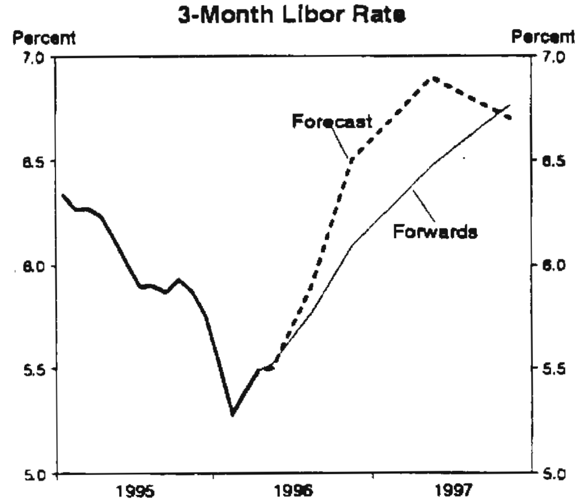
Source: Department of Labor.

Producer Price Index



Source: Department of Labor.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

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II. The Profit Share of Income: Harmony Restored?

For more than a decade, corporate profits have departed from their cyclical pattern and have turned in a strong secular performance, nearly doubling their share of income since 1980. The profits amassed over this period have not been heavily concentrated in any particular sector. Instead, it seems clear that fundamental, economy-wide changes are responsible.

In the meantime, the labor share of income has declined. Profits have ballooned at the expense of workers, as the benefits of restructuring have flowed mainly to the bottom line. Productivity increases have also had unevenly distributed benefits, encouraging profit growth without proportionately benefiting workers.

All this is true. However, we strongly disagree with the conclusions drawn by some about the implications of these developments. Some argue that the increase in the profit share is temporary. Now that the labor market has tightened, they argue, workers will regain share and depress profits.

We disagree because the shifts in income since 1980 have really been a return to "fair shares", rather than a temporary deviation. In fact, the early 1980's were the true aberration, in that profits were depressed. This low profit share in 1980 then triggered forces, like the corporate restructuring process, that pushed the shares back toward their old equilibrium. If this view is correct, then there should be no inherent forces for reversal of profit gains. In addition, it implies that profits cannot be expected to continue growing faster than other components of income, but instead are likely to settle into a range near their current share of GDP.

The Profit Crescendo

Since 1982, profits have been uniformly strong relative to GDP. Accounting for only 4.7% of GDP in 1982 Q1, profits claimed 8.4% of income by 1995 Q4. The upbeat note has been sounded across sectors, with profits as a percentage of income rising from 0.3% to 1.9% in the financial sector, 3.5% to 5.6% in the non-financial sector, and 0.8% to 1.0% in net foreign receipts.

Prior to 1982, profits had played second chair, keying off the economy's swings. Thus, pretax profits (adjusted to remove inventory profits and to show straight-line depreciation on replacement costs) tended to decline 17-27% prior to and during contractions. This range was notably tight, given the general volatility of profits. Profits also tended to rise sharply during the initial leg of an expansion, normally turning one quarter before the trough in real GDP and rebounding 34.5% on average during the following four quarters.

Yet, in 1982, profits grew tired of looking to GDP for direction and began their solitary upward trek. For instance, during the 1990-1991 recession, profits actually rose during all but one quarter, for a total gain of 0.2%. The one setback, during the third quarter of 1990, saw profits declining only 11%, a departure from their previous cyclical pattern. Such delinkage was further evidenced when profits did not rebound sharply once the recession ended (in part because the economic recovery was weak). Apart from these anomalies, cumulative profit growth from 1982-95 still bypassed historical norms, even relative to the 1961-69 period of uninterrupted, positive GDP growth. Controlling for differences in inflation, capacity utilization or trade-weighted dollar environments, profit performance has still been better-than-expected.

Increases in the profit share of income meant that at least some sectors had to be losing share. Labor income, as measured by total compensation, was the primary loser, surrendering two percentage points of income share, dropping to 58% share in 1995 from 60% of income in 1982. Driving the loss of share were real wage declines, falling 5% during the 82-90 expansion, another 2% during the 90-91 recession, and remaining virtually stagnant since. Although real wage data (as opposed to total compensation) overstate the degree of labor losses, the overall message remains: gains at the bottom line have not flowed through to workers.

Harmony Restored?

We doubt that the upsurge in the profit share of income will be reversed. This is because the uptrend appears to have restored equilibrium. In fact, the early 1980s appear to be the true aberration. After all, in the early 1980s, profits were depressed, registering their lowest share of income in the post-war period. If we instead use the 1960s as a base, the 1982-95 period represents a process of harmony being restored.

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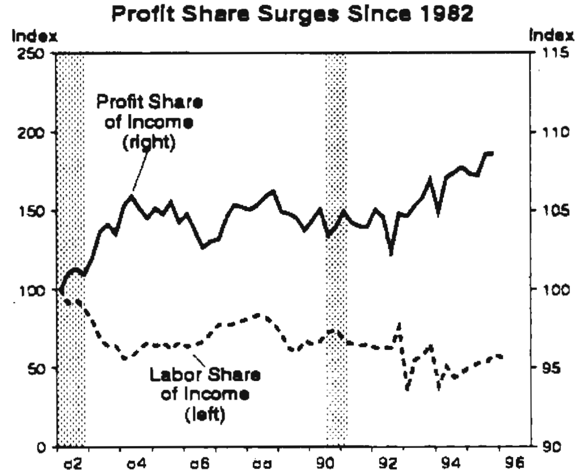
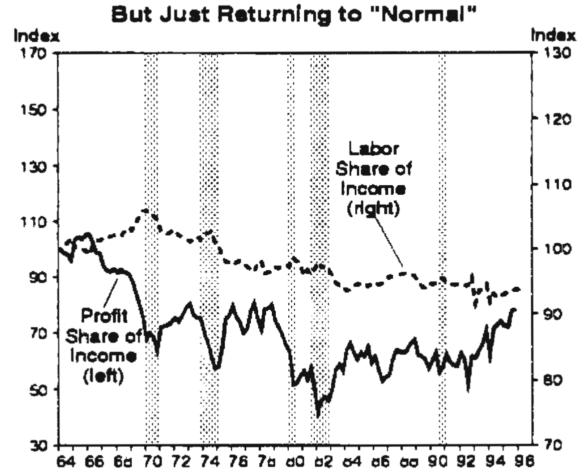
The accompanying two charts illustrate the problem of choosing a base. In the first, the profit and labor shares of income are both indexed according to their 1982 levels. From this standpoint, the post-82 gap between profits and labor income growth has caused wide divergence from the starting point. In the second chart, however, we see that by indexing with 1960 levels, the 1982-95 period of profit gains looks like the closing of an earlier gap, i.e. a return to "normal" shares rather than a divergence.

Profit Share Surges Since 1982



Source: Department of Commerce.

But Just Returning to "Normal"



Source: Department of Commerce.

We believe that the 1960s represent the "normal" shares of income for three reasons. First, an 8-10% profit share was the norm during three separate postwar business cycles from 1958 to 1973. Second, the profit share losses during the 1970s can be, in part, explained by the rise in inflation and higher energy prices which depressed returns on capital. High inflation caused taxable income to be overstated because depreciation did not keep up with inflation. Higher energy prices also hurt profits by causing less energy-efficient capital to become less productive. Third, when the shares of income shifted toward labor during the 1970's, disruptive forces were unleashed. For example, U.S. cost competitiveness declined. The 1980's restructuring wave could be viewed as one consequence that acted to push the shares of income back toward equilibrium.

An examination of the forces that have caused a widening profit share of income also suggests that the profit/labor shares are likely to settle into a range near current levels. This is because the forces which have been at work should soon stabilize.

As we see it, the profit share of income has climbed mainly due to four forces:

1. **Restructurings boosted profits while generating labor uncertainty.** Downsizings have doubtless been a source of profit gains. And they have also pressured labor income growth, by causing a sea change in various labor markets. For example, white collar workers saw their displacement rate rise from 2.6% in the early 1980's to 3.6% a decade later. In the blue collar market, although the overall displacement rate did not rise, those who lost their jobs were often structurally replaced--for instance, by technology or higher skilled workers. These changes created uncertainty, causing workers to lower their "acceptable wage" floor. Thus, displaced workers typically rejoined the workforce with lower earnings--7.7% on average for white collar workers and 10.9% for manufacturing workers.

2. **Below trend capital to labor ratios.** During the 1980s a sharp slowing in the growth rate of the capital stock pushed the capital to labor ratio about 15% below the level implied by the 1960-75 trend. This in turn meant that capital became relatively more scarce, boosting returns on capital. Labor, on the other hand, became less scarce during this period.

3. **Import competition exacerbating wage declines in high penetration industries.** In industries such as food or durable industrial supplies and materials, where import penetration topped 15% by the early 1980s, real wages dropped by an average of 13.0% from 1980 to 1993. In industries with lower import

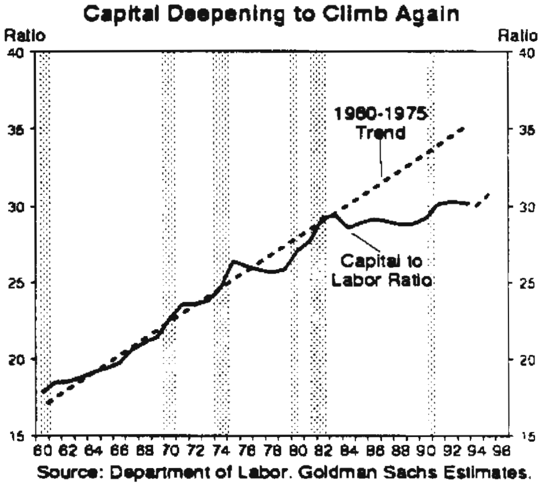
penetration, such as the non-durable industrial supplies arena, real wages fell by only half as much, in line with the overall average decline. Finally in services, where imports are quite rare, real wages remained level throughout the 1980s.

4. **Demographic changes, such as the rise in female participation.** The U.S. jobs market absorbed a large increase in the number of female workers between 1980 and 1994, as the female participation rate rose from 50.9% to 58.8%. According to the Census Bureau, females of the same age and education level earn approximately 35%-40% less than their male counterparts. If this is true, the compositional shift to a higher proportion of female workers would by itself be sufficient to cause a 2.0% drop in real wages over the 1980-1994 period.

Most of the forces cited should stabilize in coming years. The restructuring process, for example, appears unlikely to intensify further as most industries have now gone through at least one round of corporate slimming and even regulated industries such as banking, insurance, and telecommunications are now working hard at cost reduction. Import pressures should also be stabilizing, as the heightened competitiveness of the U.S. helps to lower our trade deficit. Finally, female participation rates have leveled off.

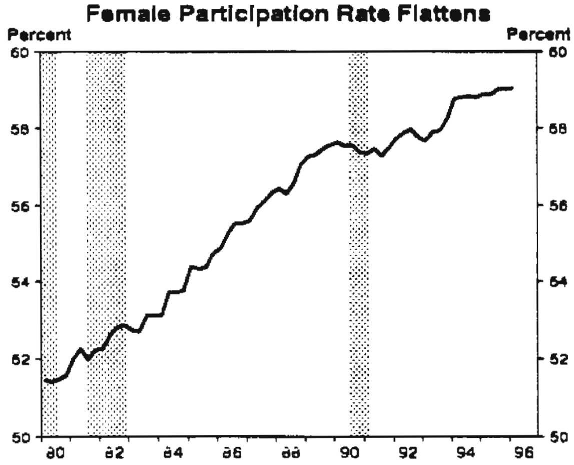
The one force that is likely to reverse is the capital to labor ratio. Growth in the capital stock has already turned up and should climb further as the pool of domestic savings rises, funding further investment. At the same time, growth of the labor force should be restrained, now that the baby boom bulge has been absorbed. This suggests that capital will become less

Capital Deepening to Climb Again



Source: Department of Labor. Goldman Sachs Estimates.

Female Participation Rate Flattens



Source: Department of Labor.

scarce, limiting the likelihood of a further rise in the profit share of income.

Financial Market Implications

Stabilization of the profit share of income over the long-term, implies that profits are not likely to continue to outpace gains in nominal GDP. This implies a much slower growth rate, relative to the 9.6% average during the 1982-95 period. This, however, does not mean that the equity bull market is over yet. In particular, S&P 500 earnings are likely to continue to rise faster than nominal GDP for two reasons. First, share buybacks will tend to boost earnings per share faster than profits. Second, companies with foreign operations are likely to have more earnings leverage as growth in Europe and Japan revives, pushing earnings up faster than profits grow in the U.S. economy alone.

A second consequence is that as pressures on labor stabilize, labor income should resume a more cyclical pattern. This means that inflation pressures may become more evident, relative to the 1982-95 period, with negative implications for fixed income markets.

Jill Jacobs

Goldman Sachs

Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 Apr	'96 Mar	'96 Feb	'96 Jan	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	2	178	631	-146	170	143	Jun 7
Unemployment Rate (%)	5.4	5.6	5.5	5.8	5.6	5.6	
Index of Hours Worked (% ch)	-0.5	0.1	2.9	-1.7	0.1	0.8	
Average Hourly Earnings (% ch)	0.6	0.2	0.1	0.3	2.8	3.1	
Producer price finished goods index (% ch)	0.4	0.5	-0.2	0.2	3.9	2.6	Jun 11
Excluding food and energy	0.1	0.1	0.1	-0.1	1.3	1.8	
Consumer price index (% ch)	--	0.4	0.2	0.4	3.2	2.8	May 14
Excluding food and energy (% ch)	--	0.3	0.2	0.3	2.9	2.9	
Retail sales (% ch)	--	0.1	1.9	0.0	6.6	5.2	May 14
Excluding motor vehicles (% ch)	--	0.3	1.1	-0.2	3.5	3.4	
Industrial Production (% ch)	--	-0.5	1.3	-0.3	1.1	1.3	May 15
Manufacturing	--	-0.8	1.5	-0.3	0.8	1.1	
Capacity utilization (%)	--	82.5	83.2	82.3	82.8	83.2	May 15
Manufacturing	--	81.4	82.3	81.3	81.8	82.3	
Housing Starts (annual rate, thousands)	--	1447	1505	1453	1440	1398	May 16
Single-family	--	1159	1175	1146	1145	1110	
Trade balance (billions, monthly)	--	--	-8.2	-9.9	-8.0	-9.2	May 17
Merchandise	--	--	-13.8	-15.1	-13.4	-14.5	
Factory Orders (% ch)	--	1.5	-1.5	-0.2	1.9	3.1	Jun 4
Durable Goods	--	2.5	-2.5	-0.6	0.1	3.7	May 24
Personal Income (% ch)	--	0.5	0.8	0.1	5.5	5.2	May 31
Wages and Salaries	--	0.4	1.0	-0.2	4.9	5.0	
Purchasing Managers' Index (%)	50.1	46.9	45.2	44.2	46.4	47.1	Jun 3
Consumer Sentiment U Mich (Feb 66=100)	92.7	93.7	88.5	89.3	90.6	91.3	May 17
Conference Board (1985=100)	105.3	98.4	98.0	88.4	98.5	98.7	May 28

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- The retail sales report for April is likely to show continued strength in consumer spending (May 14). Substantial upward revisions to March retail sales also appear likely.
- Consumer prices in April are likely to be boosted by the sharp upward surge in gasoline prices (May 14). Elsewhere, however, prices should advance only moderately.
- Industrial production in April will rise sharply due to the settlement of the GM strike (May 15). Outside of motor vehicles, however, manufacturing output in April should show little change.
- Housing starts for April should decline in response to the rise in mortgage rates since the beginning of the year (May 16). But the falloff should be gradual given that the rise in mortgage rates (quarter-over-quarter) has not been that large and housing activity has become less sensitive to changes in interest rates.
- The trade balance for March should show improvement, as imports fall by about 1%-1.5% and exports rise by about 1.5%-2% (May 17). Although domestic demand in Europe is weak, among the other major U.S. trading partners it has generally strengthened.

Economic Releases and Other Events

		Estimate		
Date	Indicator	GS	Consensus	Last Report
May 14	Consumer Price Index (Apr.)	+0.4%	+0.4%	+0.4%
	Ex. Food and Energy (Apr.)	+0.3%	+0.2%	+0.3%
	Retail Sales (Apr.)	+0.3%	+0.3%	+0.1%
	Ex. Auto (Apr.)	+0.9%	+0.3%	+0.3%
May 15	Industrial Production (Apr.)	+0.7%	+0.3%	-0.5%
	Capacity Utilization (Apr.)	82.8%	82.6%	82.5%
	Business Inventories (Mar.)	+0.2%	0.0%	+0.1%
May 16	Housing Starts (Apr.)	-0.5%	-1.5%	-3.9%
	Non-Farm Productivity ('96 IP)	+3.5%	n.a.	-0.5%
May 17	Trade Balance (Mar.)	$-7.0 Bil	$-8.3 Bil	$-8.2 Bil

- Atlanta Fed Survey (May 14)
- Homebuilders' Survey (May 15)
- Philadelphia Fed Survey (May 16)
- Prel. Univ. of Mich. Consumer Confidence (May 17)
- Treasury Announcement: 1-yr. Bill (May 17)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.7	6.2	6.8
Forward	5.7	6.0	6.4
2 Yr T-Note	6.2	6.4	6.8
Forward	6.3	6.5	6.7
10 Yr T-Note	6.8	6.9	7.1
Forward	6.9	7.0	7.1

* As of Thursday close.

Key Nos. in the Business Outlook

	1996				
	Q1	Q2	Q3	1996	1997
Real GDP	2.8%	4.2%	3.3%	2.6%	2.8%
Ind. Production	2.7	6.5	6.3	3.4	5.1
CPI	3.2	4.2	3.4	3.1	3.4
Profits*	20.6E	20.9	8.8	13.3	2.2
Unemployment	5.6	5.4	5.3	5.4	5.1

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Labor Costs Key to the U.S. Inflation Outlook

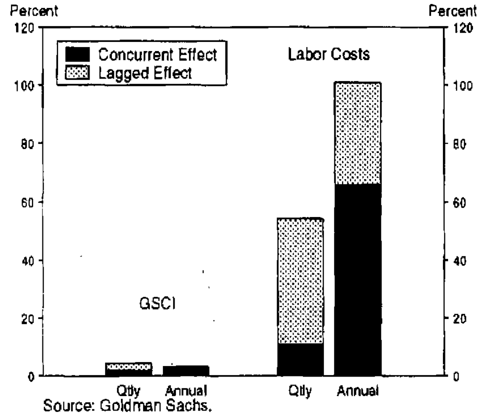
- Inflation will probably move up in the next year or so, but not primarily because of the commodity price increases that have grabbed all the attention in financial markets. The real threat is incipient upward pressure on unit labor costs, inasmuch as 100% of these cost increases pass through to retail prices, versus less than 5% for commodities.

- The subordinate role of commodity prices as an inflation driver does not invalidate investment in commodities as an asset class. Returns on the Goldman Sachs Commodity Index should benefit from additional increases in commodity prices, expectations of inflation, and unusually large gaps between spot and futures prices.

- The latest data, though sparse, are consistent with our expectations of improving business activity, led by export growth. Several key reports, on employment, factory conditions, first-quarter GDP growth, and labor costs, are due for release in coming days.

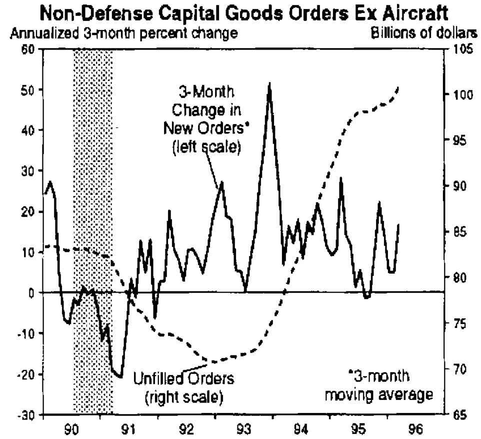
- Now that fiscal 1996 spending levels for federal programs finally have been settled, congressional leaders are focused on how to structure their budget strategy for this election year. A revival of sweeping deficit-reduction talks between the White House and Congress remains doubtful; instead, the joint fiscal resolution likely will call for several bills dealing with budget issues in a piecemeal fashion.

Pass-Through From Commodities and Labor Costs to CPI



Source: Goldman Sachs.

Non-Defense Capital Goods Orders Ex Aircraft



Source: Department of Commerce.

Trade Recommendations

- We would remain short September Eurodollar futures, with a target of 94.00 and a stop of 94.55. The likelihood of a tightening by September remains substantially higher than what is currently priced into money market rates.

- We would remain neutral on the Treasury bond market. Economic strength makes the medium-term outlook for bonds troublesome. However, over the nearer term, we believe that the anxiety about higher commodity prices as a harbinger of a rise in inflation is overdone.

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Issue No: 96/17
April 26, 1996

Goldman Sachs

U.S. Economics Analyst

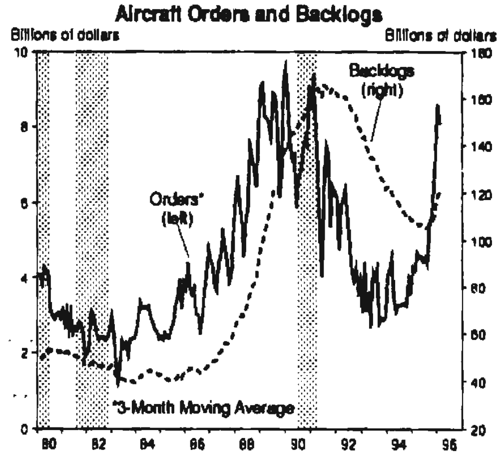
Planes, Grains, and GDP Growth

- The commercial aircraft and farm sectors were both drags on the economy in 1995. However, looking forward, these two sectors are likely to give the economy a healthy boost. Commercial aircraft deliveries are likely to climb about 70% or $12 billion by 1997 compared to 1995. Moreover, receipts from sales of corn and soybeans alone are likely to rise by about $12 billion this year, boosting overall farm income.

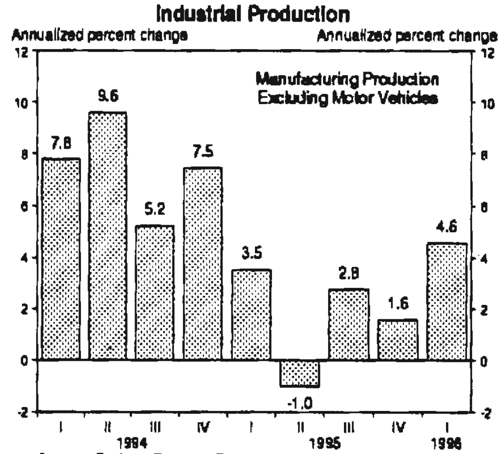
- The swing in these two small sectors from drag to stimulus is likely to reinforce the economy's upward momentum. Even excluding their impact, there are good reasons to expect above-trend growth: The outlook for consumer spending is favorable, export growth is likely to continue, and production will bounce upward once the inventory adjustment process comes to an end.

- Recent data releases reinforce earlier impressions of strengthening domestic goods production, rising residential construction outlays, and a pickup in net job creation. Along with firm first-quarter consumption patterns, this information implies an early return to above-average real GDP growth.

- Judging from their latest comments, top Federal Reserve officials are becoming more confident of the expansion's durability, and therefore are more inclined to worry about inflationary risks should economic growth prove unexpectedly strong.



Source: Department of Commerce.



Source: Federal Reserve Board.

Trade Recommendations

- We continue to expect that Fed officials will begin to tighten monetary policy by late summer. As a result, we would sell short the September Eurodollar futures contract at prices above 94.35, with a stop at 94.55.

- We would remain neutral on the Treasury bond market. In the short run, inflation fears related to commodity price pressures appear to be overblown. However, over the medium-term, economic strength that provokes a Fed tightening would not be good news for bonds.

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Issue No: 96/16
April 19, 1996

Goldman Sachs

I. Weekly Wrapup

Economic and Market Overview

Although upward pressure on U.S. bond yields has abated in recent days, reports on domestic business conditions continue to depict an earlier-than-expected recovery in the growth of employment, demand, and output. This information suggests an incipient appreciable strengthening of real GDP gains, and a likelihood that Federal Reserve policies will gradually evolve in a less accommodative direction.

Manufacturing activity appears to have rebounded, led by rapid expansion among business equipment producers. The strike against General Motors pulled total industry output down 0.5% during March, but factory production rose 0.2% outside the motor vehicle industry, on top of an upward-revised 1.3% net gain over the prior two months. Thus, non-auto manufacturing production expanded 4.6% annualized last quarter, compared to just 1.7% in the prior year. Vehicle assemblies are poised to accelerate in the months ahead, as inventories have been sharply reduced and total first-quarter domestic unit sales marked a new peak for this expansion. In another indication of an improving production tone, the Philadelphia Fed index of factory business conditions jumped to +17.3% in April, a six-month high, led by surging new orders and shipments.

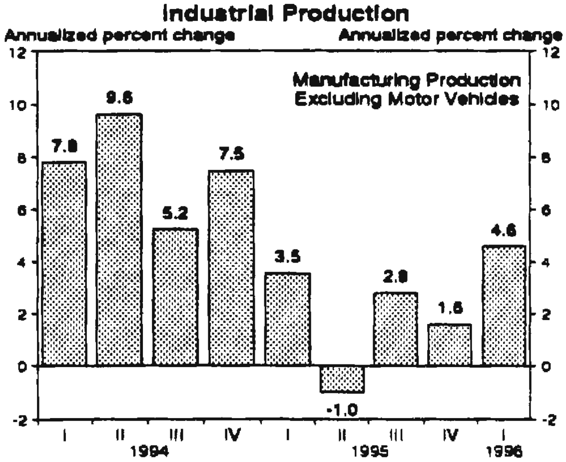
Residential construction is another positive element in the medium-term business outlook. Housing starts slipped 3.9% last month, but groundbreaking on single-family dwellings jumped more than 11% at an annual rate during the winter quarter. Higher levels of construction spending will likely be forthcoming to complete these units, and with builders reporting unusually high traffic at housing developments, this sector could sustain upward momentum for months. Meanwhile, in a fresh sign that net hiring has picked up, initial jobless insurance claims remained low at 360,000 in the latest week. If sustained, the recent claims pace would be consistent with payroll growth comparable to the strong first-quarter results.

Federal Reserve Policy

Pressures are building for the next move to be upward. The drumbeat of favorable economic reports seems to have impressed senior Fed officials, because public remarks by central bankers now more frequently emphasize the current high levels of resource utilization. Minneapolis district bank president Gary Stern — a voting FOMC member — this week said, "I don't observe too much unused capacity." Similarly, San Francisco region chief Robert Parry noted that inflation had not receded further amid last year's slow growth, and he said that going forward "the risks are on the upside for inflation." Higher oil prices and possible wage pressures were cited by Parry as grounds for concern about the price outlook.

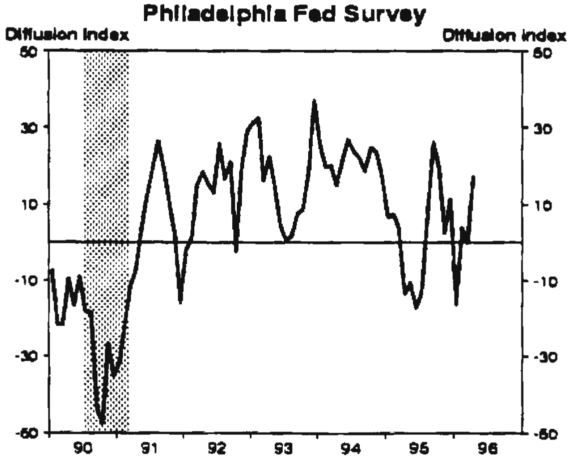
A similar evolution of attitudes is apparent among policy makers who previously were reliable advocates for additional easing. Governor Janet Yellen says the risks for the economy no longer are skewed to the downside, and while she believes inflation fears are overblown, she also perceives the economy to be operating close to its long-run potential. Governor Lawrence Lindsey, a consistent advocate for lower interest rates since last summer, now seems to prefer a neutral approach.

Industrial Production



Source: Federal Reserve Board.

Philadelphia Fed Survey



Source: Federal Reserve Bank of Philadelphia.

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Fiscal and Political Developments

When Congress returned from vacation last Monday, the plans of Republican leaders to focus on renewed deficit reduction efforts were sidetracked by Democrats' insistence on a vote regarding the two-stage, $0.90 per hour minimum wage hike (to $5.15) recommended by President Clinton. Those efforts appear to have worn down resistance, and it now looks likely that legislation approving an increase will be passed this year. It is very possible, though, that the GOP will attempt to link any minimum wage rise to other proposals that are ideologically and politically troublesome for the Clinton administration, and this could ultimately torpedo the effort. For example, Republicans might try to use a minimum wage bill as a vehicle for limiting the ability of labor unions to use workers' dues for political campaigns. President Clinton might find it tough to sign such a measure, since he is counting on significant financial and voting support from unions and their members toward his re-election this fall.

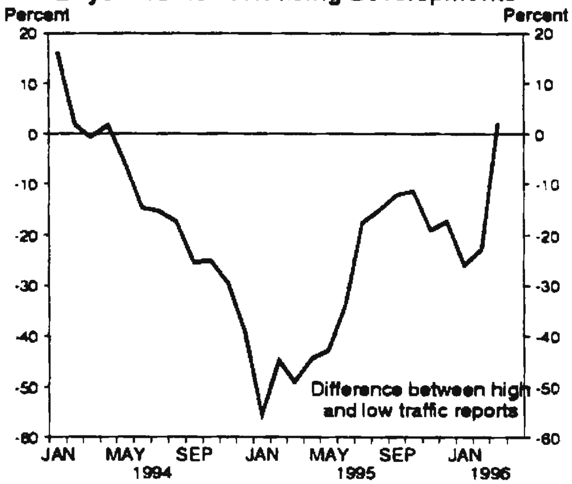
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

We continue to believe that market participants are too complacent about the risk of a tightening of monetary policy before the election. Our work shows that the Federal Reserve actually tightens more often in Presidential election years than in non-election years because economic growth tends to be stronger in the runup to the election. Only between Labor Day and Election Day do Fed officials have an observable aversion to adjusting monetary policy. For this reason, we would short the September 1996 Eurodollar futures contract at the current price (94.40) with an objective of 94.00 and a stop loss at 94.55.

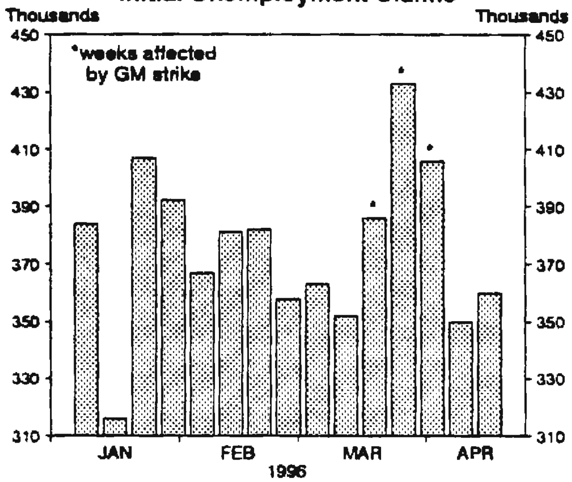
At the long end, we believe the market will remain in a relatively narrow trading range for the time being. On the positive side of the ledger, the extreme backwardation of many commodity futures markets suggests that spot commodity prices are more likely to fall than rise over the near-term. On the negative side, signs of economic strength continue to proliferate suggesting that Fed tightening and higher bond yields are both likely later this year.

Buyer Traffic at Housing Developments



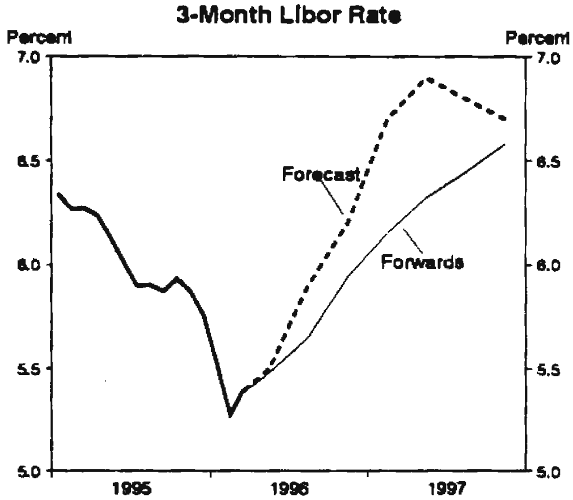
Source: National Association of Home Builders.

Initial Unemployment Claims



Source: Department of Labor.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

II. Planes, Grains, and GDP Growth

We have argued for some time that the economy is in the process of rebounding to an above-trend growth pace that is likely to persist well into 1997. Those who anticipate a slower growth path typically respond by asking: What are the sources that will generate an above-trend trajectory to growth?

We believe that there are several important sources of growth — some large and more obvious, and others that are smaller, more obscure, but also significant. Some of the potential sources of growth we have examined recently in this publication. For example, we have argued that consumer spending is likely to be stronger than expected, bolstered by a big jump in tax refunds and large gains in net worth (the focus of the past two issues). Similarly, we have argued that the trade sector is likely to be a positive element in the outlook. Despite recent gains in the dollar, the U.S. is very competitive internationally and, thus, should pick up market share in the year ahead. In addition, export growth will be boosted by faster domestic demand growth among the major U.S. trading partners in both 1996 and 1997.

In addition to these sectors, there are two smaller areas of the economy — commercial aircraft and the farm sector — that will contribute positively to growth in 1996 and 1997. These contributions are important for two reasons: 1) Both of these areas were drags on the economy in 1995, and 2) the magnitude of the gains in these sectors in 1996 and 1997 are large enough to have a meaningful impact on the overall economy despite these sectors' small size.

Planes and Grains: Typically Not in Synch

Commercial aircraft production and farm production are normally quite uncorrelated with real GDP and with each other. For example, over the 1966-1995 period, the correlation between the annual change in farm gross product and the growth rate of real GDP was -0.03. Similarly, aircraft production follows its own cycle. Over the same time period, the correlation between changes in aircraft and parts production and real GDP growth was only 0.34. Thus, neither sector is normally an important factor influencing the business cycle. However, due to a coincidence of timing, both sectors are likely to contribute positively to growth in 1996 and 1997 after being drags on the economy in 1995.

Correlation with Real GDP Growth

(annual % changes)

	Aircraft Production	Farm Output
1966-95	+0.34	-0.03
1980-95	+0.23	+0.18

Aircraft Deliveries to Soar

	1992	1993	1994	1995	1996E	1997E
Deliveries	570	407	317	256	286	380
$ Value (bn)	29.4	23.9	18.4	16.0	19.6	27.3

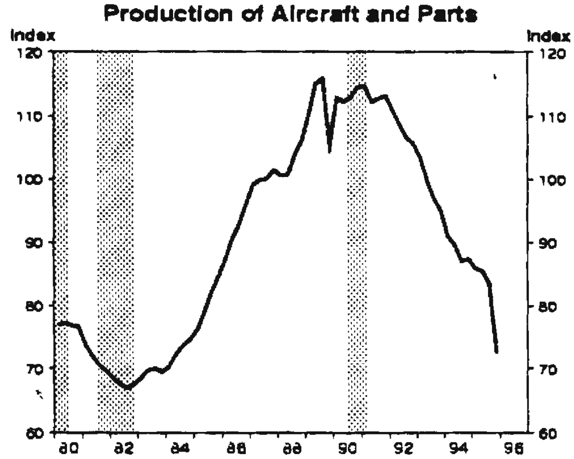
Commercial Aircraft Production to Soar

The commercial aircraft production cycle has turned, after falling more or less continually since the peak in deliveries in 1992. In 1992, Boeing and McDonnell Douglas — the two major U.S. producers of commercial aircraft — delivered 570 planes, worth nearly $30 billion. In contrast, by 1995, deliveries had fallen to 256 planes, worth about $16 billion.

But 1995 was the trough. Production will turn up sharply over the next few years, reflecting the rise in orders and orders backlogs that has already occurred. Aircraft orders (including military aircraft) increased by 48% in 1995 to $65.8 billion. Because the orders rate was well above the pace of production, aircraft backlogs have begun to climb again, up 11% in February 1996 from a year earlier.

Our aerospace analyst projects that deliveries of commercial aircraft from Boeing and McDonnell

Production of Aircraft and Parts



Source: Federal Reserve Board.

Goldman Sachs

Douglas will rise by 12% to 286 planes in 1996 and a further 33% to 380 planes in 1997. The dollar value of deliveries will climb by about 70% over the two year period or about $11 billion. The increase in the dollar value is larger than in the number of deliveries because the mix is shifting toward more expensive planes such as Boeing's new 777 wide-body aircraft.

This is a substantial swing compared to the negative impact of aircraft production on the economy in 1995. From the fourth quarter of 1994 to the fourth quarter of 1995, the production of aircraft and parts fell by 17%, pulled down sharply by the Boeing strike. This held down total industrial production by about 0.5% over this period. In contrast, the increase in aircraft production is likely to push industrial production up by about 1.5% in 1997 compared to the fourth quarter of 1995, when production was at its trough. Translated into GDP terms, this means that aircraft production will boost real GDP by about 0.3% over that period, after subtracting about 0.1% from real GDP in the year ending the fourth quarter of 1995.

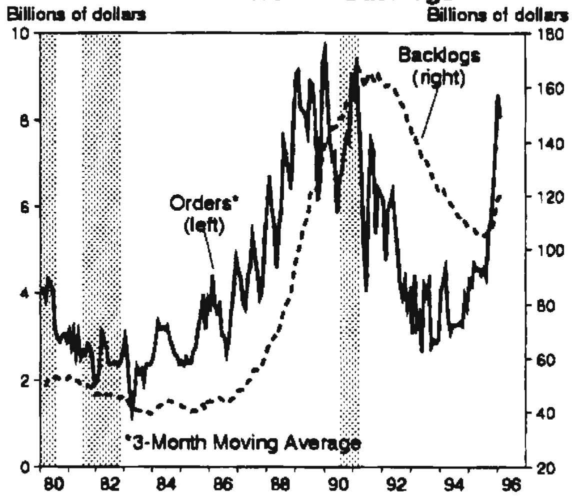
Farm Income to Climb Sharply

Similarly, the farm sector is also likely to contribute positively to growth after being a drag over the past year. In 1995, farm gross output, which is slightly less than 1½% of GDP, fell sharply, declining by about 9% in real terms. Prices rose only slightly. Thus, the nominal value of gross output also declined, falling by about 5% year-over-year. Not surprisingly, real farm income and the nominal value of proprietors' farm income both declined last year.

In 1996, and potentially, 1997, the farm sector is likely to become a much more positive element in the outlook. In particular, a large rise in nominal income is virtually inevitable, given the large increase in grain prices that has already occurred. Although forecasting grain prices is wrought with peril given the vagaries of the weather, our commodity analysts remain bullish about grain prices, which are about 30%-40% higher than last year, and are expected to face further upward pressure due to supply tightness. With crop acreage for corn projected by the Department of Agriculture to expand by about 12% (soybean acreage is projected to be flat), this implies at least a 40% rise in receipts from corn and soybean sales, or more than $12 billion, assuming that average crop yields are unchanged from a year earlier.

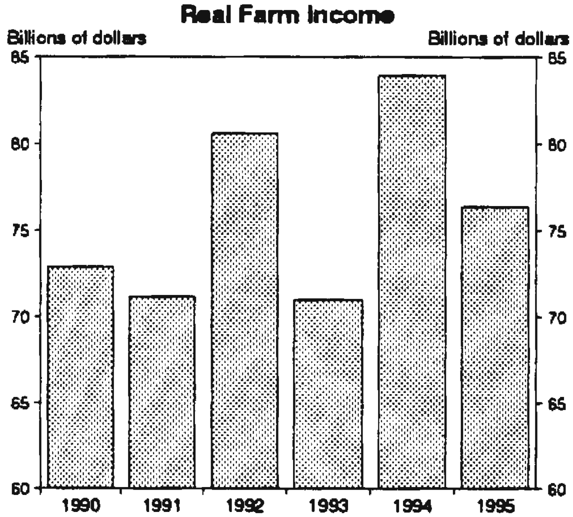
In contrast, while wheat prices have also increased sharply, this is likely to be offset somewhat by a

Aircraft Orders and Backlogs



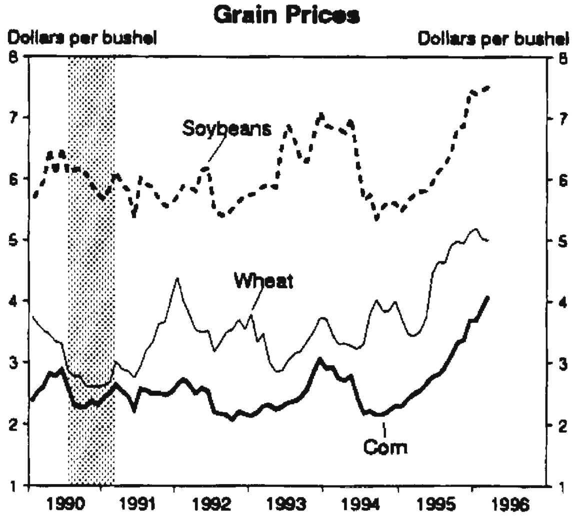
Source: Department of Commerce.

Real Farm Income



Source: Department of Commerce.

Grain Prices



Source: Chicago Board of Trade.

decline in the wheat harvest. The winter wheat crop, in particular, has been hurt by dry weather this year. Assuming, for simplicity, that other changes in the farm sector are largely offsetting, a $12 billion boost to farm receipts from corn and soybeans would represent nearly a 15% rise in total nominal farm income.

In real terms, the positive impact on GDP growth will be much lower than that barring an improvement in growing conditions this summer. However, even here a respectable gain appears likely for two reasons. First, as noted above, farmers are likely to respond to higher grain prices by increasing the acreage planted. In this regard, the new farm bill removes an impediment to expanding production, because the farm support payments are no longer generally contingent on land being held out of production. Second, some increase in yields would appear likely. Although the winter wheat crop is in poor shape, corn yields fell sharply last year, so some recovery appears likely. Also, with grain prices so high, farmers have ample incentive to take extra measures to maximize yields.

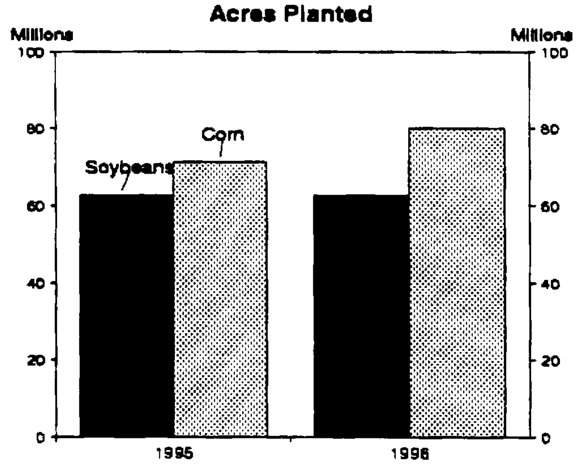
Regardless of the magnitude of the increase in real output, the sharp rise in nominal income, which is much more certain, is probably more important. After all, the rise in nominal incomes will fuel farm equipment purchases and other spending by farmers in the year ahead. Moreover, given that a significant proportion of U.S. grain production is exported (roughly 20%-30% for corn, 35%-40% for soybeans, and 50%-60% for wheat over the past few years), the rise in nominal income is not just a transfer within the U.S. economy from consumers, livestock producers, and downstream food processors to farmers. Instead, a good portion of the gain represents a transfer of income from abroad in the form of an improvement in the terms of trade.

Implications for Financial Markets

The swings in aircraft production and farm output from negative to positive represent two more reasons why the economy is likely to grow at an above-trend rate well into 1997. Not only will these sectors be positive in their own right, but the income generated by growth and, in the case of the farm sector, higher prices, will contribute to higher demand for other products.

Developments in the commercial aircraft and farm sectors are shifting these sectors from headwinds to tailwinds for the economy as a whole. Coupled with

Acres Planted



Source: Department of Agriculture.

strong consumer spending, solid export growth and a bounce in production as the inventory adjustment process comes to an end, this is likely to increase the pressure on Federal Reserve officials to tighten monetary policy later in 1996. Otherwise, the U.S. economy will grow too fast for comfort. The risk of overheating would increase and, with it, a gradual reemergence of inflation pressures.

Bill Dudley

Goldman Sachs

Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 Mar	'96 Feb	'96 Jan	'95 Dec	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	140	624	-146	145	174	139	May 3
Unemployment Rate (%)	5.6	5.5	5.8	5.6	5.6	5.6	
Index of Hours Worked (% ch)	0.0	2.9	-1.7	-0.3	2.3	1.5	
Average Hourly Earnings (% ch)	0.3	0.0	0.3	0.3	2.4	3.0	
Producer price finished goods index (% ch)	0.5	-0.2	0.3	0.5	3.5	2.4	May 10
Excluding food and energy	0.1	0.1	-0.1	0.1	1.7	1.9	
Consumer price index (% ch)	0.4	0.2	0.4	0.2	3.2	2.8	May 14
Excluding food and energy (% ch)	0.3	0.2	0.3	0.1	2.9	2.9	
Retail sales (% ch)	0.1	1.9	0.0	0.6	6.6	5.2	May 14
Excluding motor vehicles (% ch)	0.3	1.1	-0.2	0.4	3.5	3.4	
Industrial Production (% ch)	-0.5	1.3	-0.3	0.2	1.1	1.3	May 15
Manufacturing	-0.8	1.5	-0.3	0.2	0.8	1.1	
Capacity utilization (%)	82.5	83.2	82.3	82.8	82.8	83.2	May 15
Manufacturing	81.4	82.3	81.3	81.9	81.8	82.3	
Housing Starts (annual rate, thousands)	1447	1505	1453	1425	1440	1398	May 16
Single-family	1159	1175	1146	1150	1145	1110	
Trade balance (billions, monthly)	--	--	-10.3	-7.0	-8.1	-9.3	Apr 23
Merchandise	--	--	-15.4	-12.3	-13.4	-14.5	
Factory Orders (% ch)	--	-1.4	-0.2	1.7	1.6	1.2	May 2
Durable Goods	--	-2.3	-0.6	3.1	1.6	1.2	Apr 24
Personal Income (% ch)	--	0.8	0.1	0.6	5.9	5.2	May 3
Wages and Salaries	--	1.1	-0.2	0.6	5.3	4.9	
Purchasing Managers' Index (%)	46.9	45.2	44.2	46.0	45.8	47.3	May 1
Consumer Sentiment U Mich (Feb 66=100)	93.7	88.5	89.3	91.0	90.2	91.3	Apr 26
Conference Board (1985=100)	97.7	98.0	88.4	99.2	96.9	98.6	Apr 30

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- The trade balance report for February (April 23) is likely to show improvement due to a rebound in exports, following a 2.2% decline in January. Even with a deficit decline in February, the trade sector is likely to be a drag on the economy during the first quarter. In our view, this largely reflects faulty seasonal adjustments rather than a change in the underlying pattern of gradual trade balance improvement.

- Durable goods orders for March (April 24) are likely to be held to a modest gain as the General Motors strike presumably depressed orders temporarily. A rebound in aircraft and defense bookings should lead to a modest overall gain. Key focus should be on orders for non-defense capital goods, excluding aircraft, and non-auto consumer durable items.

- During the past two weeks, initial unemployment claims have averaged 355,000, much lower than their average level preceding the General Motors strike. This week's reading (April 25) should help to confirm whether the downward trend in initial claims is intact. That would indicate that the improvement in labor market conditions suggested by the recent strength of the payroll figures is continuing.

Economic Releases and Other Events

		Estimate		
Date	Indicator	GS	Consensus	Last Report
Apr. 23	Trade Balance (Feb.)	-$8.5 Bil.	-$9.0 Bil.	$-10.3 Bil.
Apr. 24	Durable Goods Orders (Mar.)	+0.4%	-0.1%	-2.3%
Apr. 25	Existing Home Sales (Mar.)	Up	-1.7%	+6.5%

- Import & Export Prices (Apr. 23)
- Pennsylvania Primary (Apr. 23)
- 2-year T-note auction (Apr. 23)
- 5-year T-note auction (Apr. 24)
- 1-year T-bill auction (Apr. 25)
- Consumer Sentiment - Final (Apr. 26)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.5	5.9	6.7
Forward	5.5	5.8	6.2
2 Yr T-Note	6.1	6.2	6.7
Forward	6.2	6.3	6.5
10 Yr T-Note	6.7	6.8	7.1
Forward	6.6	6.7	6.8

* As of Thursday close.

Key Nos. in the Business Outlook

	1995	1996			
	Q4	Q1	Q2	1995	1996
Real GDP	0.5%	1.7%	3.2	2.0%	2.1%
Ind. Production	1.3	2.8	2.0	3.6	2.3
CPI	2.4	3.0	3.5	2.8	2.8
Profits*	12.6	5.8	6.1	11.7	3.9
Merch Trade Bal. (monthly, $B)	-11.6	-14.3	-13.3	-13.3	-12.9

* Excluding inventory profits; adjusted for depreciation distortions

Goldman Sachs

U.S. Economics Analyst

Our Views Have Changed

Tax Refunds to Bolster Consumer Spending

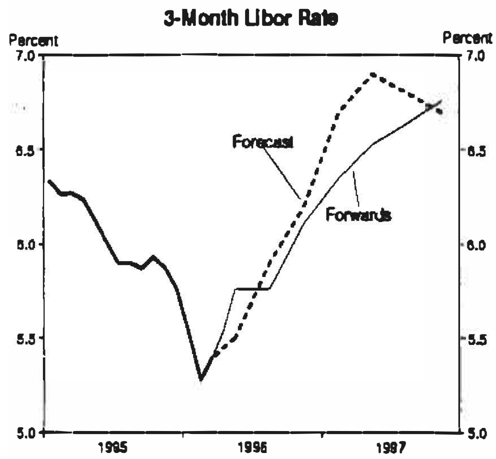
- Above-trend growth has arrived one quarter earlier than expected. On the basis of surprisingly firm reports in a wide variety of areas, we have raised our second-quarter annualized growth estimate to 3.2%, from 2.0%.

- The Federal Reserve is apt to respond to this strengthening sooner than we previously thought and sooner than now expected by financial market participants. The first move is likely to occur sometime in the third quarter, probably before the presidential election campaign gets under full swing. Short-term rates should rise a cumulative 50 basis points by yearend.

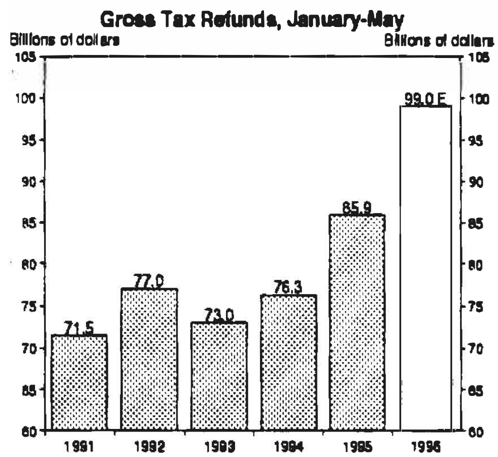
- For the most part, these adjustments are matters of timing rather than magnitude. We still expect short- and long-term interest rates to hit 6.5% and 7.3%, respectively, by the second half of 1997.

- Tax refund payments have climbed sharply, up nearly 25%, compared to a year ago. This is likely to keep consumer spending on a strong upward trajectory this quarter.

- Because the increase in refunds is due mainly to increases in the average refund size and the proportion of taxpayers that receive refunds, rather than due to a big rise in processing speed, much of the impact of the refunds has probably not yet been felt. In 1995, when the processing speed was also slow, spending was much stronger in the second quarter than the first.



Source: Federal Reserve Board, Wall Street Journal.



Source: Internal Revenue Service.

Trade Recommendations

- Given our expectation that Fed tightening could begin by late summer, we would get short the September Eurodollar futures contract should the market rally and push prices above 94.40.

- Given the large selloff that has occurred in Treasury bonds over the past two months, we would no longer have a bias toward getting short over the near-term.

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Issue No: 96/15
April 12, 1996

Goldman Sachs

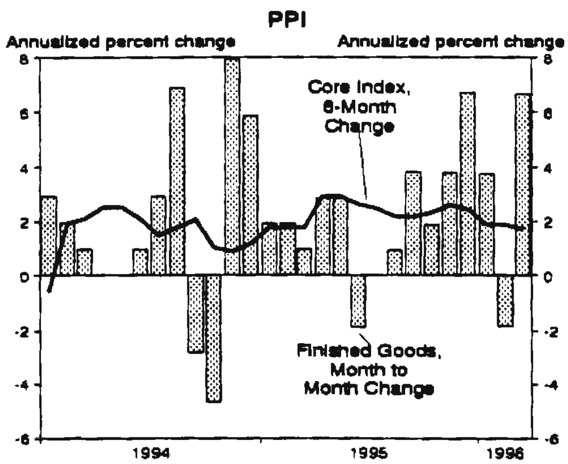
I. Weekly Wrapup

Economic and Market Overview

Firmer-than-expected reports in a wide variety of areas have prompted us to raise our forecasts for growth and inflation in the second quarter. We now expect real GDP to rise at a 3.2% annual rate, up from a previous forecast of 2.0%. In essence, the above-trend growth we had been anticipating for the second half of 1996 has arrived one quarter ahead of schedule. Our forecast for growth in the 2½%-3% range during the second half, rising to slightly above 3% in early 1997, is unchanged. On the inflation front, we have bumped up the second-quarter increase in the consumer price index to 3.5% at an annual rate, reflecting the recent spike in energy prices.

These are small changes, and there is a risk they will prove to be inadequate. In the case of growth, the index of hours worked already implies a 4% annualized increase in labor input under the extremely conservative assumption that hours stay flat between March and June. In the case of inflation, with the economy at full employment and labor costs beginning to accelerate, the risk is that commodity prices will work their way into wages.

Inflation worries certainly preoccupied U.S. financial markets this week. Equity prices fell sharply and bond prices slipped further, as indexes of commodity prices persistently hit new highs. So far, the producer index shows no pick-up of inflation in the pipeline beyond the pass-through of the recent surge in oil prices. In fact, the core index for intermediate goods prices posted its sixth consecutive decline in March, dropping 0.2%, and the core index for crude goods fell 1.8%. Consumer prices were somewhat stickier in March, rising 0.4% overall and 0.3% excluding food and energy.



Source: Department of Labor.

Meanwhile, other gauges of economic activity keep pointing to a pick-up in real GDP growth. In the first reading clear of GM strike distortions, initial filings for jobless benefits fell to 347,000 during the week ending April 6. This was the lowest one-week figure in 5 months; if sustained, it would be the lowest level in more than one year. Meanwhile, the tone of retail business remained firm. Major chain stores reported year-to-year gains averaging 4.2% for stores open one year or more. Although retail sales rose only 0.1% in March (0.3% excluding autos), levels of spending in February were revised up sharply. In light of these new figures, our current estimate of 2.7% annualized growth in real spending during the first half of 1996 seems conservative, especially given the potential for tax refunds to add to spending later this spring.

Federal Reserve Policy

We have also modified our views on monetary policy and interest rates. Although Fed officials may be inclined to regard this quarter's above-trend growth as merely a rebound from various disruptions over the past six months, the persistence of strength into the third quarter will surely disturb them. Accordingly, we now believe they will begin to tighten policy sometime during the third quarter in an effort to head off a rise in inflation, most likely before the election campaign moves into high gear in September. An additional move is probable in the fourth quarter, lifting the federal funds rate to 5¾% by yearend. As the prospects for tightening become more apparent, bond prices will be subject to further downward pressure, pushing yields on benchmark 30-year Treasury bond above 7% on a sustained basis during the second half of the year.

Like the GDP revisions, these changes in our interest-rate views are mainly ones of timing. We still expect the federal funds and bond rates to hit 6.5% and 7.3%, respectively, in the second half of 1997.

New U.S. Interest Rate Forecasts 1996-97
(quarter end)

	96 Q1	96 Q2	96 Q3	96 Q4	97 Q1	97 Q2	97 Q3	97 Q4
Federal funds	5.3	5.3	5.5	5.8	6.3	6.5	6.5	6.5
3 mo LIBOR	5.4	5.5	5.9	6.2	6.7	6.9	6.8	6.7
2 yr Treas	5.7	6.1	6.2	6.4	6.7	6.9	7.0	7.0
10 yr Treas	6.3	6.5	6.7	6.8	7.0	7.1	7.1	7.1
30 yr Treas	6.6	6.8	7.0	7.1	7.2	7.3	7.3	7.3

The latest commentary by Fed officials has been mixed on the current state of the economy. Chairman Greenspan was reported to say that his view of the economy has not changed nearly as much as the market sentiment has, while Governor Yellen recently expressed optimism about the inflation outlook and did not see any evidence of upward pressure on wages. However, newswire quotes from other Fed officials, mostly off the record, were much more cautionary. In varying degrees, they indicated concerns about existing and potential wage pressure.

Fiscal and Political Developments

Congress returns from its Easter recess on Monday, April 15. The first order of business will be to work out a budget compromise for fiscal 1996 before the latest continuing resolution expires on April 24. Any such compromise is likely to provide a small dollop of stimulus to the economy, as authorizations for spending are lifted somewhat to gain President Clinton's assent. As the focus turns to the 1997 budget resolution, the Republican majority will seek to establish a record of legislative accomplishment and/or presidential vetoes in order to bolster Senator Dole's chances of unseating President Clinton in the November election. This means retaining the commitment to balance the budget by 2002, but splitting out specific parts of it for individual votes.

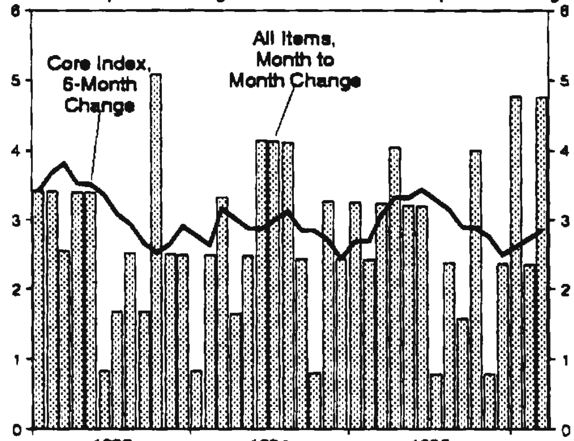
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

Given that we now expect Federal Reserve officials to begin tightening monetary policy by the end of the third quarter, we would look to get short the September 1996 Eurodollar futures contract should it rally above 94.40. A tightening of monetary policy before that contract goes off the board would imply a climb in 3-month Libor yields to 5¾%-6%.

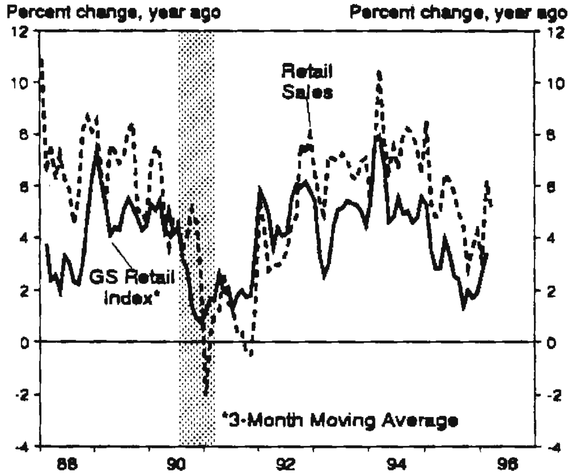
In terms of the long end of the market, we would assume a neutral stance for the time being. Long bond yields around 6.90% implicitly discount a slight degree of Fed tightening already. Moreover, recent commodity price fears may subside. In our opinion, a sustainable move above 7% probably requires either a deterioration in the inflation outlook or greater evidence that the economy is likely to grow at an above-trend pace during the second half. Although such evidence will probably be forthcoming eventually, it is not likely to arrive immediately. Thus, long bond yields are likely to stabilize for the time being, trading mainly in a range of 6¾%-7%.

CPI



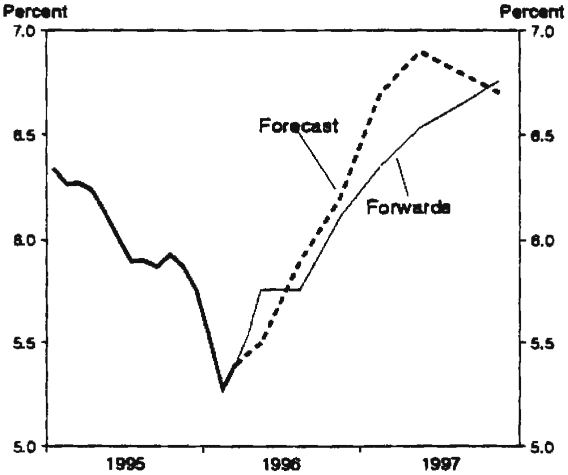
Source: Department of Labor.

Goldman Sachs Retail Index



Source: Goldman Sachs.

3-Month Libor Rate



Source: Federal Reserve Board, Wall Street Journal.

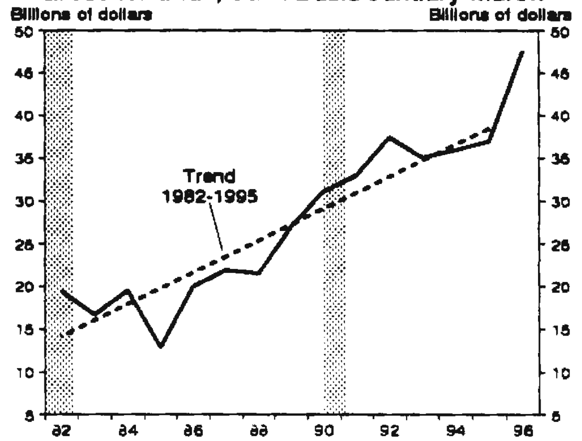
Goldman Sachs

II. Tax Refunds to Bolster Consumer Spending

Tax refund payments to individuals are increasing sharply this year, bolstering disposable personal incomes to a degree that should lift the first-half consumer spending growth rate above consensus expectations. Moreover, because the pace of processing tax returns is unusually slow again this year, the positive influences of refunds on household purchases may be backloaded somewhat into April and May, as they were last year.

With nonfarm business inventory accumulation at a three-year low, the potential for an unanticipated acceleration in consumer demand further enhances the probability of a revival in domestic economic activity over the coming months.

Gross Refunds, Cash Basis January-March

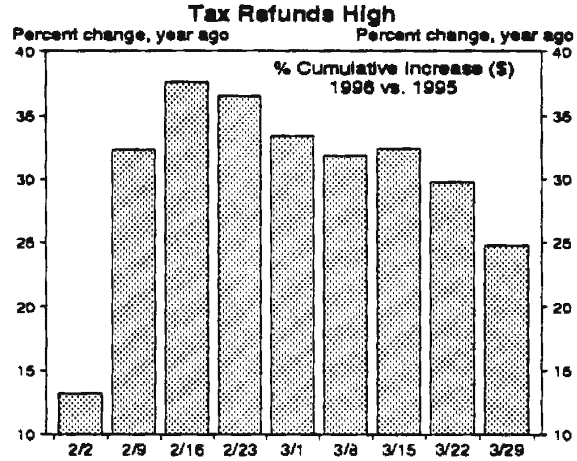


Source: Internal Revenue Service.

Tax Refunds Soar . . .

Federal individual income tax refund payments are soaring this year. According to the Internal Revenue Service, as of March 29, total refunds had increased more than 25%, climbing to $52.1 billion from $41.7 billion a year earlier. Treasury cash statistics display an even larger gain — fully 29% year-to-year. This sharp rebate rise has not been a function of materially faster processing of tax returns, but rather is tied almost completely to a surge in the average refund size and an increase in the percentage of filers receiving refunds. About 16 percentage points of the gain were due to an increase in the average size of refunds (to $1,252 per return from $1,076), 6 percentage points were due to an increase in the proportion of refunds (to 79.9% from 75.6%) and only about 3 percentage points were due to faster processing of tax returns. This suggests that the strength in tax refunds is likely to persist through the end of the personal tax rebate season on May 31.

Tax Refunds High



Source: Internal Revenue Service. (End of Week)

Given that the gap in total refunds between 1996 and 1995 has shrunken somewhat in recent weeks, the aggregate percentage rise may drop somewhat lower by May 31. This would occur if there were a downward shift in the increase in the proportion of tax filings resulting in refunds or in the average size of the refund check compared to a year ago.[1]

However, a steep falloff in the year-over-year refund volume comparison going forward appears unlikely, as there are solid reasons for the proportion of tax filings with refunds and the average size of refunds to be growing. Specifically, the federal rules which govern the appropriate timing of tax payments by higher income households (single filers with incomes greater than $75,000 and joint filers with incomes above $150,000) were tightened in 1993 for tax years beginning January 1994 and beyond. The narrowing of these so-called "safe harbor" compliance regulations led affected taxpayers to increase their withholding and make larger estimated tax payments during 1994 and 1995, with the consequence that

[1] One speculation as to why such a downward shift might occur — that filings claiming the earned income tax credit (EITC) were processed much earlier this year — does not appear to hold much water for two reasons. First, the average refund for EITC filers is not much different than the total average refund size to date. Second, EITC filings represent a relatively small proportion of total returns (roughly 15%).

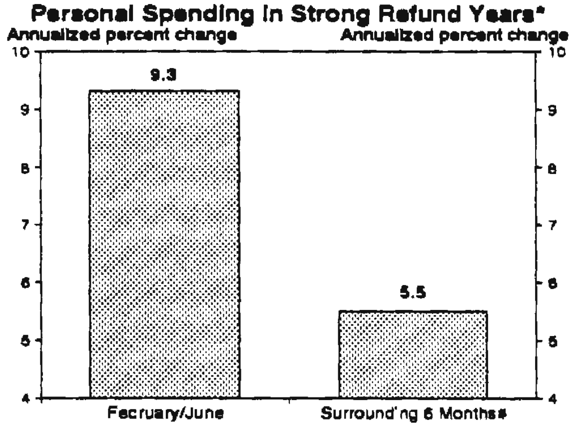
their refunds have been larger and more numerous during the past two years. The average size of the refunds has probably increased further this spring in part because many high-income taxpayers who failed to meet the safe harbor provisions for the 1994 tax year and incurred penalties responded by significantly increasing their withholding and estimated payments during 1995. Having built in a bigger pre-payment cushion, such parties are now receiving heftier refunds this spring.

We expect that the Treasury will send out 15% more total refunds in the February-May interval this year, lifting the total payout by $13 billion to $99 billion. Such an increase would lift the annual growth rate for disposable personal incomes over those four months by roughly ¾% at an annual rate. This is a remarkable performance given that refunds in 1995 had already risen sharply over 1994. Compared to two years ago, we estimate that total refunds will increase by about 28%, or $23 billion.

. . . Spurring Household Spending This Quarter

Like any other unexpected infusion of dollars into the private sector, heftier tax refunds create the potential for a more buoyant pattern of consumer spending in the near term. An examination of refund experiences in the 1983-1995 period provides some support for this view. During those years, most of which were characterized by relatively low and stable inflation, the average and median annual increases in gross personal tax refunds were roughly 4½%. Prior to this year, the two strongest year-to-year increases in gross refunds within that interval were in 1995 (+12.6%) and 1983 (+10.3%), while the two weakest were in 1993 (-5.2%) and 1988 (-0.5%). As might be expected, data on nominal personal consumption from those periods indicate some impact from high and low refund results on consumer purchases. In the two years with unusually bloated refund volumes, nominal personal consumption in the February/June period outran the average spending pace during the surrounding six months by an average of 3.8% annualized, or more than 0.3% per month. During the two weakest refund years, by contrast, consumption was about 1% slower at an annual rate over the five months ending in June than in the six months bracketing that interval.

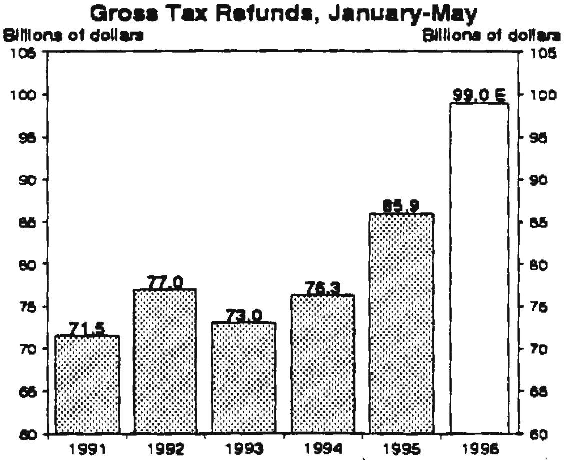
Personal Spending in Strong Refund Years*



*1983 and 1995.
#October/January and July/September.
Source: Department of Commerce.

Just as changes in the gross magnitude of refunds have historically influenced spending patterns within a year, the speed with which they are disbursed can skew the timing of outlays in the first two quarters. Because the pace of tax return processing has been slow this year, the spending stimulus from heavy tax refunds has probably not yet been fully realized. For example, when more deliberate scrutiny of refund requests was first implemented in 1995, growth in nominal personal consumption outlays during the February/June period (+0.5% per month on average) was somewhat concentrated within the final two months (+0.7% average). Similarly, computer glitches temporarily dammed up refund flows in the early part of 1985, and in that year nominal consumption rose nearly twice as fast over April and May (+2.0% cumulatively) as it had in February and March (+1.1%). With sluggish return processing once again evident, a near-term acceleration in personal spending would not be surprising[2]

Gross Tax Refunds, January-May



Source: Internal Revenue Service.

[2] Because the inflation rate is generally stable over such short time periods, the pattern for real spending is similar.

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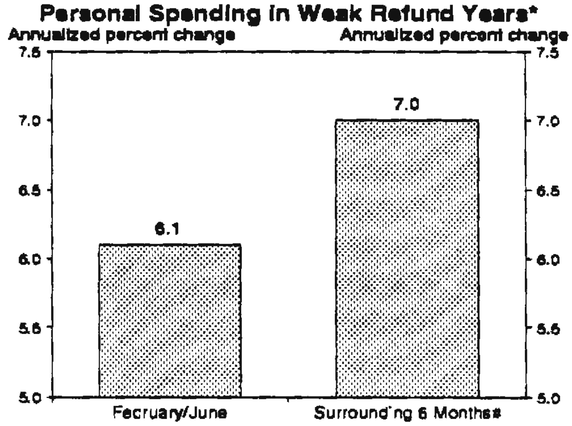
Implications for Financial Markets

If our analysis of refunds is correct, it increases the likelihood of a strong rebound in economic activity in the second quarter. This is one reason why we have raised our second quarter forecast of real GDP growth, to 3.2% annualized from 2.0% earlier (see page 2). Moreover, because the pickup in consumption demand is likely to be largely unanticipated by producers, some of it is likely to be met out of inventories, setting the stage for continued above-trend growth in the second-half of 1996.

Some might argue that when the tax refund faucet is turned off at the end of May consumer spending will slow sharply. We agree that some deceleration is possible over the summer months. However, it is important to note that the large rise in refunds this year may have borrowed more from growth in 1995 than the second half of 1996. After all, the increase in withholding payments in 1995 held down disposable income growth that year. A similar large impact is unlikely this year now that taxpayers have had time to adapt to the toughened safe-harbor provisions. Moreover, as economic activity rises, this is likely to lead to further employment and income gains, causing consumers to become more confident about loosening their purse strings. As we noted last week, the savings rate currently is somewhat higher than would be predicted given the large surge in net worth over the past year. Thus, even if disposable income growth slows, consumer spending may hold up better than expected.

For interest rates, strong consumer spending is likely to increase pressures on Federal Reserve officials to tighten monetary policy. As noted on page 3, we now expect two modest tightenings of monetary policy in the second half of 1996, which would take the federal funds up to 5¾% by yearend. With Fed tightening now anticipated to come somewhat earlier, the outlook for the bond market also becomes a bit more negative.

Personal Spending in Weak Refund Years*



*1988 and 1993.
#October/January and July/September.
Source: Department of Commerce.

Bill Dudley John Youngdahl

Goldman Sachs

Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 Mar	'96 Feb	'96 Jan	'95 Dec	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	140	624	-146	145	174	139	May 3
Unemployment Rate (%)	5.6	5.5	5.8	5.6	5.6	5.6	
Index of Hours Worked (% ch)	0.0	2.9	-1.7	-0.3	2.3	1.5	
Average Hourly Earnings (% ch)	0.3	0.0	0.3	0.3	2.4	3.0	
Producer price finished goods index (% ch)	0.5	-0.2	0.3	0.5	3.5	2.4	May 10
Excluding food and energy	0.1	0.1	-0.1	0.1	1.7	1.9	
Consumer price index (% ch)	0.4	0.2	0.4	0.2	3.2	2.8	May 14
Excluding food and energy (% ch)	0.3	0.2	0.3	0.1	2.9	2.9	
Retail sales (% ch)	0.1	1.9	0.0	0.6	6.6	5.2	May 14
Excluding motor vehicles (% ch)	0.3	1.1	-0.2	0.4	3.5	3.4	
Industrial Production (% ch)	--	1.2	-0.4	0.1	1.6	1.6	Apr 16
Manufacturing	--	1.4	-0.3	0.2	3.0	1.7	
Capacity utilization (%)	--	82.9	82.1	82.7	82.9	83.3	Apr 16
Manufacturing	--	82.1	81.2	81.8	82.0	82.5	
Housing Starts (annual rate, thousands)	--	1490	1447	1425	1429	1379	Apr 17
Single-family	--	1170	1140	1150	1138	1095	
Trade balance (billions, monthly)	--	--	-10.3	-7.0	-8.1	-9.3	Apr 23
Merchandise	--	--	-15.4	-12.3	-13.4	-14.5	
Factory Orders (% ch)	--	-1.4	-0.2	1.7	1.6	1.2	May 2
Durable Goods	--	-2.3	-0.6	3.1	1.6	1.2	Apr 24
Personal Income (% ch)	--	0.8	0.1	0.6	5.9	5.2	May 3
Wages and Salaries	--	1.1	-0.2	0.6	5.3	4.9	
Purchasing Managers' Index (%)	46.9	45.2	44.2	46.0	45.8	47.3	May 1
Consumer Sentiment U Mich (Feb 66=100)	93.7	88.5	89.3	91.0	90.2	91.3	Apr 26
Conference Board (1985=100)	97.7	98.0	88.4	99.2	96.9	98.6	Apr 30

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- Industrial production and capacity utilization data from March will be depressed by the influences of the General Motors strike (Apr. 16). Nonauto manufacturing output will likely be unchanged or slightly firmer on the month.
- Homebuilding activity probably slipped in March, but from a fairly high level (Apr. 17). Signs of improvement in new home sales suggest residential construction will remain a positive influence on real GDP through next quarter.
- Data on first-time jobless insurance claims for the week ending April 13 (Apr. 18) will help clarify the labor demand picture, which has been muddied by bad weather, an auto strike, and volatility in monthly payroll survey results. Should the claims figure stay close to the 347,000 reported for the April 6 week, that would make the strength in February/March hiring seem more sustainable.

Economic Releases and Other Events

		Estimate		
Date	Indicator	GS	Consensus	Last Report
Apr. 16	Industrial Production (Mar.)	-0.4%	-0.4%	+1.2%
	Capacity Utilization (Mar.)	82.3%	82.3%	82.9%
Apr. 17	Housing Starts (Mar.)	-4.0%	-2.5%	+3.0%
Apr. 19	Federal Budget Balance (Mar.)	-$53.5 Bil	-$45.0 Bil	-$50.5 Bil

- Congress Reconvenes (Apr. 15)
- Treasury-Announcement: 3- & 6-mnth Bill Auctions (Apr. 15)
- Treasury-Announcement: 2- & 5-yr Notes (Apr. 17)
- Initial Jobless Claims (Apr. 18)
- Philadelphia Fed Survey (Apr. 18)
- Treasury-Announcement: 1-yr Bill (Apr. 19)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.5	5.9	6.7
Forward	5.6	5.9	6.4
2 Yr T-Note	6.1	6.2	6.7
Forward	6.3	6.5	6.6
10 Yr T-Note	6.7	6.8	7.1
Forward	6.8	6.8	6.9

* As of Thursday close.

Key Nos. in the Business Outlook

	1995	1996			
	Q4	Q1	Q2	1995	1996
Real GDP	0.5%	1.0%	3.2	2.0%	1.9%
Ind. Production	1.3	2.5	5.0	3.6	2.7
CPI	2.4	3.0	3.5	2.8	2.8
Profits*	12.6	10.3	10.1	3.9	8.2
Merch Trade Bal. (monthly, $B)	-11.6	-14.3	-13.3	-13.3	-12.9

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Surge in Net Worth Trumps Rise in Delinquencies

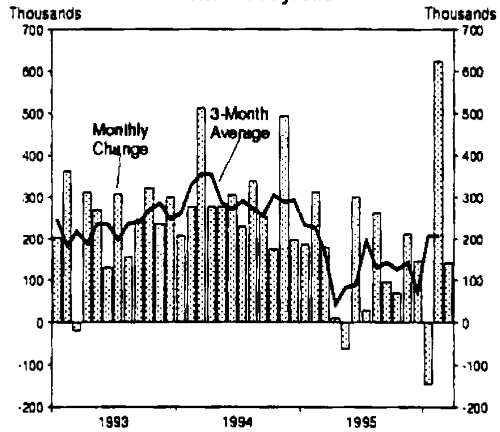
- The latest job report confirms that a material pick-up in U.S. economic growth is underway. Private nonfarm payrolls rose nearly 200,000 per month during the first quarter, while increases in hours worked imply that second-quarter growth will exceed our 2% forecast. A new estimate will be available shortly.

- The improvement is evident in other data as well. Spending and income rose sharply in February, and auto sales held up in March. Purchasing managers also report improvement in industrial conditions.

- The spending gains imply that worries about consumer finances are overdone. Although credit-card delinquencies are approaching record levels, the total increase in delinquent balances is less than $10 billion. This pales in comparison to last year's $2.6 trillion surge in net worth, which in real terms was the largest in more than 25 years.

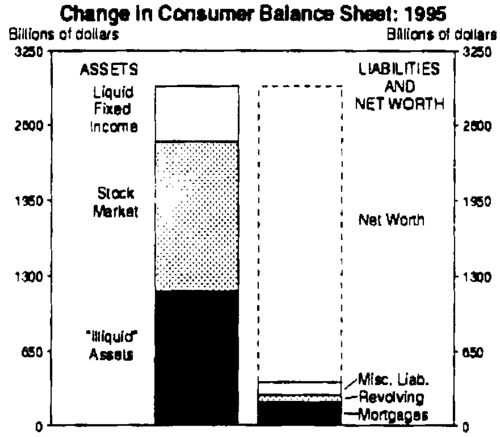
- Because the economy is likely to grow at an above-trend rate again in the second quarter, the risks of a Fed tightening of monetary policy continue to increase. Most likely, Fed officials will sit tight for awhile to assess the durability of the rebound. If, however, the rebound proves durable, then monetary policy tightening will almost certainly follow, perhaps as early as late summer but more likely later in the year, following the November elections.

Nonfarm Payrolls



Source: Department of Labor.

Change in Consumer Balance Sheet: 1995



Source: Federal Reserve Board.

Trade Recommendations

- Sadly, we were stopped out of our short position in December Eurodollar futures at 94.30 this week. We would retain a bearish stance, looking for opportunities to get short should prices in the short-end bounce.

- We would recommend shorting the December Eurodollar futures contract against the September/March Eurodollar butterfly. Yearend pressures in 1996 could be very pronounced given that yearend coincides with the end of the Federal Reserve's two-week reserve maintenance period.

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Issue No: 96/14
April 5, 1996

Goldman Sachs

I. Weekly Wrapup

Economic and Market Overview

Bond prices generally drifted lower in the runup to the March employment report as dealers strived to go into the report flat. That did not prevent a sharp move lower in prices, however, as the payroll figures confirmed that a material improvement has occurred in the labor market. Private nonfarm payrolls rose nearly 200,000 per month during the first quarter despite a GM strike in March; job gains in the household survey were almost twice as large. Meanwhile, the index of hours worked held on to its high February level, strongly implying that growth in real GDP will exceed its 2% long-term trend in the second quarter.

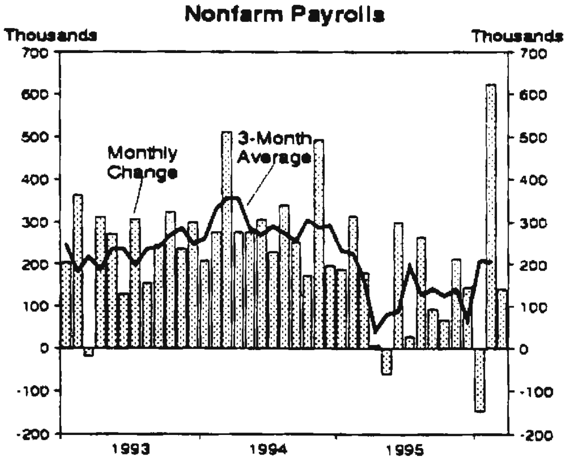
Other economic news reinforce our impression that the economy has passed an inflection point and that stronger growth lies ahead. The National Association of Purchasing Managers' index ticked up to 46.9% in March from 45.2% in February. The increase would have been even larger except for the drag exerted by a 5-point drop in the inventory component. Similarly, personal income and consumption expenditures both rose sharply in February, climbing 0.8% and 1.1%, respectively, more than recovering losses in January. In real terms, consumer spending is on a 2½%-3% annualized growth track for the first quarter, and real disposable income has increased at about a 4% annual rate over the past three months. The improvement in demand is also visible in the sustained strength of domestic auto and light truck sales in March, which held on to almost all of their February gains. At 14 million units, the annualized selling pace for domestic motor vehicles is at its highest point in the current economic expansion.

The only signs of weakness were a downward revision to annualized real GDP growth, to 0.5% in the fourth quarter from 0.9% previously, and a 1.4% decline in factory orders in February. Even these figures do not foreshadow weakness. Half of the revision in real GDP growth was in the inventory component, which implies that the inventory correction is more advanced, and, thus, implies more strength looking ahead. Similarly, the decline in factory orders was primarily due to a sharp fall in transportation orders, which are very volatile from month to month. Backlogs of unfilled orders, excluding defense, are rising again, by 0.4% in February and a cumulative 2.9% (not annualized) over the past three months.

Federal Reserve Policy

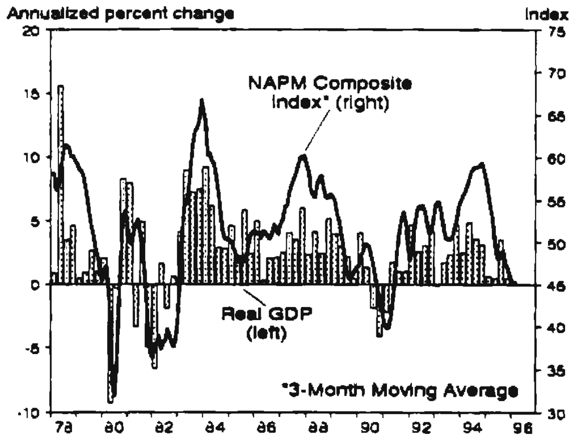
Now that it appears likely that the pace of economic activity will be above-trend in the second quarter, the risks that Fed officials will be forced to tighten monetary policy have increased. Most likely, Fed officials will keep policy on hold for awhile to assess the durability of the economic rebound. However, as early as late summer or, more likely, shortly after the fall elections, the pressures on the Fed to restrain the economy are likely to prove irresistible, forcing a tightening of monetary policy. That Fed officials are already worried about the strength of the economy is suggested by the minutes to the January 30-31 Federal Open Market Committee. They reveal that Federal Reserve officials were very cautious in easing monetary policy at that time despite economic news, which indicated that the economy was very weak.

Nonfarm Payrolls



Source: Department of Labor.

NAPM Index



Source: Department of Commerce, NAPM.

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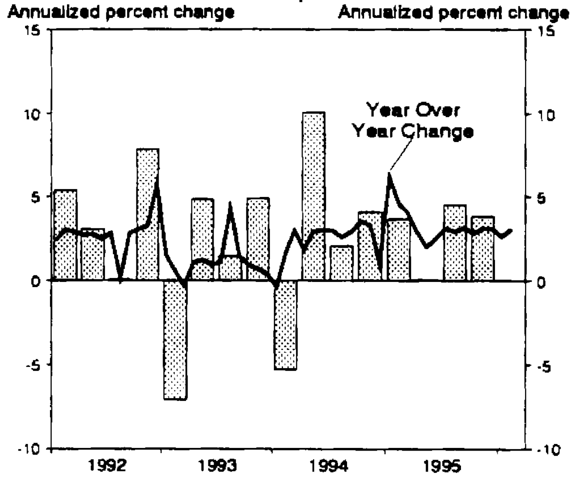
Fiscal and Political Developments

Having failed to reach agreement on the five 1996 appropriations bills that have not yet been enacted, Congress passed another continuing budget resolution to keep all parts of the federal government operating. The new resolution provides temporary funding through April 24. Congress and the Administration will renew their negotiations when Congress returns on April 15. At this point, agreement on the five appropriations bills would tend to have a net stimulative effect on economic activity because President Clinton has been pressing Congress to add back funds and will only agree to a deal if the funding is greater than what has already been granted under the continuing budget resolutions.

Real Personal Disposable Income



Source: Department of Commerce. Goldman Sachs Estimates.

Market Outlook and Comments on Value

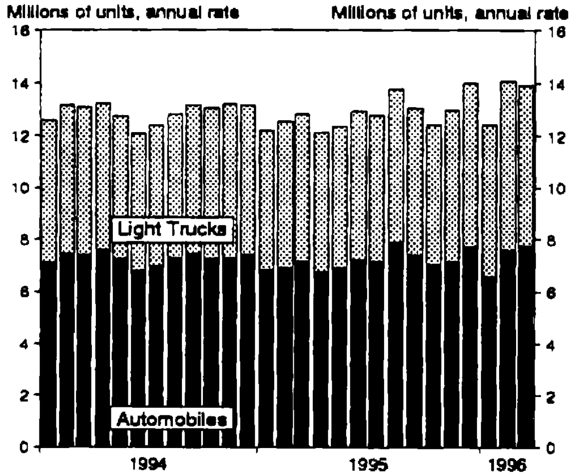
Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

With respect to short-term rates, our view was right, but our stop was wrong. Our short position in the December Eurodollar futures contract was stopped out at 94.30, capping our cumulative profit in the trade at about 40 basis points.

Following the payroll employment report, the money market curve now incorporates a tightening bias, which we view as appropriate. As a consequence, we would use any rallies to get short. On the long end, we continue to have a bearish bias and would look to get short the June bond future at prices above 112.16.

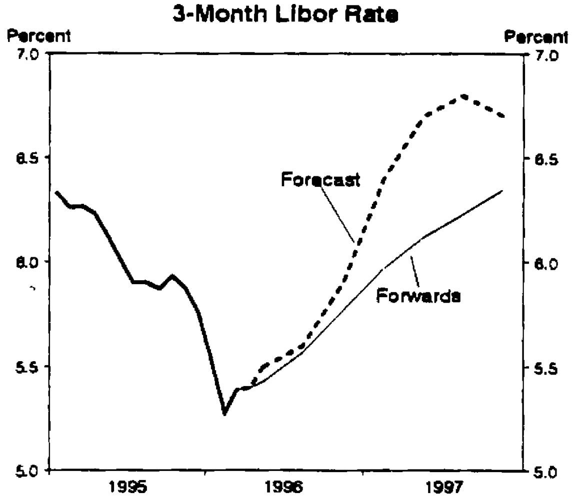
We would also advocate selling the December Euro contract against the September/March butterfly. On Thursday, December was trading flat against the butterfly. We believe that December should trade at a higher yield of at least 5-10 basis points. This reflects the fact that the risk of upward pressures on yearend rates is particularly high this year because the end of the 2-week reserve maintenance period falls on yearend for the first time since 1986 and 1987. This could create an intense scramble for funds because banks short of reserves on December 31 will be forced to bid aggressively for funds to meet their reserve requirements. In other years, a shortfall at yearend can be made up in the few days following January 1, reducing the risk of a spike in money market rates. Although yearend pressures in 1987 were not severe, 1986 was a disaster, with the federal funds rate spiking upward, averaging around 15%.

Domestic Motor Vehicle Sales



Source: Department of Commerce.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

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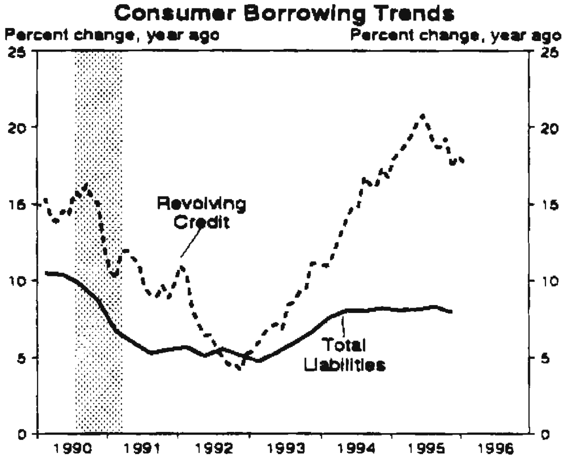
II. Surge in Net Worth Trumps Rise in Delinquencies

Forecasts of subpar U.S. economic growth, or worse, rely heavily on the judgment that growth in consumer spending is crumbling under the weight of too much debt. This is too pessimistic a view, for two reasons. First, the disturbing developments in consumer debt are confined to credit cards, which constitute less than 8% of total household liabilities. Second, asset growth has dwarfed liability growth in the past year, providing households with their largest net-worth gain in at least 25 years. This strongly implies that there is plenty of liquidity to swamp the impact of higher delinquencies and interest expense on total spending.

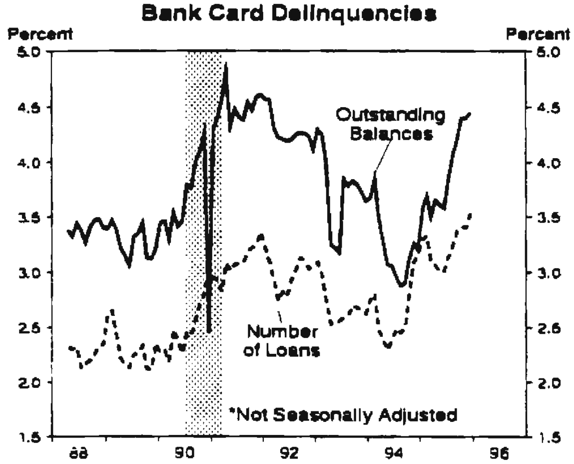
Consumers are therefore apt to play a supporting role in the U.S. expansion over the next year or two, increasing their spending in line with income if not somewhat faster. This, in turn, makes it unlikely that the Federal Reserve will feel compelled to ease monetary policy further. In fact, we believe that the next move in monetary policy will be a tightening later this year, and that bond yields will rise further once that prospect comes into clearer focus. For equity investors, an outlook of continued moderate growth in household spending supports the recommendation of our Portfolio Strategy Group that overweighted positions be established in certain consumer cyclical stocks, such as autos, other durable goods, and transportation.

Debt Problems Concentrated in Credit Cards

The current hype about consumer debt is rooted in the frenetic growth in credit card balances. Over the past 3½ years of rapid growth in overall installment credit, the outstanding dollar volume of revolving credit



Source: Federal Reserve Board.



Source: American Bankers Association.

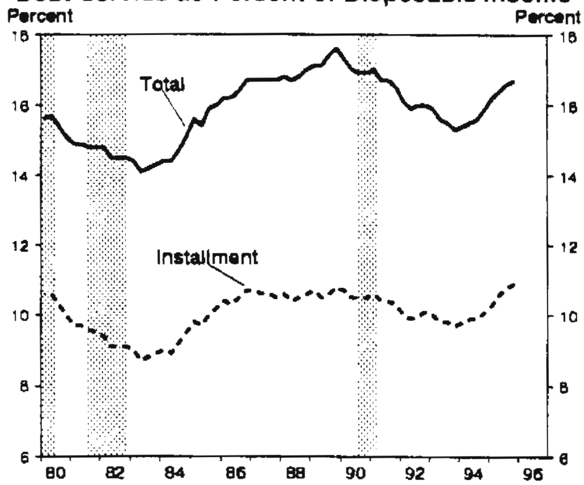
(principally credit cards) has risen from $250 billion to $400 billion — more than a 14% compound annual growth rate. There has been no meaningful sign of a letup in recent months. Since mid-1994, year-to-year growth in revolving credit has consistently exceeded 15%, briefly topping 20% in mid-1995 and outpacing growth in disposable income and nominal GDP by a 3-to-1 margin over the entire period. In January 1996, the latest date for which information is available, revolving credit was 17.7% above its year-earlier level.

The reasons for this surge in credit-card use are no mystery. They reflect changes on both the demand and supply sides of the credit-card market. On the supply side, lenders seeking to capitalize on this high-margin business have aggressively promoted the use of credit cards, by soliciting new accounts and providing incentives (such as airline mileage) to use the cards more frequently. On the demand side, card holders have responded predictably to the widening array of transactions — now including groceries, medical bills, school tuitions, and property taxes — that can be handled with credit cards.

Delinquencies on credit-card balances have risen sharply as a result. Under the circumstances, it would be highly surprising if they had not. In seeking new accounts, lenders have clearly lowered their credit standards. Meanwhile, borrowers using cards more actively for convenience purposes, or in response to inducements, may have ended up leaving the balances on their accounts for longer than they intended. By the end of 1995, the percentage of loans past due by

30 days or more had risen to 4.45% — the highest level in nearly four years and not far from the 4.81% record, set in April 1991.

Debt Service as Percent of Disposable Income



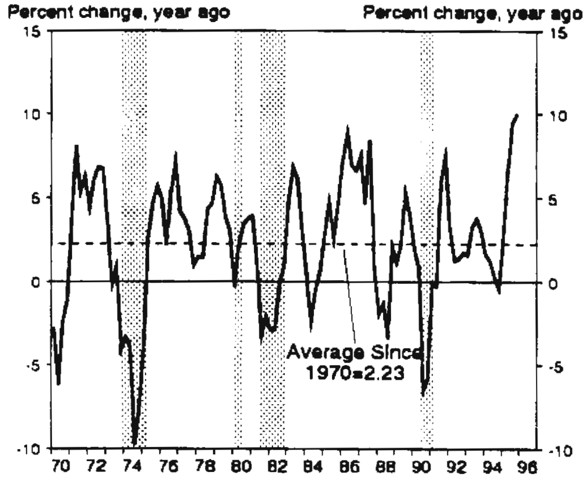
Source: Federal Reserve Board.

Delinquencies: A Rounding Error Compared to Spending and Income . . .

There is little question that this rise in credit-card delinquencies signals financial problems, including a probable spending retrenchment, for the borrowers who are overextended. It does not follow, however, that the household sector as a whole will curb its spending to any significant degree. This is because the dollar increase in delinquencies, on all forms of debt, pales in comparison to annualized spending and the huge gains in assets and net worth that U.S. households have racked up over the past year. The same goes for increases in debt service, much of which represent the recycling of credit-card balances rather than higher interest expense.

By our estimate, the volume of installment debt past due 30 days or more has risen about $11½ billion over the past 2½ years, with most of this increase ($9 billion) occurring over the past year. More than three-quarters of the rise in delinquent balances has been in the credit-card area. Meanwhile, the volume of delinquent mortgages has been roughly unchanged, as a gradual increase in outstanding balances has been offset by a small decline in delinquency rates.

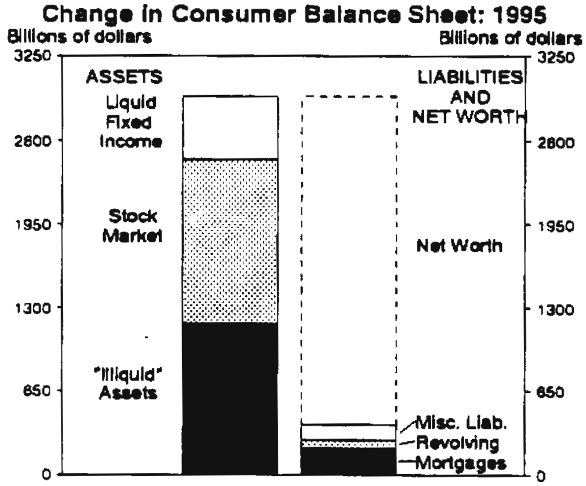
Real Net Worth



Source: Federal Reserve Board.

While the rise in delinquencies may spell trouble for the families who fall behind for more than a month or two, it amounts to little more than a rounding error for a household sector whose outlays for goods and services will top $5 trillion this year. Nor does the increase in household debt service look particularly onerous in this context. During 1995, household debt service rose from 15.9% to 16.7% of disposable income, an increase of $84 billion. However, only about $30 billion of this increase (0.6% of spending and disposable income) was in interest on outstanding obligations. The remainder was in the form of larger required repayments of principal, mostly reflecting the increasing flow of spending through revolving credit balances.

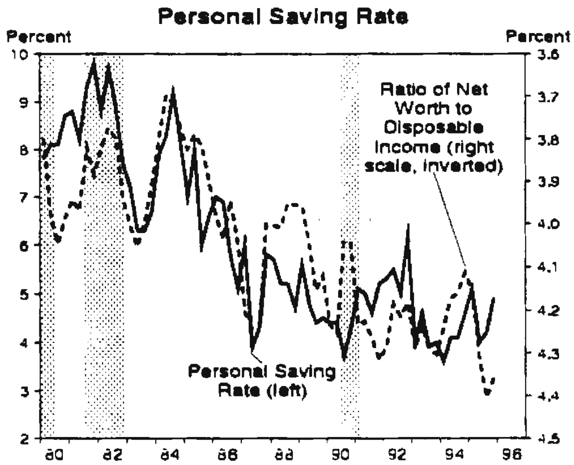
Change in Consumer Balance Sheet: 1995



Source: Federal Reserve Board.

. . . And Small Fish in A Big Pool of Liquid Assets and Net Worth

Most important, the increases in delinquent balances and interest expense are minuscule relative to the rate at which household assets and net worth have been rising. Over the past year, for example, the assets held by U.S. households have risen $2.9 trillion, or



Source: Department of Commerce.

11.4%, far outstripping the $381 billion (7.9%) increase in liabilities. This means that household net worth rose by nearly $2.6 trillion, a stunning 87% of the increase in assets. In real terms, last year's surge in net worth was the largest in more than 25 years. And, the figures on record arguably understate the actual increase in wealth, inasmuch as fixed-income assets have not been marked to market.

Of course, not all of this gain in wealth is readily convertible to cash for spending. About $1.2 trillion (40%) of the asset growth accrued in illiquid or semiliquid form — increases in life insurance and pension fund reserves, equity in noncorporate businesses, and residential home values. Another $1.3 trillion (43%) piled up in corporate stock and mutual fund holdings. Although highly liquid, much of this latter gain reflects the sharp runup in equity prices, which some individuals might regard as transitory. Beyond that, households socked away $486 billion more in liquid fixed-income assets last year. And $113 billion of the increase in home values was in equity, bringing to nearly $600 billion the incremental funds available to finance spending without resorting to the sale of stocks.

Economists have long argued about how responsive consumer spending is to changes in net worth — the so-called wealth effect. It is clear from the figures just reviewed, however, that the wealth effect need not be very large to offset last year's $9 billion rise in delinquencies. This is a mere 1.5% of the increase in liquid fixed-income assets and home equity, and an almost imperceptible 0.4% of the increase in total net worth. Most estimates of the wealth effect place it in the 2%-3% range. The impact the 1987 stock market crash on spending (measured by the change in saving) was consistent with this — about 2.4% of the change in total net worth.

If spending had followed the same path in 1995, the personal saving rate would have dropped 1.4 percentage points, to 2.8% by yearend. Instead, it rose 0.7 points to 4.9%, probably because the slowdown in growth made consumers more cautious. The difference represents a large unspent reservoir of net worth gains, exceeding $110 billion. With the tone of business now improving, consumers may be tempted to spend some of this money.

Implications for Financial Markets

In the U.S. economic outlook, we have assumed that households will be passive participants in the growth process — neither spurring growth by reducing their saving rates nor retarding it by saving a larger portion of disposable income. Key to this view has been the judgment that the vast majority of U.S. households harbor neither strong pent-up demands nor any urgent need to repair balance sheets. The analysis above supports this second judgment and suggests the possibility of upside surprises to consumer spending in coming months. Perhaps the strength of car sales in February and March and overall spending in February are the first sign of this.

If so, there are two broad implications for U.S. financial markets:

1. Federal Reserve officials will see no need to lower short-term rates further, given that consumer finances and attitudes were one of the key risks in their view. In fact, trade improvement coupled with a pick-up in consumer spending would probably be enough to provoke a tightening later this year. In this context, the risks in bond yields tilt clearly to the upside.

2. Equity investors have an opportunity to establish positions in certain consumer cyclical stocks. While the best news has probably passed in the housing industry, a pick-up in consumer spending should benefit shares in auto makers, producers of other durable goods, and transportation. Our Portfolio Strategy Group recommends overweighted positions in each of these sectors.

Ed McKelvey

Goldman Sachs

Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 Mar	'96 Feb	'96 Jan	'95 Dec	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	140	624	-146	145	174	139	May 3
Unemployment Rate (%)	5.6	5.5	5.8	5.6	5.6	5.6	
Index of Hours Worked (% ch)	0.0	2.9	-1.7	-0.3	2.3	1.5	
Average Hourly Earnings (% ch)	0.3	0.0	0.3	0.3	2.4	3.0	
Producer price finished goods index (% ch)	--	-0.2	0.3	0.6	3.0	2.0	Apr 11
Excluding food and energy	--	0.1	-0.1	0.2	1.9	2.0	
Consumer price index (% ch)	--	0.2	0.4	0.2	2.6	2.7	Apr 12
Excluding food and energy (% ch)	--	0.2	0.3	0.1	2.7	2.9	
Retail sales (% ch)	--	0.8	-0.1	0.7	3.8	5.0	Apr 11
Excluding motor vehicles (% ch)	--	0.4	-0.2	0.4	2.9	3.2	
Industrial Production (% ch)	--	1.2	-0.4	0.1	1.6	1.6	Apr 16
Manufacturing	--	1.4	-0.3	0.2	3.0	1.7	
Capacity utilization (%)	--	82.9	82.1	82.7	82.9	83.3	Apr 16
Manufacturing	--	82.1	81.2	81.8	82.0	82.5	
Housing Starts (annual rate, thousands)	--	1490	1447	1425	1429	1379	Apr 16
Single-family	--	1170	1140	1150	1138	1095	
Trade balance (billions, monthly)	--	--	-10.3	-7.0	-8.1	-9.3	Apr 23
Merchandise	--	--	-15.4	-12.3	-13.4	-14.5	
Factory Orders (% ch)	--	-1.4	-0.2	1.7	1.6	1.2	May 2
Durable Goods	--	-2.3	-0.6	3.1	1.6	1.2	Apr 24
Personal Income (% ch)	--	0.8	0.1	0.6	5.9	5.2	May 3
Wages and Salaries	--	1.1	-0.2	0.6	5.3	4.9	
Purchasing Managers' Index (%)	46.9	45.2	44.2	46.0	45.8	47.3	May 1
Consumer Sentiment U Mich (Feb 66=100)	93.7	88.5	89.3	91.0	90.2	91.3	Apr 12
Conference Board (1985=100)	97.7	98.0	88.4	99.2	96.9	98.6	Apr 30

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- Headline increases in price indexes for March will be pushed up by the recent jump in oil prices, perhaps by more than we have reckoned. Core indexes should remain well-behaved, however.
- After rebounding sharply in February, retail sales appear to have increased substantially further in March. Car sales remained firm in March and could represent a high-side surprise to our estimate.
- Jobless claims should post a significant decline for the week ended April 6 (due for release Thursday, April 11). This was the first week free of contamination by the GM strike.

Economic Releases and Other Events

Date	Indicator	Estimate: GS	Estimate: Consensus	Last Report
Apr. 11	Producer Price Index (Mar.)	+0.4%	+0.3%	-0.2%
	Ex. Food and Energy	+0.1%	+0.1%	+0.1%
	Retail Sales (Mar.)	+0.5%	+0.3%	+0.8%
	Ex. Autos	+0.7%	+0.5%	+0.4%
Apr. 12	Consumer Price Index (Mar.)	+0.3%	+0.3%	+0.2%
	Ex. Food and Energy	+0.2%	+0.2%	+0.2%
	Business Inventories (Feb.)	+0.2%	+0.2%	+0.6%

- 3- and 6-month T-bill auctions (Apr. 8)
- 2-year T-note auction (Apr. 8)
- 5-year T-note auction (Apr. 9)
- Wholesale Trade (Apr. 9)
- Atlanta Fed Survey (Apr. 9)
- Jobless Claims (Apr. 11)
- Prel. April U. Mich Consumer Sentiment (Apr. 12)

Interest Rates: Forecast vs. Forward Yields*:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.5	5.6	6.4
Forward	5.5	5.6	6.0
2 Yr T-Note	5.7	5.9	6.4
Forward	5.9	6.1	6.2
10 Yr T-Note	6.3	6.5	6.8
Forward	6.4	6.5	6.5

* As of Thursday close.

Key Nos. in the Business Outlook

	1995 Q4	1996 Q1	1996 Q2	1995	1996
Real GDP	0.5%	1.0%	2.0%	2.0%	1.8%
Ind. Production	1.3	3.0	2.0	3.6	2.3
CPI	2.4	3.0	2.7	2.8	2.8
Profits*	12.6	5.8	6.1	11.7	3.2
Merch Trade Bal. (monthly, $B)	-11.6	-14.3	-13.3	-13.3	-12.9

* Excluding inventory profits; adjusted for depreciation distortions

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U.S. Economics Analyst

Capital Deepening Key to Wages, Productivity

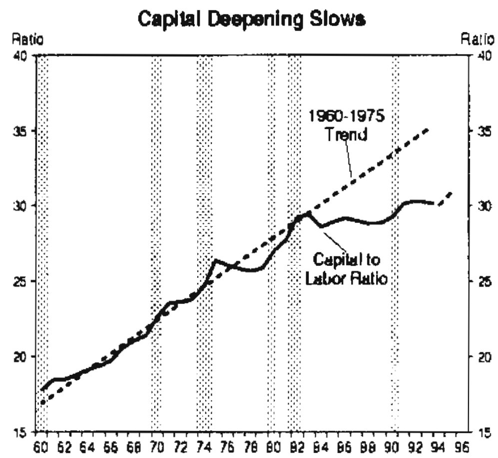
- Real wage and productivity growth has been subpar for years, provoking an intense debate about how to remedy the problem. Trade barriers, limits on immigration, and a flat tax have all been proposed as solutions.

- As we see it, the major cause for the poor performance has been a shortfall of savings, which has caused a dramatic slowdown in the pace of capital deepening.

- The good news is that the long-term secular outlook is now improving. The nation's savings rate has started to move higher and further gains are likely, assuming that the politicians do not backslide in their efforts to control the federal budget deficit. With labor force growth remaining sluggish, this implies a rise in the amount of capital per worker.

- Over the near-term, cyclical developments are likely to dominate such favorable secular trends. In particular, strength in capital goods orders implies either robust export growth or firm capital spending.

- Chairman Greenspan's latest testimony confirms that Fed officials are done easing monetary policy, at least for the time being. With the economy looking more robust at a time that it is already at or below full employment, Chairman Greenspan is undoubtedly becoming more nervous about the inflation outlook.



Source: Department of Labor, Goldman Sachs Estimates.

Source: Department of Commerce.

Trade Recommendations

- Maintain short position in December Eurodollar futures, with target of 94.00; move stops to 94.30.

- June bond futures fell just short of climbing to the 113½ level where we had recommended initiating short positions. Having missed a good opportunity, we would not chase the market to initiate shorts even though the bond market looks to be in poor shape, technically.

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Issue No: 96/13
March 29, 1996

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I. Weekly Wrapup

Economic and Market Overview

After rising sharply on Monday, U.S. bond prices fell back under the cumulative weight of several reports showing that the foundations for demand for U.S. output remain solidly intact. In the household sector, for example, confidence remained buoyant in March, according to surveys conducted by both the Conference Board and the University of Michigan. Consumers' high level of comfort was also evident in home sales data. Turnover of existing homes rebounded 6.5% in February, while sales of new homes in February slipped just 1.3%, holding on to most of the 3.5% rise in January.

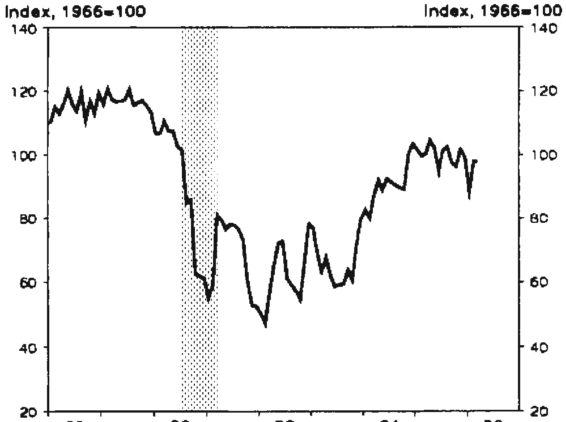
In the industrial sector, setbacks in the volatile defense and civilian aircraft industries dominated the 2.5% decline in orders for durable goods posted for February. Bookings for nondefense capital goods other than aircraft rose 3.7% last month; over the past year, the upward trend in such orders has diminished only slightly. At first blush, this conflicts with the paltry 1.5% increase in capital outlays planned for 1996. Either U.S. businesses have become more confident of economic growth since the survey was conducted in November or foreign firms are boosting their outlays, in which case the argument for U.S. trade improvement is even stronger than before, despite the poor January figures. The $10.3 billion trade deficit in January, from $7.0 billion in December, should be heavily discounted. Exports were held down by bad weather, the effects of the Boeing aircraft strike, and seasonal adjustment problems. Imports were boosted, in part, by a rise in the value of oil imports.

Federal Reserve Policy

Tuesday's FOMC meeting concluded with an unsurprising decision to stand pat on short-term interest rates. Senate hearings held that same day on Alan Greenspan's renomination as Federal Reserve Chairman and Alice Rivlin's and Laurence Meyer's nominations as Fed Governors were only slightly less suspenseful despite the distraction of a General Accounting Office report criticizing the Fed's financial management. All three nominations won quick endorsement by the Banking Committee and should ultimately be approved by the full chamber.

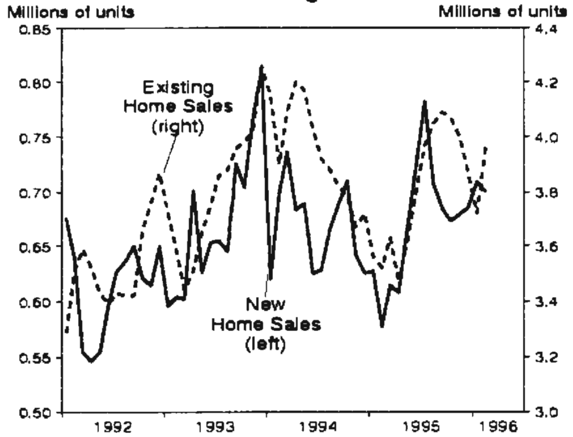
Another round of Congressional hearings on Wednesday proved more important, as Chairman Greenspan revealed a subtle but important evolution in his thinking about the current economic situation. For several months, he has warned that the increase in corporate profits' share of national income would come to an end as pressures on wage inflation mounted. In Wednesday's session, he reiterated this view, stating that "it may indeed already be occurring." The fact that this was said in response to a question, rather than as part of a prepared text, diminishes its significance somewhat. Nevertheless, with the economy showing more life these days, it is a natural inference that Mr. Greenspan may be a bit more concerned about the potential for wage inflation.

Consumer Confidence



Source: Conference Board.

New and Existing Home Sales



Source: Department of Commerce, National Association of Realtors.

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Fiscal and Political Developments

On Friday, President Clinton signed legislation raising the federal debt limit to $5.5 billion. This should create enough room for the Treasury to borrow until the fall of 1997. A break in the 1996 budget impasse may also be at hand, although probably not until after Congress returns from its Easter recess on Monday, April 15. Both chambers of Congress are considering bills with somewhat higher spending than before, and President Clinton has indicated that he would sign the version now before the Senate.

The main focus will be on the 1997 budget resolution when Congress returns in mid-April. In strategic terms, this measure is likely to resemble last year's in targeting a balanced budget for the year 2002. In tactical terms, however, there will be one key difference. Instead of rolling all of the proposals into one big package, Congressional Republicans plan to send the president separate bills on different parts of the budget. The aim is to create a legislative record of vetoes and, at the same time, maximize progress in those areas where agreement can be reached.

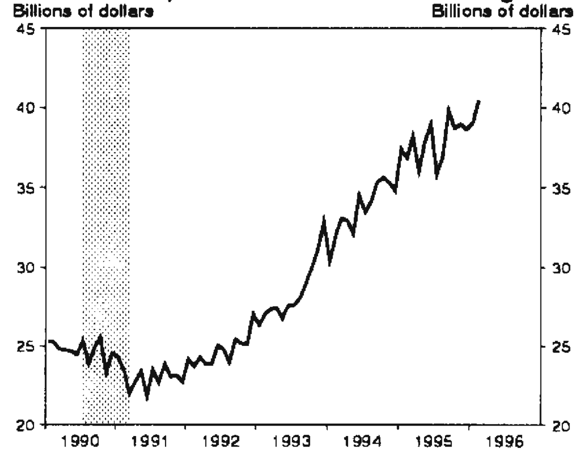
Market Outlook and Comments on Value

Note: The following comments reflect trading views and may differ from our longer-term interest rate forecast.

Chairman Greenspan's testimony helped to convince investors that the Fed is done easing for the foreseeable future, pushing Eurodollar futures yields higher. For example, the December Eurodollar contract yield climbed to 5.85% on Thursday's close, up from 5.74% a week earlier. Because the economic news over the next week may indicate an economy with more momentum than generally expected, we would keep this short position in place, with a target price of 94.00. We would move our stop to 94.30 from 94.50 to protect the large profit (about 55 basis points) accumulated in our short Euro positions over the past four weeks.

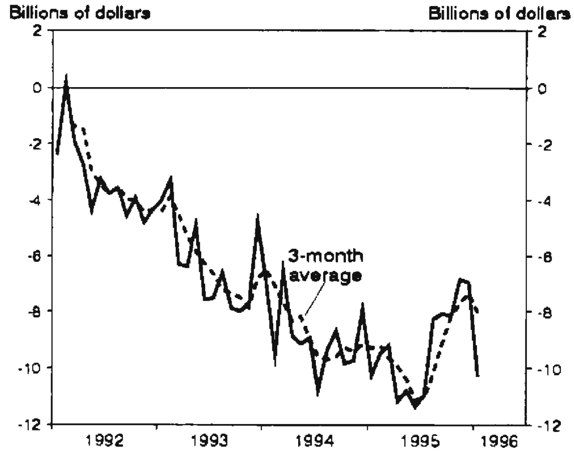
Unfortunately, the June bond future fell just short of climbing to the 113½ level, where we recommended initiating short positions last week. Although we do not feel strongly enough about the market to recommend short positions (bond yields at current levels are generally consistent with a Fed that is done easing), we would still be biased toward a cautious stance, in part, because technically the market looks to be in poor shape. The selloff of the past few days has returned the June bond future contract to the sharp downward channel that it had been trying to escape.

Non-Defense Capital Goods Orders Excluding Aircraft



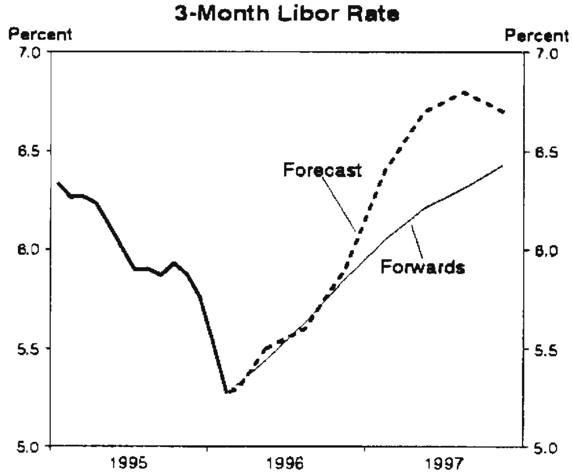
Source: Department of Commerce.

Trade Balance



Source: Department of Commerce.

3-Month Libor Rate



Source: Federal Reserve Board. Wall Street Journal.

II. Capital Deepening Key to Wages, Productivity

Over the past two decades, real wage growth and productivity growth has been subpar, especially compared to the 1960s. As we see it, one major cause of this deterioration has been the dramatic slowdown in the degree of capital deepening.[1] The slower pace of net investment has caused the amount of capital employed by each worker to grow much more slowly since 1975 than previously, with negative consequences for both wages and productivity.

Ironically, just as the political debate on this issue is heating up with policy prescriptions ranging from the flat tax to calls for higher trade barriers and curbs on immigration, the long-term outlook for capital deepening and growth in productivity and real wages is improving. The pace of capital deepening has already begun to climb, and this trend is likely to continue as the savings pool available to finance investment increases and labor force growth remains sluggish.

The Pace of Capital Deepening Has Slowed Sharply

The average amount of capital each worker has to utilize has grown much more slowly over the past two decades. This can be seen in the accompanying chart, which depicts the ratio of the nation's business capital stock to total hours worked. As can be seen, the capital-to-labor ratio is roughly 15% below the level it would have been if the 1960-75 trend had remained intact.

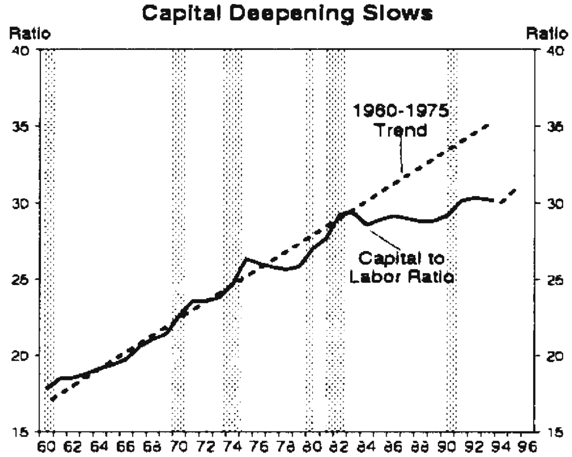
The slowdown in the growth rate of the capital-to-labor ratio is due mainly to a sharp slowing in the growth rate of the capital stock. The real capital stock has grown more slowly as the pool of nation's savings available to fund investment has shrunk relative to GDP. This pool has been augmented by foreign capital, as the U.S. has run a chronic current account deficit, but the foreign capital inflows have not been sufficiently large to make up the gap.

The decline in the net national savings rate can be attributed both to a fall in the household savings rate and a rise in the federal government deficit. Government dissavings has reduced the pool of domestic savings available to fund investment.

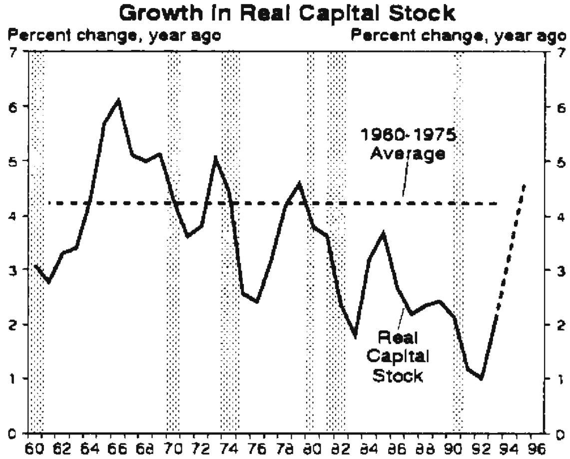
In contrast, the growth rate of the labor input as measured by total hours worked has not changed dramatically over the 1960-1995 period. Thus, the slowing in capital deepening can be attributed mainly to the decline in savings, not to a big shift in the growth rate of the labor input.

The decline in the pace of capital deepening has had three major consequences:

1. **Slower productivity growth.** Productivity growth averaged 2.9% per year in the 1960s,



Source: Department of Labor. Goldman Sachs Estimates.



Source: Department of Commerce. Goldman Sachs Estimates.

[1] Of course, human capital deepening also affects productivity and real wages. Note, for example, the widening gap between earnings of the college-educated compared to the high-school-educated. However, in this short article we are only focusing on physical capital.

compared to only 1.1% per year from 1976-1995. Less capital deepening leads to slower productivity in two ways. Not only does productivity suffer because there is less growth in the amount of capital per worker, but productivity is also impaired because the capital stock is older. Older capital embodies less technological progress, which also hurts productivity.

2. **Slower real wage growth.** If labor is becoming more abundant relative to capital, then real wages should grow more slowly. After growing by an average of 1.8% per year in the 1960s, real wages (calculated from average hourly earnings deflated by the consumer price index) fell at a 0.8% annual rate over the 1980-1995 period.[2]

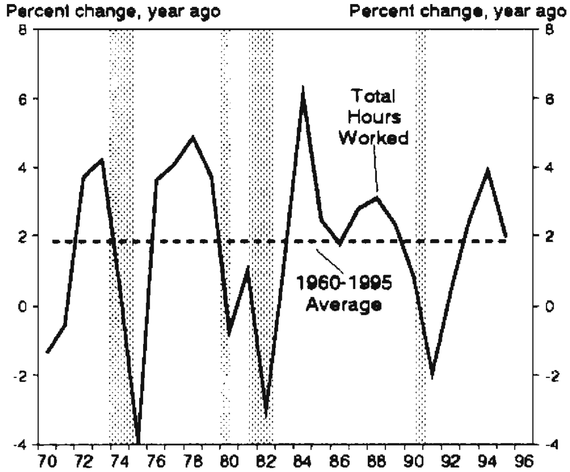
3. **Higher real interest rates.** Similarly, if capital is scarce, then real interest rates should be higher. This is also the case. For example, during the 1960s, the real federal funds rate averaged 1.9%. During the 1980-1995 period, the average real federal funds rate was 3.3%.

In principle, a scarcity of capital should also lead to an increase in returns on capital. In practice, the evidence is, at best, mixed. In fact, the average return on capital (as measured by the ratio of net cash flows to the capital stock) was higher in the 1960s than currently. This may reflect a number of factors. First, a shortage of domestic capital can (and has been) augmented by foreign capital inflows via a current account deficit. Second, the return on capital is presumably influenced by many other factors besides the capital-to-labor ratio such as the cost of capital, the pace of technological innovation, the level of barriers to entry, and the degree of foreign competitive pressures.

Capital Deepening to Climb in the Future

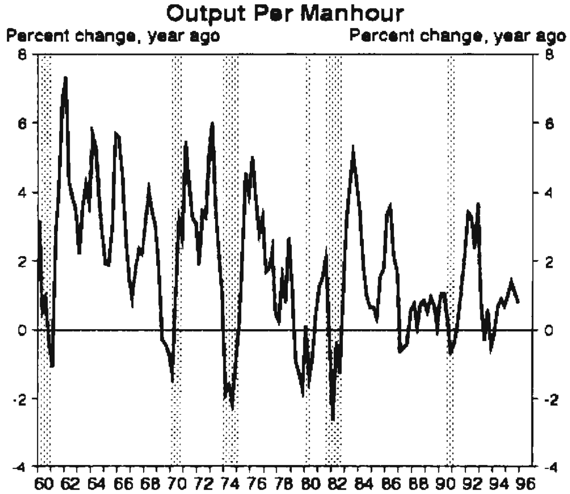
The rate of capital deepening has begun to climb again recently. The domestic savings pool is increasing and that is leading to faster growth in the nation's capital stock. At the same time, demographic trends are restraining the growth rate of the labor force. Together, these two trends should cause the capital-to-labor ratio to begin to climb more quickly.

Total Hours Worked



Source: Department of Labor.

Output Per Manhour



Source: Department of Labor.

Real Wage Growth

Source: Department of Labor.

[2] This measure may overstate the deterioration in real wages somewhat as average hourly earnings only apply to production workers. This is the measure most used, however, in discussions of real wage trends.

The net national savings rate has begun to increase again as the government deficit has dropped and the profit share of income has increased. This increase in the savings pool is likely to continue as the household savings rate begins to increase. As the baby boom generation ages, its saving rate should increase, slowly pushing up the aggregate household savings rate. If further steps are taken to control the federal budget deficit, the net national savings rate could double during the next decade.

Such a rise in national savings would undoubtedly not be fully transmitted to the growth rate of the capital stock. That is because the current account deficit would likely shrink as domestic savings became more plentiful. As long as this offset, however, were less than one-to-one, the total savings pool would increase as a proportion of GDP, causing the pace of capital deepening to climb.

Implications for Financial Markets

If the process of capital deepening accelerates, we would expect to see many of the trends evident since 1980 to be gradually reversed. Productivity and real wage growth should rise as workers have more and more capital to work with. Real interest rates should fall as capital becomes less scarce relative to labor.

From the perspective of bondholders, this implies a more favorable long-term secular outlook as real interest rates decline. However, it is important to note that any decline is likely to be gradual and is likely to be overwhelmed by cyclical developments over the next year. Moreover, how much real rates decline depends, in part, upon whether Congress and the Administration are successful in reducing the budget deficit. If entitlement spending is not controlled, then the deficit will likely increase, restraining (or preventing altogether) the rise in the national savings rate.

From the perspective of equityholders, the outlook is also favorable. Equity prices could be expected to benefit from lower real bond yields and the increased demand among households for long-duration financial assets as the pool of savings climbs.

There is no simple panacea to use to generate faster growth, greater productivity, and higher real wages. Deepening of the physical and human capital is critical. Unfortunately, fostering such changes via public policy initiatives is difficult. Historically, demographic trends have been the most powerful influence. The good news, however, is these

Growth in Population, Age 25-64

Source: Department of Commerce.

demographic trends are now working in the right direction — boosting savings and restraining the growth rate of the labor force. This suggests that productivity and real wage trends may improve over the next decade even in the absence of strong measures (other than fiscal restraint) from the nation's policymakers.

Bill Dudley **Jill Jacobs**

Goldman Sachs

Key U.S. Economic Data

	Latest Monthly Data				6 Mo	12 Mo	Next
	'96 Mar	'96 Feb	'96 Jan	'95 Dec	Trend	Trend	Release
Nonfarm Payrolls (ch. thousands)	--	705	-188	145	173	146	Apr 5
Unemployment Rate (%)	--	5.5	5.8	5.6	5.6	5.6	
Index of Hours Worked (% ch)	--	3.2	-2.0	-0.3	3.4	1.6	
Average Hourly Earnings (% ch)	--	-0.1	0.4	0.3	3.0	2.9	
Producer price finished goods index (% ch)	--	-0.2	0.3	0.6	3.0	2.0	Apr 11
Excluding food and energy	--	0.1	-0.1	0.2	1.9	2.0	
Consumer price index (% ch)	--	0.2	0.4	0.2	2.6	2.7	Apr 12
Excluding food and energy (% ch)	--	0.2	0.3	0.1	2.7	2.9	
Retail sales (% ch)	--	0.8	-0.1	0.7	3.8	5.0	Apr 11
Excluding motor vehicles (% ch)	--	0.4	-0.2	0.4	2.9	3.2	
Industrial Production (% ch)	--	1.2	-0.4	0.1	1.6	1.6	Apr 16
Manufacturing	--	1.4	-0.3	0.2	3.0	1.7	
Capacity utilization (%)	--	82.9	82.1	82.7	82.9	83.3	Apr 16
Manufacturing	--	82.1	81.2	81.8	82.0	82.5	
Housing Starts (annual rate, thousands)	--	1490	1447	1425	1429	1379	Apr 16
Single-family	--	1170	1140	1150	1138	1095	
Trade balance (billions, monthly)	--	--	-10.3	-7.0	-8.1	-9.3	Apr 23
Merchandise	--	--	-15.4	-12.3	-13.4	-14.5	
Factory Orders (% ch)	--	--	0.5	1.7	12.0	3.1	Apr 3
Durable Goods	--	-2.5	-0.6	3.1	17.4	1.0	Apr 24
Personal Income (% ch)	--	--	0.1	0.6	4.2	4.6	Apr 3
Wages and Salaries	--	--	-0.2	0.6	2.9	4.0	
Purchasing Managers' Index (%)	--	45.2	44.2	46.0	46.5	47.7	Apr 1
Consumer Sentiment U Mich (Feb 66=100)	93.7	88.5	89.3	91.0	90.2	91.3	Apr 12
Conference Board (1985=100)	97.7	98.0	88.4	99.2	96.9	98.6	Apr 30

Note: Percentage changes are month to month for last four months, annualized for 6-12-month trends. 6- and 12-month figures for levels (e.g., unemployment rate) are averages over those periods.

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U.S. Calendar

Focus for the Week Ahead

- The National Purchasing Managers' report for March (April 1) represents a one-sided risk for the market. A decline can be easily explained away as being caused by the General Motors strike, while an increase would indicate that the economy is rebounding and that the inventory adjustment is just about complete.
- Payroll data for March (April 5) will help clarify recent trends in labor market conditions. Investors should consider the January-March data collectively. Even a flat reading for March would be consistent with economic strength if it were not accompanied by significant downward revisions to the prior months.
- Now that the debt limit has been raised by Congress, we expect a flood of short-term bills and notes during the next two weeks. The 2-year and 5-year note auctions are planned for April 8 and April 9, respectively.

Economic Releases and Other Events

Date	Indicator	Estimate GS	Estimate Consensus	Last Report
Apr. 1	Purchasing Managers Index (Mar.)	47.0%	46.5%	45.2%
	Construction Spending (Feb.)	Up	+0.5%	+0.3%
	Domestic Motor Vehicles (Mar.)	13.0 Mil	13.6 Mil	14.1 Mil
Apr. 2	Real GDP ('95 IVR)	+0.6%	+0.9%	+0.9%
	Chain-Wt. Price Index ('95 IVR)	+2.2%	n.a.	+2.2%
	Leading Indicators (Feb.)	+1.2%	+1.0%	-0.5%
Apr. 3	Personal Income (Feb.)	+0.8%	+0.8%	+0.1%
	Personal Consumption (Feb.)	+1.2%	+0.8%	-0.5%
	Factory Orders (Feb.)	-1.2%	n.a.	+0.5%
Apr. 5	Civilian Unemployment Rate (Mar.)	5.6%	5.6%	5.5%
	Nonfarm Payroll Employment (Mar.)	0	+75,000	+705,000
	Consumer Credit (Feb.)	+$9.0 Bil	+$9.8 bil	+$10.3 Bil

- ABC/Money Consumer Confidence Index (April 3)
- Columbia Univ. Leading Index of Inflation (April 5)

Interest Rates: Forecast vs. Forward Yields:

	3 mo	6 mo	12 mo
LIBOR 3 mo	5.5	5.6	6.4
Forward	5.5	5.7	6.1
2 Yr T-Note	5.7	5.9	6.4
Forward	6.0	6.1	6.3
10 Yr T-Note	6.3	6.5	6.8
Forward	6.5	6.5	6.6

Key Nos. in the Business Outlook

	1995 Q4	1996 Q1	1996 Q2	1995	1996
Real GDP	0.9%	1.0%	2.0%	2.1%	1.8%
Ind. Production	1.3	3.0	2.0	3.6	2.3
CPI	2.4	3.0	2.7	2.8	2.8
Profits*	5.2E	5.8	6.1	9.7	3.2
Merch Trade Bal. (monthly, $B)	-11.6	-14.3	-13.3	-13.3	-12.9

* Excluding inventory profits; adjusted for depreciation distortions